

**SOUTH OF THE BORDER:  
IMMIGRATION ATTITUDES IN LATIN AMERICA**

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## **SOUTH OF THE BORDER: IMMIGRATION ATTITUDES IN LATIN AMERICA**

Thesis directed by Professor Jennifer Fitzgerald

This dissertation develops a greater understanding of immigration attitudes through four essays focused on an important migration hub, Latin America. Each essay either develops existing scholarship by providing highly specified empirical tests of important theoretical debates or utilizes an alternative framework to approach the analysis of immigration attitudes. The first essay (Chapter 2) addresses a long standing theoretical and empirical debate concerning the role of economic self-interest and education in shaping immigration attitudes. I demonstrate that concern over labor competition is not an important factor influencing immigration attitudes in Latin America and that education increases tolerance of foreigners. Chapter 3 utilizes a unique survey experiment conducted in Chile to demonstrate that individual attitudes are a function of sociotropic economic concerns. Additionally, there is evidence that individuals perceive immigration as having important humanitarian implications. Chapter 4 takes an alternative tactic to advancing the scholarly understanding of immigration attitudes by examining how a religious institution can theoretically shape immigration attitudes. In Chapter 5, I formulate an alternative framework to analyze immigration attitudes. I argue that individuals experience migration as a dual phenomenon—one marked by emigration and immigration—and thus their immigration attitudes are influenced by this dual lens. Importantly, I show that both familial and financial connections to emigrants are determinants of immigration attitudes. Overall, the dissertation enhances our understanding of immigration attitudes by leveraging the economic and cultural characteristics of Latin America to test highly debated theory and by developing alternative analytical approaches.

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# Chapter 1

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## A Brief Introduction

In 2001, thousands of construction workers and other citizens took to the streets in protest. With banners and bullhorns, this group wanted the world to know they would not stand by as immigrants upended the country's economy and reshaped its cultural identity. Around the same time, politicians chimed in with anti-immigrant rhetoric suggesting that the inundation of non-white immigrants was the cause of increased crime as well as economic and social turmoil. This scene very well could have been from a major immigrant receiving country from North America or Europe, where political and social tension surrounding the economic and cultural implications of immigration has been rampant during the past two decades. It was not, however.

This protest occurred in Buenos Aires, Argentina. The protesters were directing their scorn toward non-white Bolivian immigrants who were believed to work for low-wages as manual laborers in this bustling metropolitan region. There are two parts to this broader immigration story. One part concerns a largely ignored pattern of migration: movement to developing countries (South-South and North-South migration). In 2005, the United Nations estimated that almost 41% of all migrants in the world were residing in developing countries (Ratha and Shaw 2007). Despite this pattern of migration encompassing such a wide swath of people and countries throughout the world, it has received little attention from immigration scholars. Through a series of essays, this dissertation highlights one particularly important migration region, Latin America, demonstrating the importance of migration outside of highly developed countries.

The second part of this story, and the principal focus of the four essays that comprise the dissertation, is about the diverse attitudes of individuals toward immigrants and immigration. Why do some people welcome immigrants and support more liberal immigration policy, while others are concerned about immigration and push for more restrictive measures to prevent

immigration? In a world of movement—goods, capital, information—the movement of people remains highly restricted. This dissertation is an effort to understand the phenomena surrounding immigration through the eyes of individuals. At its core, this is a story about individual opinion—whether it be positive, negative, hopeful or hateful—regarding globalization’s most divisive aspect: the transnational movement of people.

Although Latin America is often perceived as simply a sending region, with emigrants dispersing across the highly-developed economies of the US, Canada, Europe and Japan, many of its countries are increasingly becoming important destinations for immigrants as well. The migration patterns of old are shifting as the economic contours of Latin America take on new forms. From Nicaraguans in Costa Rica, to Peruvians, and Spaniards in Chile to Brazilians in Peru, these immigrants draw the attention of citizens, politicians and the media alike. Although the aggregate number of immigrants in many of these countries remains low in comparison to the United States and countries in Europe, there have been dramatic increases in migratory flows between Latin American countries in the last two decades. Table 1.1 shows the change in the intercensal population of immigrants (1990-2000) living in Latin American countries. In some cases, the growth has been dramatic. These trends have continued during the last decade as well. For instance in Argentina, the International Organization for Migration reports that since 2001 the Bolivian population has increased by 48% (Cave 2012).

Despite aggregate numbers of immigrants remaining relatively small, these influxes of immigrants are potentially more important in terms of societal disruption as individuals are more likely to take notice of shifting demographics (Kahneman and Tversky 1979). Hostile reactions to immigrants can be a function of an immigrant influx coupled with national rhetoric politicizing this demographic change (Hopkins 2010). Therefore, throughout Latin American

countries, which are experiencing demographic shifts as more and more immigrants arrive, and have seen politicians and the media latch on to immigrant issues, there is potential for widespread anti-immigrant attitudes and behavior.

**Table 1.1 Intercensal Growth of Immigrant Population in Latin America<sup>1</sup>**

<b>Country</b>	<b>Intercensal Growth 1990-2000 (%)</b>
Argentina	19.9
Belize	48.5
Bolivia	63.8
Brazil	24.1
Chile	109.4
Costa Rica	272.6
Ecuador	39.9
Honduras	-31.6
Mexico	4.8
Panama	37.6
Paraguay	-8.5
Venezuela	12.5

These negative and hostile attitudes can have grave consequences. In November 2005, a Nicaraguan immigrant named Natividad Canda Mareina entered a business in Lima, Costa Rica and was attacked and killed by two guard dogs. Mr. Canda Mareina, like many Nicaraguans, had come to Costa Rica in search of work and opportunity, despite the prospect of significant discrimination directed toward ethnically distinct and economically disadvantaged immigrants. The horrific attack was captured on video and showed multiple police officers standing near the victim, but doing little to stop the dogs even when they wandered away from the victim. A fire-hose finally scared off the dogs; however, it was too late for Mr. Canda Mareina. In the aftermath

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<sup>1</sup> *Source:* Latin American Demographic Center, Economic Commission on Latin America and the Caribbean Research Project on International Migration in Latin America and the Caribbean ("IMILA").

of the attack, the police were accused of not intervening because the victim was Nicaraguan: a powerful microcosm of the discrimination toward immigrants pervasive throughout the country. It was not a moment of national reflection and widespread recognition of intolerance, but rather a symbol of the deep turmoil within a society confronted by the economic and cultural implications of immigration. Understanding the determinants of divisive immigration attitudes that exist across Latin America is the principal focus of the dissertation.

Utilizing data from a diverse set of Latin American countries as well as evidence from a unique survey experiment conducted in Chile, I present four essays that provide an examination of how economic, cultural and group-based factors shape the immigration attitudes of individuals in emerging economies. In each of the four essays I focus on a specific factor influencing immigration attitudes and advance our understanding of divisive attitudes by providing either a precise test of contentious theory or by bridging important areas of behavioral and immigration research. The findings have significant implications for understanding the political economy of behavior and relationships between groups. I argue that Latin American immigration attitudes are influenced by broad economic concerns rather than narrow pocketbook calculations related to immigrant job competition. I demonstrate, through two separate analyses that oft cited economic models of immigration attitudes are ill-equipped to understand divisive immigration opinions. These findings also indicate that there is potential for significant theoretical and empirical advancement in evaluating attitude formation.

With that in mind, I examine immigration attitudes through two alternative perspectives. The first explores the dynamics of religious influence on immigration attitudes by focusing on a particularly powerful pro-immigrant institution, the Roman Catholic Church. The second approach develops an alternative framework to analyze immigration attitudes that is structured

around the broad migration process: a system of emigration and immigration. This framework has important implications for understanding attitudes because individuals experience and understand migration through both of these complementary processes. Overall, this group of related essays enhances our understanding of immigration attitudes by leveraging the economic and cultural features of Latin American migration to help unravel the complex web of economic, social and psychological factors influencing attitudes.

### **Immigration Attitudes- An Overview of Prior Research**

In order to provide a general theoretical framework for the four essays that comprise the dissertation, I describe the major streams of literature that have advanced explanations of immigration attitudes, while also highlighting their limitations.

There has been no drought of attention among scholars in an effort to understand what factors shape immigration attitudes. For 20 years, a wide range of academics from different disciplines—sociology, political science, psychology and economics—have pursued a clear answer as to what determines these critically important attitudes. Almost exclusively, scholars focus their attention on the attitudes of individuals in highly-developed countries. That attention is certainly warranted as the United States and Europe attract immigrants in large numbers and experience extensive social and political tension related to immigration. So, what do we know about immigration attitudes from the research that primarily focuses on highly-industrialized countries?<sup>2</sup>

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<sup>2</sup> There are indeed a number of studies that include developing countries as part of cross-national studies (Mayda 2006) or focus on individual developing countries (Facchini, Mayda, and Mendola 2011; Orcés 2009), however, the vast majority of scholarly work related to immigration attitudes is centered on the United States, Europe and other highly developed countries such as Canada and Australia.

## *The Economics of Attitudes*

There are a number of different ways we can conceptualize the potential economic impact of immigration and how that might affect individual attitudes. An intuitive starting point is to think about how immigration could affect an individual. Let us assume native-born workers are concerned about both job security and maintaining their current wage or salary. However, every worker has a particular set of skills and some workers have far more training than others. Immigrants also have different sets of skills, but according to economic theory immigrants are likely to move to a country where there is a high-demand for their skills (relative scarcity).<sup>3</sup> The United States, which has a large number of high-skilled workers and a relatively small number of low-skilled workers, is likely to be attractive to immigrants searching for low-skilled work. Those immigrants, however, are not competing with everyone for jobs; they are really only potential competitors to native-born residents who have similar skills.

How does job competition between immigrants and native citizens translate into attitudes? When an individual faces immigration that involves immigrants with a similar set of skills to their own, they would be more likely to support policy restricting immigration (Scheve and Slaughter 2001). In simple terms, individuals want to reduce the number of direct job competitors who might reduce opportunity or negatively affect wages and thus would support more restrictive immigration policy. In the United States, we would expect less-skilled workers to oppose immigration and potentially have a negative perspective associated with immigrants because immigrants are likely to compete for low-skill jobs. This is a clear example of what we might call a pocketbook calculation influencing attitudes: immigration is perceived to have personal negative economic consequences and therefore influences an individual's attitudes

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<sup>3</sup> As Mayda (2006, 518) points out in a simple one-sector model of countries with identical production functions flows are determined by the rate of return on factors of production.

toward immigration and immigrants. Although elegant in its simplicity there is varied evidence as to whether individuals actually make this type of economic calculation or not (Hainmueller and Hiscox 2010; Mayda 2006; Scheve and Slaughter 2001).

Thinking about job security and labor competition is one possible pocketbook calculation, but another important economic calculus revolves around the potential impact of immigrants on taxes and expenditures. Immigrants are not just workers, but also individuals who may require different types of social insurance (medical care, food assistance, housing, etc.) depending on their economic position. In this version of the pocketbook story, a native-born resident who bears a significant income tax burden (high-income earners under a progressive tax scheme) would be opposed to low-skill immigration because those immigrants represent an increased stress on the social welfare system and therefore a possible increase in the individual's taxes.<sup>4</sup> Highly-skilled immigrants, likely to find well-paying jobs, would be welcomed by this high-income individual because skilled immigrants represent additional net contributors to the tax system. This economic logic has locational implications as well, given the concentration of immigrants in some areas (greater numbers equate to greater demand for services) and the diverse forms of social welfare across different regions and countries (Hanson, Scheve, and Slaughter 2007).

Individuals are not entirely bounded by pocketbook interests. They are capable of broader observation and sociotropic evaluations (Harell et al. 2012). When people perceive that the broad national economy is flailing, individuals are generally less supportive of immigration (Citrin et al. 1997). Overtime as the economy grows and contracts, native-born residents can have shifting

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<sup>4</sup> This specification assumes that governments will attempt to maintain a balanced budget while providing consistent levels of service thus necessitating a tax increase to maintain a balanced budget; whereas an alternative interpretation would suggest that in the face of immigration and greater demand or pressure on public services, governments could respond by reducing benefits (Hainmueller and Hiscox 2010).



perspectives on immigration as well. These macro-economic conditions are not the only broad economic elements influencing immigration attitudes. There is some indication that individuals' support for immigration is based on a determination of what types of immigrants benefit the broad national economy (Hainmueller and Hopkins 2012; Harell et al. 2012). In other words, attitudes are a function of an immigrant's perceived ability to contribute to a country's overall economic success. It is not hard to imagine that individuals would then be more supportive of high-skilled, well-educated professionals with long-term employment contracts than low-skilled, seasonally employed or unemployed immigrants. Native-born citizens, in this economic story, are not concerned about direct job competition, but rather the broad economic implications of immigration.

All of the aforementioned perspectives—stemming from widely used economic models—are certainly plausible, but none has received much support from the extensive research on immigration attitudes. The economic calculus individuals are purported to make, whether it is in terms of pocketbook concerns or sociotropic ones, is only one part of the story.

### *The Ins and Outs of Groups*

An alternative perspective in understanding immigration attitudes involves the dynamics of group identity based on non-economic attributes: race, ethnicity, religion, language and other cultural aspects. Where there are differences between groups, there is potential for attitudinal variation. One way to conceptualize how these group differences operate is in historically prevalent group perceptions based on race. Individuals may view people of different races (racial out-groups) negatively. Their attitudes about immigration then become a function of these racial prejudices. If immigration involves racially distinct groups, prejudiced or ethnocentric native-born residents will have more negative attitudes toward immigration and immigrants. Where

immigrants come from (country of origin) will have a significant influence on attitudes if individuals associate racial stereotypes with different immigrant groups. Although racial differences may be an important feature associated with immigration, the contours of identity are not simply defined along this one dimension.

National identity is an important factor in shaping immigration attitudes. Immigrants potentially represent a distinct and foreign out-group to an individual who has a strong sense of national identity. There is evidence in both the United States and Europe that individuals are concerned that immigration can and might alter national identity (Citrin et al. 1997; Sides and Citrin 2007). But what exactly does it mean to be French, American or any other nationality for that matter? Conceptions of national identity vary across continents, countries, cultures and individuals. In the United States and Europe two features that are prevalent components of national identity are built around language and religion.<sup>5</sup> Individuals who strongly associate French language with French identity may feel threatened by non-French speaking immigrants. Conversely, immigrants who demonstrate a desire or effort to learn a country's native language are likely to be viewed more positively (Hopkins 2011). In the case of religion, if a native-born resident incorporates a particular religion into their conception of identity then immigrants of other religious groups, who might alter the fabric of national identity, can be perceived threatening (McDaniel, Nooruddin, and Shortle 2010). In the United States, where a 'true American' is often perceived as white, Christian and native born (Theiss-Morse 2009), certain immigrants would be highly excluded from the native in-group. We would expect, using this perspective, that the closer immigrants are to native-born residents culturally, linguistically and religiously, the more supportive those residents would be of immigration.

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<sup>5</sup> In the case of Europe, it may not be a religion itself, but rather secularism that is associated with national identity.

These two perspectives, however, presuppose a particular dynamic between native-born residents and immigrants. They are opinions of a group from afar. What happens when immigrants and native-born residents actually interact? Contact between distinct groups can have a number of plausible effects. One possible effect is that contact generates conflict: in a world of finite resources, contact between groups is capable of reinforcing the threat another group poses. However, the effect of contact may very well depend on the nature of the interaction itself. An alternative perspective suggests that intergroup contact (i.e. repeated and normalized social interactions) can alleviate animosity and threat felt between distinct groups. We have evidence supporting both sides of the story when it comes to immigrants. In some cases the presence of immigrants seems to engender greater animosity and in others it does the opposite (Schlueter and Wagner 2008; Schneider 2008). What may matter more than contact itself is the influx of immigrants into a community and sudden shifts in the presence and salience of different groups (Hopkins 2010; Zick, Pettigrew, and Wagner 2008).

These two broad approaches, one economic and the other rooted in cultural identity, represent the major streams of research addressing immigration attitudes, but they are not entirely comprehensive. The influence of political attentiveness, crime-related fears and the media have all received scholarly attention and are likely to affect an individual's immigration attitudes (Brader, Valentino, and Suhay 2008; Fitzgerald, Curtis, and Corliss 2012; Sides and Citrin 2007). This dissertation, however, uses the two major streams of research outlined above as a springboard to help increase our understanding of immigration attitudes. Arguably, much of the research to date is constrained by the economic and cultural dynamics prevalent in highly-industrialized countries. The US and Europe often attract low-skilled immigrants who are highly culturally distinct from the majority of the host-country population. Scholars therefore have to

wade through a quagmire of associated stereotypes (economic, religious, racial, linguistic, educational, etc.) when attempting to evaluate extant theories. The result has been a diverse set of findings, bifurcated, in part, by theoretical approach. The essays in this dissertation take an alternative tactic to testing these pivotal theories by analyzing attitudes in a different economic and cultural context: the emerging economies of Latin America.

### **Leveraging Latin America**

Latin America is marked by a wide range of economic development and migration (i.e. the movement of both high and low skill labor). This dynamic provides the economic variation necessary to precisely test economic theories used to derive individual immigration preferences. The diverse levels of economic development and their associated labor markets create the conditions for the increased movement of a wide range of labor throughout the continent. Chile, a regional economic power house, attracts a substantial number of low-skill workers from Peru. However, Chile's emerging technology industry as well as its large manufacturing and mining industries require highly trained technicians and professionals, who account for almost 25% of working immigrants in the country (Ribe, Robalino, and Walker 2010). Latin America's less developed economies, such as Bolivia, have attracted an entrepreneurial class from Argentina and Brazil that own small businesses and are often more educated than their Bolivian counterparts (World Bank 2010). From Tijuana to Punta Arenas, Latin Americans cross borders to find work and meet the demands of highly variable emerging economies.

The Latin American labor market is also quite distinct from the United States and Europe. Across Latin America almost 50% of all workers are employed in the informal sector (Perry 2007). In some countries, such as Ecuador and Bolivia, almost 70% must find employment outside of the formal economy (International Labour Organization 2012). Informal

sector work usually means individuals are excluded from social insurance—limited access to healthcare, no pension and no unemployment benefits. That means the safety net that exists for many workers across highly-industrialized countries is absent for many Latin Americans. Additionally, Latin American social welfare systems, although diverse, are generally minimalist and provide far less social insurance than most European countries (Breceda, Rigolini, and Saavedra 2008). Therefore losing your job has serious consequences because there is little to fall back onto. In this context, one without formal employment and social insurance, securing even life's basic necessities becomes incredibly difficult. The often incredibly low wages of the large informal sector in Latin America coupled with the weak and narrow social insurance system augments the risk associated with formal sector unemployment.

Historically, the Latin American labor market has not been marred by high levels of unemployment as fluctuations in wages served as the corrective mechanism in times of macroeconomic shock (Pages 2004). However, in recent decades and as a result of certain structural changes, unemployment has become the response mechanism to the volatile economic market in Latin America (Pages 2004; Tokman 2007). In 2007, prior to the most recent global economic crisis, Latin American unemployment reached 8%, almost twice the unemployment rate in some EU countries (Economic Commission for Latin American and the Caribbean 2007).<sup>6</sup> Fears of job loss in Latin America are disproportionately high relative to actual unemployment rates: between 2002 and 2005 approximately 75% of Latin American workers were concerned about being unemployed in the next 12 months (Latinobarometro 2005). Immigrants entering into this environment are likely to pose a threat to workers already concerned about their ability to compete with other native-born residents for work, let alone a foreign pool of laborers. A traditional source of employment in Latin America, the public sector, has been eroding over the

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<sup>6</sup> Certain EU countries such as Spain have experienced unemployment rates as high as 20%.

last two decades. As governments shrink, public sector employees are forced into the labor market in search of private sector work, increasing competition among educated workers. In an already competitive labor climate, Latin Americans have reason to fear increased labor competition from immigrants.

In addition to the aforementioned economic dynamics, immigration in Latin American still involves a number of important non-economic issues. Ethnicity serves to create sharp lines between immigrants and native-born residents. Immigrants from the Andean region (Peru and Bolivia), who are ethnically distinct from many white host-country citizens, often face harsh discrimination in their destinations of choice—Chile and Argentina respectively—and are often the object of racist and prejudice media and political commentary (Grimson and G. Kessler 2005). Despite ethnic differences between immigrants and natives, there are objective elements that create a degree of cultural proximity between immigrants and natives (language, religion, etc.). Thus, issues of cultural tolerance are less complex than in other immigration contexts such as the United States and Europe, where factors such as religious and linguistic differences are important determinants of immigration attitudes (Hopkins, Tran, and Williamson 2011; Sniderman, Hagendoorn, and Prior 2004). In the United States for instance, assumptions or stereotypes about an individual's race, skin tone, educational level, religion, language and other customs all may be attached to an immigrant's country of origin. That is a difficult set of assumptions and stereotypes to unpack. Latin Americans certainly have stereotypes about immigrants, but because of specific shared cultural features, individuals have less to focus on in terms of conflicting identities and could be more focused on the economic implications of immigration.

Overall the dynamics of the Latin American migration hub provide analytical leverage toward better understanding immigration attitudes in four different ways. First, the significant flows of both low and high skilled immigrants throughout the region provide the necessary structure to more accurately test a highly debated aspect of immigration attitudes: the effect of labor competition. Most prior studies of highly industrialized countries are limited in their ability to test whether pocketbook calculations related to competition affect both low and high skilled workers. Second, the economic conditions in Latin America coupled with a limited social safety net make the specter of immigration a salient economic concern. If the threat of competition influences attitudes, it is likely to do so in a labor environment marked by uncertainty and significant fear of unemployment. Third, the relative cultural proximity of natives and migrants in the region permits a more precise assessment of how different immigrant attributes (ethnicity, national origin and skill-level) affect immigration attitudes. Fourth, the narrow evaluation of attitudes toward immigration in highly industrialized countries ignores the importance of migration as a broader phenomenon: a world of comers and goers, senders and receivers. In countries where high rates of emigration occur alongside immigration, individuals experience migration through a dual lens. I argue that this migration framework is critical to understanding immigration attitudes. In general, I am able to leverage the economic and cultural characteristics as well as migration patterns that define Latin American immigration to more adequately evaluate some of the central theoretical claims underpinning the research on immigration attitudes.

### **Overview of Essays**

The first essay (Chapter Two) investigates the role of economic self-interest and tolerance in shaping immigration attitudes by evaluating the effect of education. Scholars often

debate whether education serves to form more cosmopolitan citizens or acts as a proxy for economic skill level and labor market location. To test these competing perspectives, I combine data from the Latin Barometer survey and World Bank and utilize a multi-level model to account for both individual-level and country-level contextual factors. The analysis finds little evidence that individuals are affected by a sense of job competition between themselves and immigrants. In other words, these findings are contrary to one of the pivotal simplifying economic theories used to model immigration attitudes. Education in Latin America generates more tolerant citizens, but only to a limited degree.

Chapter Three provides a more direct test of the labor market competition hypothesis, while also addressing how the ethnicity and national origin of immigrants influence attitudes. The essay outlines a unique survey experiment I deployed in Chile. In this choice experiment, Chileans are presented with two immigrants applying for work visas and asked to make a choice as to which immigrant should receive a visa. Each immigrant is described in terms of economic skill level, ethnicity and country of origin (attributes are randomly assigned). By utilizing these three attributes and focusing respondents on the labor market implications of immigration, I supply an explicit test of the behavioral expectations associated with the labor competition hypothesis. Importantly, I also dissect the effects of national origin and ethnicity by explicitly separating these two characteristics. This essay demonstrates that Chileans prefer highly skilled immigrants and are not making narrow pocketbook calculations related to job competition. There is also evidence of a humanitarian quality to immigration preferences: individuals are more likely to support migration of individuals who they perceive as benefitting from the opportunities provided by immigration—ethnic minorities from less developed countries.



I investigate the role that certain institutions may play in generating increased tolerance toward immigration in Chapter Four. This chapter explores the possible influence of the Roman Catholic Church, which has been a global advocate for immigrants. Given its important social and political position throughout much of Latin America, the Church is theoretically capable of affecting parishioners' attitudes toward immigration. Using individual survey data from the Latin Barometer survey and hierarchical modeling techniques, I find that Latin American attitudes are not significantly influenced by the powerful pro-immigrant institution, the Roman Catholic Church. However, members of minority religious groups are more supportive of immigration than their Catholic counterparts, suggesting a degree of empathy exists between marginalized groups in Latin America.

Lastly, in the final essay (Chapter Five), I explore how the nexus of emigration and immigration influences attitudes in Latin America. Prior studies of immigration attitudes ignore the sending and receiving aspects of migration, masking important mechanisms that shape attitudes. I argue that personal connections—familial and economic—to emigrants will have a positive and significant effect on immigration attitudes. Individuals with close emigrant ties are likely to better understand the immigration experience, creating a sense of empathy for immigrants living in their own country. Additionally, remittances can serve to alleviate economic concerns, thus reducing negative attitudes toward immigration. Using individual survey data on emigrant connections and remittances, this analysis demonstrates that close familial ties have an important direct impact on immigration attitudes. Individuals connected to migrant networks are more supportive of immigrants in their own country. Additionally, the positive effect that remittances exert on immigration attitudes appears to operate through the impact remittances have on an individual's economic security. These two findings suggest that understanding

immigration attitudes requires a broader analytical framework that focuses on migration: a dual process of immigration and emigration.

I conclude the dissertation (Chapter Six) with a discussion of the overall implications of this research and provide a set of recommendations for advancing our understanding of immigration attitudes.

# Chapter 2

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## Competition or Cosmopolitanism: Education and Immigration Attitudes in Latin America

### Chapter Abstract

It is well documented that education lessens anti-immigration attitudes. It is considerably less clear why this is so. Does education yield tolerant, enlightened citizens with more welcoming and cosmopolitan orientations? Or does education simply dictate labor market position and the economic calculations associated with that position? Existing studies of this important relationship tend to focus on highly industrialized countries, in which cultural differences between “natives” and immigrants are salient and the incoming labor flows tend to be of the low skill variety. These common characteristics limit our theoretical leverage with the question at hand. Therefore, this study examines immigration attitudes in Latin America where cultural proximity between natives and migrants is high and there are prevalent influxes of both high *and* low skill labor. Utilizing the 2007 Latin Barometer Survey, I test the two predominant theoretical mechanisms linking education to immigration attitudes: tolerance and labor market competition. Even in the risky and competitive Latin American labor market, the effect of education on immigration attitudes is largely consistent with the tolerance perspective. However, other personal and sociotropic economic factors do have a substantial impact on Latin American immigration attitudes reflecting patterns observed in the United States and Europe.

## **Introduction**

It is a historical and contemporary fact that immigration generates social conflict. From the docks of New York City at the turn of the 20<sup>th</sup> century to the modern slums of South Africa, immigrants have served as scapegoats for social and economic ills. Across the globe, the social and political implications of immigration are bountiful and pervasive. And because international migration will undoubtedly be an important phenomenon in the future—as people continue to cross borders to search for better lives—it is important that we continue to ask: What drives these important and divisive attitudes?

Existing accounts of anti-immigration attitudes tend to conclude that education reduces people's objections to the influx of foreigners. Yet these studies interpret this relationship in very different ways. Economists argue that education serves as a proxy for skill level. Therefore the effect of education on immigration attitudes is a function of an individual's location in the labor market relative to immigrants (Mayda, 2006; O'Rourke & Sinnott, 2006; Ortega & Polavieja, 2012; Scheve & Slaughter, 2001). An individual's skill and their associated self-interest thus determine their attitudes. However, an alternative explanation as to the mechanism through which education operates is that it increases cultural and racial tolerance. The more highly educated are purported to be less racist and to value cultural diversity, therefore they have more positive attitudes regarding immigration, especially of culturally distinct immigrants (Chandler and Tsai 2001; Hainmueller and Hiscox 2007). These two perspectives provide very different interpretations of the underlying mechanism that links education to immigration attitudes. The mechanism of the economic perspective is a fairly simple story of labor competition among natives and immigrants. If tolerance flows from education, however, the mechanism that generates anti-immigrant sentiment is rooted in concerns over racial, cultural and national identity. Education then serves to mitigate the emergence of those cultural concerns.

I contend that to gain further insight into this important theoretical and empirical debate, it is essential to shift the focus of inquiry to new immigration contexts. Almost all of the published research on immigration attitudes analyzes the perceptions of citizens in highly developed countries (United States, Europe, Australia and Canada).<sup>7</sup> Scholars, with a few notable exceptions, keep returning to the same highly-developed countries for analysis. The majority of this research uses a rational framework and imputes gains and losses by indirect indicators such as income and social class (Sniderman, Hagendoorn, and Prior 2004, 46). In highly industrialized countries, economic models would suggest that low-skilled workers will compete with migrants. Testing hypotheses in this context using cross-sectional data largely means that the relationship is examined in only one form: competition among low-skilled workers.<sup>8</sup> This factor undermines the ability of scholars to adequately test the competition hypothesis.

I offer a way forward through a comprehensive evaluation of immigration attitudes in an important South-South migration region, Latin America. Worldwide, South-South migration is just as common as South-North migration (Ratha and Shaw 2007). Recent evidence suggests that the global economic crisis has curbed Latin American migration to the US and Europe, but has had little effect on South-South migration (Mazza and Sohnen 2010). The heated debate over immigration in Latin American nations shares elements of the debate playing out in the United States and Europe. From large anti-immigrant street protests led by a construction workers union

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<sup>7</sup> Orces (2009) examines the relationship between democratic attitudes and immigration attitudes in Ecuador utilizing data from the Latin American Public Opinion Project (LAPOP). Mayda (2006) also includes a number of developing countries in her cross-national analysis, although they are excluded from segments of her analysis because of data limitations. Lawrence (2011) specifically examines the Catholic Church's influence over attitudes in Latin America.

<sup>8</sup> Hainmuller and Hiscox (2010) have moved away from this general framework by asking individual respondents about particular types of immigrants: low-skilled or high-skilled. Their findings suggest that education produces tolerance. Malhorta, Margalit and Mo (2011) oversample in particular regions in which high skill immigrants are more prevalent and find support for more restrictive immigration policy among high-skilled individuals in the US.

in Argentina to mob violence directed at Zimbabwean and Malawian immigrants in South Africa, it is quite clear that immigration is a salient and divisive issue outside of the US and Europe.

Immigration throughout Latin America is dynamic—there is varied movement of low and high skilled labor—providing a strong foundation to more adequately test economic theories underpinning much of the immigration literature. Some countries, such as Chile, are regional economic success stories and attract lower skilled workers from around the region. Other countries, such as Bolivia, that are less developed attract more highly skilled and entrepreneurial workers from more developed regional neighbors.<sup>9</sup> The labor market within Latin American countries is also highly competitive. Because of a lack of formal sector jobs, many individuals are forced to engage in very low-wage independent and informal sector work: in Ecuador and Bolivia, for instance, over 60% of workers operate in the informal sector (International Labour Organization 2012). Latin American social welfare systems, although diverse, are generally minimalist and in many cases exclude large portions of the population (Breceda, Rigolini, and Saavedra 2008). In this environment, losing a job has dire consequences because workers lack the social protections offered in more advanced economies. Thus economic conditions in Latin America create a situation in which natives have strong reasons to fear job competition from immigrants.

In addition to the aforementioned economic dynamics, South-South migration in Latin American still involves ethnic and racial issues. Immigrants from the Andean region (Peru and Bolivia), who are ethnically distinct from host-country citizens, often face harsh discrimination in their destinations of choice—Chile and Argentina respectively—and are often the object of

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<sup>9</sup> See the World Bank's (2010) bilateral migration data for detailed information on immigrants and their country of origin.

racist and prejudice media and political commentary. However, despite ethnic differences between immigrants and natives, there is often substantial cultural proximity (language, religion, etc.). Thus, issues of cultural tolerance are less complex than in other immigration contexts, where factors such as religious and linguistic differences are important determinants of immigration attitudes (Hopkins, Tran, and Williamson 2011; Sniderman, Hagendoorn, and Prior 2004). I exploit the simplified cultural dynamics of South-South migration in Latin America as well as the migration patterns to more adequately evaluate one of the central theoretical claims associated with the cultural and economic determinants of immigration attitudes: the effect of education.

Utilizing data from the 2007 Latin Barometer Survey (LBS), I evaluate the complex relationship between education and immigration attitudes in a South-South immigration context. The LBS provides a unique set of questions, which specifically address the ethnic identity of immigrants; this provides considerable leverage in terms of evaluating the tolerance mechanism associated with education. Despite the fact that economic theory based on labor market competition suggests the effect of education should vary across countries depending on the relative level of development, I find little supporting evidence for the labor market competition model. Individual attitudes are linked to economic issues (personal and sociotropic concerns), but they are not a function of direct job competition. The effect of education seems to operate through tolerance; however, the substantive impact of increased education on reducing anti-immigrant sentiment is quite small.

### **Education: Skin or Skill**

There are a number of economic theories that are commonly used to derive predictions as to the preferences of individuals concerning immigration. In this section, I focus on one particular economic model, the factor proportions model, and the subsequent predictions it generates concerning labor market competition.<sup>10</sup> Economic theories of immigration attitudes begin with a core assumption concerning individuals: they are self-interested and aim to maximize utility. A basic interpretation of the factor proportions model indicates that immigration preferences will vary across individuals based on their own skill level relative to that of migrants. In high-skilled labor abundant countries, high-skilled workers will witness their real wages increase with the arrival of low-skilled immigrants. Low-skilled natives, however, will watch their wages decrease. Therefore low-skilled immigrants will be opposed to immigration because it has a direct and personal negative consequence that operates through the labor market. Perhaps more intuitively, the factor proportions model predicts that in highly industrialized countries such as the United States, low-skilled workers, who conceivably would compete with the large number of low-skilled Mexican immigrants coming to the US, should be more anti-immigrant than their high-skilled counterparts. In a developing country such as Bolivia, however, which should theoretically attract high skilled workers; we should expect low-skilled Bolivians to be more supportive of immigration than their high-skilled counterparts. What matters according to the factors proportion model is not simply your own skill level (and its relative abundance), but the skill level of immigrants as well.

A number of studies find evidence in support of the expectations generated by the factor proportions model and labor market mechanisms derived from it (Malhorta, Margalit, and Mo

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<sup>10</sup> The other principal channel that economists often illustrate when evaluating immigration attitudes is the welfare state channel, which this analysis does not directly address.



2011; Mayda 2006; Scheve and Slaughter 2001). Scheve and Slaughter (2001) as well as Mayda (2006) suggest that education serves as a proxy for skill-level. Following this logic they use education to evaluate the labor market competition proposition and find that the more highly educated in highly industrialized countries are more likely to support immigration.<sup>11</sup> These two studies, which are seen as pivotal evidence in support of labor market competition and its influence on immigration attitudes, do address two obvious concerns with the findings. According to Facchini, Mayda and Puglisi (2010), by examining only individuals outside of the labor market and finding no relationship between education and immigration attitudes, Scheve and Slaughter clearly demonstrate that education is not simply generating tolerance. Additionally, they point out that the conditional effect Mayda (2006) finds related to education is another clear indicator of the labor market competition channel because education—if generating tolerance—should have a uniform effect across all countries.

Recent work evaluating immigration attitudes and the role of skill-level utilizes a survey experiment to directly test the effect of low versus high-skilled immigration on attitudes (Hainmueller and Hiscox 2010). One of the primary criticisms that Hainmueller and Hiscox illuminate concerning labor market predictions is that previous work has been unable to test the theoretical mechanism: researchers are left to guess as to what type of immigrant (low or high skilled) respondents are thinking of when they answer questions regarding immigration. Through an experimental manipulation, Hainmueller and Hiscox (2010) find that both high and low skilled American workers are more likely to support high-skilled immigration than low-skilled immigration. This finding clearly calls into question the theoretical predictions of the labor competition model exploited by economists to explain immigration attitudes. What then explains

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<sup>11</sup> Scheve and Slaughter (2001) look only at the United States, while Mayda (2006) examines a large number of highly developed countries and some developing countries.

the fairly consistent and robust relationship between education and immigration attitudes in most immigration studies?

Although education may proxy for skill—the more educated often occupy professional and managerial positions—it can also generate other critically important attitudes and behavior in diverse societies. The more educated, especially those studying at the university level, are expected to be more tolerant of others. As Chandler and Tsai (2001) point out none of the early literature linking education to tolerance specifically addresses tolerance toward immigrants, however, it does focus on education's positive effect on tolerance toward those of distinct races and ethnicities.<sup>12</sup> A number of immigration studies find a positive and significant relationship between level of education and pro-immigration attitudes and attribute the effect of education to its ability to produce increased tolerance (Chandler and Tsai 2001; Citrin et al. 1997; Espenshade and Calhoun 1993; Hainmueller and Hiscox 2007; Kehrberg 2007). The most direct attempt to address the role of education—either as a proxy for skill or generator of tolerance—is research analyzing European attitudes toward immigrants from poorer and richer countries (Hainmueller and Hiscox 2007). This study represents a critical step in evaluating the role of education because it uses questions that provide more detail as to the skill level of immigrants and the results indicate tolerance is the mechanism through which education affects immigration attitudes. This stream of research leaves us to believe that education shifts how individuals respond to immigrants who are racially and culturally distinct.

Despite considerable evidence as to the strength of relationship between education, tolerance and immigration attitudes, there is little research that finds education generates more positive attitudes toward immigrants outside of the United States and Europe. In other words,

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<sup>12</sup> See Jackman (1978) for an overview and critique of this early literature and Fetzer (2000) for a detailed summary of the theorized link between education and tolerance.

tolerance has not been tested adequately outside of highly industrialized countries where Western-style systems of education also exist and should theoretically have a similar effect. The cross-national evidence (from highly and less developed countries) that does exist concerning the effect of education finds that its effect varies across countries depending on level of development (a proxy for relative skill abundance) (Mayda 2006). Like many studies based on the factor proportions model this work suffers from two critical issues: empirical evidence fails to demonstrate the negative impact of immigration on job opportunities and wages as purported by the model and more complex variations of the model considerably alter the predictions of attitudes based on skill level.<sup>13</sup> In other words, immigrants do not actually have a significant effect on natives' job opportunities and wages nor should we uniformly expect them to.

Furthermore, Mayda's explanation as to the varied effects of education across levels of development does not necessarily provide a clear empirical picture of immigration patterns throughout Latin America. In a developing country such as the Dominican Republic, Mayda's simple model would predict that increasing levels of education are associated with negative attitudes toward immigration because high-skilled natives are threatened by immigration from high-skilled immigrants. Yet, it is low-skilled Haitian immigrants that are the predominant immigrant group in the Dominican Republic. Rather than high-skilled laborers flocking to the Dominican Republic, low-skilled Haitians migrate in large numbers across a relatively porous border. This pattern of contiguous low-skill migration to more economically stable countries is one feature of Latin American immigration. This suggests that testing labor market competition using a regional focus that more accurately addresses migration patterns could provide a clearer test of labor market competition and the role education plays in shaping attitudes.

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<sup>13</sup> See Hainmuller and Hiscox (2007) for a detailed explanation of these two criticisms.

The problematic theoretical framework of economic models of immigration attitudes and a growing amount of empirical evidence that fails to support a number of their hypothesized outcomes raises concern as to the usefulness of the labor market competition model. Additionally, those espousing the tolerance producing qualities of education have narrowly analyzed their theoretical claims by focusing entirely on the United States and Europe and have been unable to address specific elements of tolerance because of insufficient data. Although most developing countries are often thought of as important countries of emigration, many have also become important receiving nations of both high and low skilled immigrants. I utilize this trend to provide a thorough examination of the underlying mechanism driving education's effect on immigration attitudes.

The extensive research on immigration attitudes indicates that a number of other factors aside from education are important in determining anti- or pro- immigration perceptions.<sup>14</sup> There is variation in attitudes attributable to minority status (Chandler and Tsai 2001; Citrin et al. 1997; Harell et al. 2012). Two recent studies suggest that in the United States religion and religious beliefs can play an important role in determining immigration attitudes (Knoll 2009; McDaniel, Nooruddin, and Shortle 2010). This could be of particular importance given the emergence of non-Catholic minority religions with highly active members in Latin American over the last 30 years. Both females and the elderly are more likely to be opposed to immigration (Citrin et al. 1997; Dustmann, and Preston 2007). There is also mixed evidence associated with theoretically important contextual factors: size of the immigrant population and flow of immigrants (Citrin et al. 1997; Hopkins 2010; Mayda 2006; McLaren 2003; Quillian 1995). The following analysis

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<sup>14</sup> One important distinction, highlighted by Lahav (2004), is the distinct influence of personal vs sociotropic considerations in relation to immigration sentiment. Although personal economic considerations (i.e. labor market competition) may not matter, national economic issues are capable of shaping immigration attitudes (Lahav 2004, 1167–1168).

attempts to account for these wide ranging factors, while providing a thorough examination of education's influence—both economic and cultural—on immigration attitudes in Latin America.<sup>15</sup>

### **Opening a Different Door**

In order to evaluate the determinants of immigration attitudes in Latin America, I utilize data from the 2007 wave of the Latin Barometer survey. The survey covers 18 Latin American countries and includes 20,212 respondents with at least 1,000 respondents from each country. In most countries the sampling strategy generates a national representative sample.<sup>16</sup> This particular wave of the Latin Barometer survey includes four distinct questions concerning immigration. Two of the four questions specifically identify the race/ethnicity of immigrants relative to that of the majority population.<sup>17</sup> Another question asks respondents specifically about their immigration attitudes with respect to individuals coming from poorer countries. The final question asks individuals to evaluate the benefit of immigration without specifying any attributes associated with immigrants. Question wording and a descriptive summary of the four aforementioned questions appear in Appendix A.

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<sup>15</sup> One factor, not incorporated in this analysis because of a lack of adequate data, but shown to be an important predictor of German immigration attitudes is concern related to crime (Fitzgerald, Curtis, and Corliss 2012). Additionally, I use race/ethnicity because the survey question uses both of these descriptors.

<sup>16</sup> For a detailed description of the survey methodology please see the Methodological Report Latinobarómetro 2007 (<http://www.latinobarometro.org/latino/LATContenidos.jsp>)

<sup>17</sup> Recent experimental work demonstrates the effect different types of immigrants can have on anxiety and subsequently immigration attitudes (Brader, Valentino, and Suhay 2008), making this particular set of questions highly useful.

A number of recent studies have collapsed four-point scales of immigration attitudes into dichotomous variables measuring pro-immigration attitudes (Hainmueller and Hiscox 2007; Mayda 2006). I follow a similar procedure to facilitate interpretation and ease the estimation constraints of estimating multilevel ordered logit models. The result is a set of three dichotomous measures of immigration attitudes focused on certain types of immigrants and one general continuous measure of immigration attitudes.

This set of questions is unique because two of the questions are comparable in terms of tolerance across distinct racial and ethnic identities. If education produces tolerance, we should expect a certain set of relationships between education and attitudes. From this perspective, education will have a profound and positive effect when the immigrants referenced in the question are of a different race or ethnicity than the majority of the population. This effect should be consistent across Latin American countries. Although Latin American educational systems are not identical and there is significant variation in terms of education spending, one of the core functions of educational systems in developing regions is to generate social cohesion (Heyneman and Todoric-Bebic 2000). Also, in the past 30 years a wide swath of Latin American countries have adopted inclusive educational reforms (e.g. bilingual education) (Van Cott 2005), indicating a pattern of educational policy that recognizes the importance of diversity. Education still should matter with respect to immigrants of the same race because immigrants represent an ‘other’, but it should conceivably matter less because a key feature that can trigger anti-immigrant sentiment no longer exists.

The question describing the immigrants’ country of origin as poorer permits a precise analysis of the labor market competition model, which mirrors prior work looking at attitudes in Europe (Hainmueller and Hiscox 2007). Because immigrants are identified as originating from

poorer countries, we can assume that respondents think of these immigrants as less-skilled. Assuming education proxies for skill-level, we would then expect that education will have a positive and significant effect across all Latin American countries. Low-skilled workers should be uniformly opposed to immigration from poorer countries according to the factor proportions model.<sup>18</sup>

Lastly, the final general question concerning immigration is similar to many of the questions used in previous studies regarding immigration attitudes: it does not identify specific immigrant characteristics. If skill matters and individuals extend their personal fears of job competition to general evaluations of immigration's impact, the effect of education should vary across countries depending on the country's level of development. This is an important contextual element that will be described in detail below. If education produces tolerance and increases the value individuals place on cultural diversity, we should expect education to have a consistent and positive effect across general attitudes toward immigration in Latin American nations.

Scholars have taken a number of approaches in dealing with cross-national immigration attitudes survey data. Some, such as Mayda (2006), have used a two stage modeling procedure to account for clustering at the country level in stage one and then in the second stage incorporate country level predictors. Given the importance of evaluating education's hypothesized conditional effect across countries, I utilize hierarchical models to analyze the determinants of individual immigration attitudes in Latin America. Very simply put, ignoring the multi-level structure of this cross-national data can cause low standard errors and result in more frequent Type 1 errors (Steenbergen and Jones 2002). Also, the labor market model suggests that the

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<sup>18</sup> One potential issue with this question is that if education also generates class or socioeconomic tolerance, it could have the same positive and significant effect across all countries.

effect of education will vary according to level of development (a country-level attribute). Using a hierarchical model, I can adequately account for this conditional effect and roughly estimate the degree to which it accounts for education's varied effect across countries—if one exists. My model choice is therefore driven by both practical statistical considerations as well as theoretical ones. This approach provides a strong test of the two theorized influences associated with education. In order to preliminarily justify an analysis that incorporates contextual factors, I calculate the percentage of variance attributable to the country-level for each dependent variable (Table 2.1). The country-level variance component associated with each dependent variable is significant ( $p < .05$ ), indicating that country-level factors are an important element in explaining individual immigration support.

**Table 2.1- Variance Associated with Dependent Variables Attributable to Country Level**

<b>Dependent Variable</b>	<b>Percent of Variance Attributable to Country Level (%)</b>
Immigrants of a Different Race	6.09
Immigrants of the Same Race	5.12
Immigrants From Poorer Countries	6.93
Immigrants Make Country Better	3.72

In the following section I use a variety of model specifications to evaluate the relationship between education and immigration attitudes. I also examine the degree to which sociotropic economic concerns relate to Latin American immigration attitudes.

### **A Multi-Level Approach**

I begin my evaluation of immigration attitudes by establishing a baseline model. The previous literature on immigration attitudes provides a litany of factors that are likely to be important determinants, even in Latin America. I include many of those factors to account for the various economic and non-economic determinants of attitudes. In addition to the individual-level predictors I include, I also account for country-level contextual factors—level of development



(GDP per capita), immigration rate and relative size of the immigrant population in each country based on prior scholarly findings (Citrin et al. 1997; Mayda 2006; McLaren 2003; Quillian 1995). I outline the equations for the baseline random intercept model below using one of the dependent variables—immigration attitudes related to immigrants of another race or ethnicity—to illustrate the model's baseline form.

*Equation 1 is the individual-level (level-1) model:*

$$(1) \text{ImmigrationSupportDifferentRace}_{ij} = \beta_{0j} + \beta_{1j} \text{Education}_{ij} + \beta_{2j} \text{AbilitytoMeetBasicNeeds}_{ij} + \beta_{3j} \text{MemberMajorityRace}_{ij} + \beta_{4j} \text{Catholic}_{ij} + \beta_{5j} \text{Female}_{ij} + \beta_{6j} \text{Age}_j + \beta_{7j} \text{CitySize}_{ij} + \epsilon_{ij}$$

In order to account for the possible impact of contextual factors (country-level) identified above, I estimate a level-2 model that models the intercept ( $\beta_{0j}$ ) as a function of three country level factors. By including the predictors at level-2, I am asserting that these variables should theoretically alter the mean level of immigration support across countries and therefore  $\beta_{0j}$  is considered a random intercept.<sup>19</sup>

*Equation 2 provides the random intercept specification:*

$$(2) \beta_{0j} = \gamma_{00} + \gamma_{01} \text{PercentMigrant}_j + \gamma_{02} \text{ChangeInMigrantStock}_j + \gamma_{03} \text{GDPPerCapita}_j + \delta_{0j}$$

Table 2.2 shows the results of this fairly simple hierarchical specification. The main variable of interest, education, is significant and positive across three of the four dependent variables. The more highly educated are more likely to support immigration by both ethnically similar and dissimilar immigrants, providing strong evidence that education increases tolerance. However, the effect size associated with education is identical across the two models (Table 2.2, columns 2 & 3) suggesting that it creates tolerance of foreigners in general, regardless of the immigrants' ethnicity. The effect of education on the dependent variable asking respondents

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<sup>19</sup> I also utilize a random slope model and cross-level interaction to test whether the effect of education varies based on level of development.

about immigration with respect to individuals coming from poorer countries is positive, however, does not meet conventional standards of significance ( $p > .05$ ). If individual attitudes are shaped by labor market competition, we would expect more educated individuals to be uniformly more supportive of immigration from poorer countries. The results of the baseline models do not support that theoretical argument. The one insignificant result may reflect the emerging empirical pattern that both low and high skill natives prefer high skilled immigration (Aalberg, Iyengar, and Messing 2011; Hainmueller and Hiscox 2007, 2010; Harell et al. 2012).<sup>20</sup>

This simple interpretation, however, does not directly test labor market competition because it includes individuals outside the labor the market. Because one of the dependent variables specifically describes immigrants in economic terms, it provides a concise test of the labor market competition hypothesis. By restricting the sample to only individuals in the labor market, the model more accurately tests labor competition. Despite this more accurate test, education remains insignificant (Table 2.3). These results suggest that less educated workers in Latin America are no more fearful of low-skilled immigration than their more well-educated counterparts.

If individual economic fears are a salient concern then they should influence general attitudes about immigration as well. The models above do not utilize one of the advantages of hierarchical modeling: the ability to comprehensively examine the variation in the effect of a particular variable across second-level units. Much of the previously discussed economic theory, based largely on the factor proportions model, indicates that the effect of education on immigration attitudes will vary across countries.

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<sup>20</sup> Although over 20,000 individuals are included in the 2007 Latin Barometer Survey, a large number of individuals (approximately 5,000) are not included in the analysis due to pair-wise deletion. To check the robustness of these results I perform multiple imputation and provide the results in Appendix A. There are no substantively interesting differences in the estimates.

**Table 2.2- Baseline Models**

Variables	(1) Immigrants From Poorer Countries	(2) Immigrants of Same Ethnicity	(3) Immigrants of Different Ethnicity	(4) Immigration Makes Country Better
Education	0.013 (0.011)	0.041*** (0.011)	0.041*** (0.011)	0.046*** (0.013)
Ability to Meet Basic Needs	0.081*** (0.021)	0.132*** (0.021)	0.100*** (0.021)	0.173*** (0.024)
City Size	0.019** (0.008)	0.037*** (0.008)	0.042*** (0.008)	-0.003 (0.009)
Age	-0.004*** (0.001)	-0.006*** (0.001)	-0.005*** (0.001)	0.001 (0.001)
Female	-0.089*** (0.034)	-0.169*** (0.033)	-0.119*** (0.033)	-0.191*** (0.037)
Catholic	-0.150*** (0.038)	-0.140*** (0.038)	-0.109*** (0.038)	0.019 (0.043)
Member Majority Race	-0.061* (0.035)	0.027 (0.035)	-0.061* (0.035)	0.034 (0.039)
Immigrant Population (%)	-0.042 (0.034)	-0.063** (0.031)	-0.046 (0.033)	-0.074 (0.048)
Change in Migrant Stock (%)	-0.054*** (0.015)	-0.058 (0.013)	-0.066*** (0.014)	-0.016 (0.020)
GDP Per Capita	0.000*** (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Constant	-0.523*** (0.185)	0.543*** (0.168)	-0.030 (0.177)	4.893*** (0.251)
<i>Variance Components</i>				
Individual Level ( $\delta^2$ )	-	-	-	5.493** (0.062)
Country Level				
Constant ( $\tau_{00}$ )	0.105** (0.037)	0.083** (0.030)	0.095** (0.033)	0.205** (0.071)
Observations	15,762	15,762	15,762	15,762
Number of groups	18	18	18	18
-2 X Log-likelihood	20396	20728	20892	71642

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

Columns 1-3 are logit estimates

Table 2.3- Labor Force Sample Immigrants from Poorer Countries

Variables	Immigrants From Poorer Countries (Logit)
Education	0.003 (0.014)
Ability to Meet Basic Needs	0.093*** (0.026)
City Size	0.017 (0.010)
Age	-0.006*** (0.002)
Female	-0.133*** (0.043)
Catholic	-0.117** (0.047)
Member Majority Race	-0.051 (0.043)
Immigrant Population (%)	-0.032 (0.035)
Change in Migrant Stock (%)	-0.053*** (0.015)
GDP Per Capita	0.000*** (0.000)
Constant	-0.499** (0.198)
<i>Variance Components</i>	
Individual Level ( $\delta^2$ )	-
Country Level	
Constant ( $\tau_{00}$ )	0.108** (0.039)
Observations	10,287
Number of groups	18
-2 X Log-likelihood	13314
Standard errors in parentheses	
*** p<0.01, ** p<0.05	

Economists, however, are not simply positing that the effect of education varies, but that it does so because of the relative skill composition of natives to immigrants. Data on the skill composition and educational level of migrants in Latin America is not readily available. Other

research has found that GDP per capita is a fairly reliable measure of the skill ratio between natives and immigrants (Hainmueller and Hiscox 2007; Mayda 2006). In this particular set of countries, we should expect that those countries with higher levels of development will be attractive to less-skilled immigrants in search of work and a higher standard of living. Therefore, according to the factor proportions model, education should have a positive and significant effect in more highly developed Latin American countries. In less developed Latin American countries, we should expect a significant and negative effect associated with education. To some degree current migration patterns reflect these theoretically driven expectations as a number of wealthier Latin American countries have become important receiving countries of low-skilled workers in the last two decades (Pizzarro and Villa 2005).

To test for the varied effect of education, I utilize the dependent variable asking respondents to evaluate the effect of immigration on their country: does it make it better or worse? This question avoids the cultural (tolerance) or economic framing (immigrants from poorer countries) associated with the other dependent variables, and therefore serves as an excellent test for the theorized conditional effect associated with education. I maintain the restricted sample to include only those in the labor force.<sup>21</sup> Those individuals outside the labor force would have little reason to directly feel the effects of labor market competition (whether actual or perceived). To specifically test the conditional effect of education, I model the effect of education as a random slope. I then generate a cross-level interaction of GDP per capita and education. The results for the random intercept, random slope model and cross-level interaction are presented in Table 2.4.

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<sup>21</sup> Scheve and Slaughter (2001) demonstrate that the effect of education on immigration attitudes does not hold for those outside the labor force. In Latin America, I find just the opposite. Among individuals outside the labor force, education has a consistent positive and significant effect on immigration attitudes. See Appendix A.

**Table 2.4- Labor Force Sample**

Variables	Immigrants Make Country Better		
	(1) Random Intercept	(2) Random Slope	(3) Cross Level Interaction
Education	0.036** (0.016)	0.036* (0.020)	0.026 (0.039)
Ability to Meet Basic Needs	0.206*** (0.029)	0.204*** (0.029)	0.204*** (0.029)
City Size	-0.009 (0.012)	-0.008 (0.012)	-0.008 (0.012)
Age	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Female	-0.223*** (0.049)	-0.222*** (0.049)	-0.222*** (0.049)
Catholic	0.030 (0.053)	0.030 (0.053)	0.030 (0.053)
Member Majority Race	-0.003 (0.049)	-0.002 (0.049)	-0.002 (0.049)
Immigrant Population (%)	-0.080 (0.051)	-0.104*** (0.038)	-0.103*** (0.038)
Change in Migrant Stock (%)	-0.019 (0.021)	-0.012 (0.015)	-0.012 (0.015)
GDP Per Capita	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Education * GDP Per Capita		-	0.000 (0.000)
Constant	4.928*** (0.272)	4.879*** (0.250)	4.949*** (0.334)
<i>Variance Components</i>			
Individual Level ( $\delta^2$ )	5.539 (0.077)	5.333 (0.078)	5.533 (0.078)
Country Level			
Constant ( $\tau_{00}$ )	0.228 (0.080)	0.384 (0.144)	0.382 (0.143)
Education ( $\tau_{11}$ )	-	0.003 (0.002)	0.002 (0.002)
Constant, Education ( $\tau_{01}$ )	-	-0.033 (0.017)	-0.032 (0.016)
Observations	10,287	10,287	10,287
Number of groups	18	18	18
-2 X Log-likelihood	46860	46850	46850

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

Interestingly, the interaction between education and GDP per capita for the labor force sample is insignificant. Given that education does exert a positive and significant effect on

immigration attitudes, but that effect does not significantly vary across level of development, even within the labor force sample, there is little evidence to support the competition perspective. However, we can further test the tolerance and competition debate using this restricted sample.

Prior research indicates that the relationship between education and immigration attitudes is not simply linear (Chandler and Tsai 2001; Hainmueller and Hiscox 2007). As Chandler and Tsai (2001) point out, exposure to university-level education can instill cosmopolitan values which generate tolerance and appreciation for other cultures. From this perspective, we should observe a consistent and positive relationship between university-level education and immigration attitudes across Latin American countries. If the relationship between university education and attitudes varies across countries based on level of development, this would indicate that the most highly-skilled have varying attitudes because of different perceptions of labor competition. To test this relationship, I use the same restricted sample, but replace the educational attainment scale with a dichotomous variable measuring whether an individual has had any exposure to university-level education (Table 2.5). The results indicate that university-educated workers are more likely to perceive immigration as benefitting their country and that the relationship is consistent across Latin American countries.<sup>22</sup> This provides further evidence that education, particularly at the university-level, generates more pro-immigration attitudes which are not linked to concerns of direct job competition.

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<sup>22</sup> To test for a significant variation in the effect of university-level education across countries, I initially model university education as a random slope (Table 2.7, Column 2). I then use a procedure (one-tailed LRT) outlined by Snijders and Bosker (1999) to determine if the variance component is significant. This is accomplished by examining the difference between the measure of deviance ( $-2 \times \log\text{-likelihood}$ ) in the random intercept and random slope models. In this case the variance component is insignificant ( $\chi^2=2.54$ ,  $df=2$ ,  $p<.30$ ). This testing procedure is supported by simulation evaluation suggesting it provides a strong balance between avoiding Type I errors and generating enough statistical power (LaHuis and Ferguson 2009).

**Table 2.5- Labor Force Sample, University Education**

Variables	Immigrants Make Country Better		
	(1) Random Intercept	(2) Random Slope	(3) Cross Level Interaction
University Education	0.172** (0.070)	0.178** (0.077)	0.259 (0.173)
Ability to Meet Basic Needs	0.211*** (0.029)	0.209*** (0.029)	0.209*** (0.029)
City Size	-0.006 (0.012)	-0.006 (0.012)	-0.006 (0.012)
Age	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Female	-0.222*** (0.049)	-0.222*** (0.049)	-0.222*** (0.049)
Catholic	0.030 (0.053)	0.029 (0.053)	0.029 (0.053)
Member Majority Race	0.003 (0.049)	0.001 (0.049)	0.001 (0.049)
Immigrant Population (%)	-0.080 (0.051)	-0.107** (0.044)	-0.107** (0.044)
Change in Migrant Stock (%)	-0.020 (0.021)	-0.022 (0.019)	-0.023 (0.019)
GDP Per Capita	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Education * GDP Per Capita	-	-	-0.000 (0.000)
Constant	4.996*** (0.272)	5.076*** (0.260)	5.025*** (0.277)
<i>Variance Components</i>			
Individual Level ( $\delta^2$ )	5.539 (0.077)	5.537 (0.077)	5.537 (0.077)
Country Level			
Constant ( $\tau_{00}$ )	0.228 (0.080)	0.246 (0.088)	0.246 (0.088)
University Education ( $\tau_{11}$ )	-	0.019 (0.025)	0.019 (0.025)
Constant, University Education( $\tau_{01}$ )	-	-0.069 (0.050)	-0.069 (0.050)
Observations	10,287	10,287	10,287
Number of groups	18	18	18
-2 X Log-likelihood	46860	46856	46856

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

Up until this point, each model has assumed that education might serve as a proxy for skill level and thus provide an adequate test of the labor market competition hypothesis. To some degree, the two are related within in this sample: a three-tier measure (low, medium, high) of



skill-level is significantly correlated with education at .4 ( $p < .001$ ).<sup>23</sup> Arguably a more direct test of competition between native workers and immigrants is to specifically look at individual skill level rather than education. I return to the dependent variable explicitly identifying immigration from poorer countries to test that relationship. I remove education from the model and include two dichotomous variables for low and medium skill workers (high skill is thus the reference category). The effect of skill-level on immigration attitudes is insignificant (Table 2.6). So, even under the most explicit specification of direct job competition between natives and migrants, there is little evidence to support the notion that attitudes are shaped by this particular form of individual fear.

**Table 2.6- Labor Force Sample and Immigrants from Poorer Countries, Skill Level**

<b>Variables</b>	<b>Immigrants From Poorer Countries (Logit)</b>
Low Skill	-0.040 (0.094)
Medium Skill	-0.058 (0.106)
Ability to Meet Basic Needs	0.104*** (0.027)
City Size	0.022** (0.011)
Age	-0.006*** (0.002)
Female	-0.140*** (0.046)
Catholic	-0.114** (0.049)
Member Majority Race	-0.039 (0.046)
Immigrant Population (%)	-0.029 (0.036)
Change in Migrant Stock (%)	-0.056*** (0.016)
GDP Per Capita	0.000*** (0.000)

<sup>23</sup> See Appendix A for skill categories and coding.

**Table 2.6 Continued**

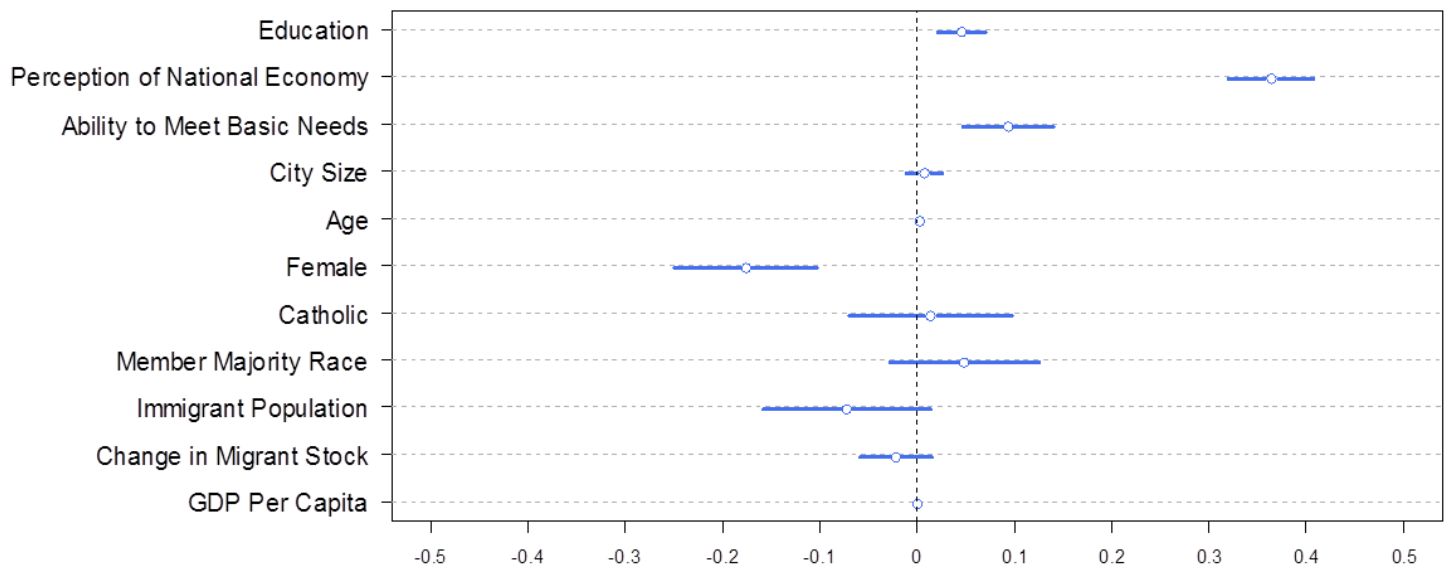
Constant	-0.478** (0.227)
<i>Variance Components</i>	
Individual Level ( $\delta^2$ )	-
Country Level	
Constant ( $\tau_{00}$ )	0.113** (0.041)
Observations	9,372
Number of groups	18
-2 X Log-likelihood	12100
Standard errors in parentheses	
*** p<0.01, ** p<0.05	

Are Latin American immigration attitudes unrelated to economic issues? Although the aforementioned models test for labor market competition there is significant evidence from other contexts to suggest that general economic concerns are highly consequential for immigration attitudes. Across all the baseline models an individual's evaluation of their family's ability to meet their needs is significantly related to immigration attitudes. However, this variable does not measure the more sociotropic economic evaluations that scholars often suggest are related to immigration attitudes (Citrin et al. 1997; Hainmueller and Hiscox 2007, 2010; Hainmueller and Hopkins 2012; Harell et al. 2012; Lahav 2004). In order to examine the relevance of more widespread or systematic economic concerns, I include in each baseline model a variable measuring an individual's perception of their country's economic situation (Table 2.7). As expected, individuals who have more positive opinions of the country's economic situation are much more likely to support immigration. The relationship is also powerful, as national economic evaluations strongly influence attitudes toward ethnically specific immigration. These results indicate that although Latin Americans are not necessarily concerned about individual job

competition, there is a very strong link between the economy, broadly speaking, and support for immigration.

Even though education may produce a greater degree of tolerance among Latin Americans and therefore more positive perceptions of immigration's impact, the effect is limited when compared to sociotropic economic evaluations (Figure 2.1). A one standard deviation change in education is associated with a .079 point increase in perceiving immigration as benefitting the country (Table 2.7, Column 4). Whereas a one standard deviation increase in the perception of the national economy is associated with a .324 increase. This difference has important substantive implications as education does not dramatically transform attitudes. What it does suggest is that anti-immigration sentiment in Latin America is potentially linked to the ebb and flow of various economic conditions.

**Figure 2.1- Does immigration make the country better?**<sup>24</sup>



<sup>24</sup> Estimates based on results from Table 2.7, Column 4. Dots represent effect size associated with a 1 unit increase in the independent variable, while whiskers represent 95% confidence intervals.

**Table 2.7- Immigration Attitudes and Perceptions of the National Economy**

Variables	(1) Immigrants From Poorer Countries	(2) Immigrants of Same Ethnicity	(3) Immigrants of Different Ethnicity	(4) Immigration Makes Country Better
Education	0.014 (0.011)	0.041*** (0.011)	0.042*** (0.011)	0.045*** (0.013)
Perception of National Economy	0.153*** (0.020)	0.154*** (0.020)	0.148*** (0.020)	0.363*** (0.022)
Ability to Meet Basic Needs	0.046** (0.022)	0.101*** (0.021)	0.068*** (0.021)	0.093*** (0.024)
City Size	0.023*** (0.009)	0.042*** (0.008)	0.046*** (0.008)	0.007 (0.009)
Age	-0.004*** (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	0.002 (0.001)
Female	-0.083** (0.034)	-0.163*** (0.033)	-0.116*** (0.033)	-0.177*** (0.037)
Catholic	-0.151*** (0.038)	-0.143*** (0.039)	-0.107*** (0.038)	0.013 (0.043)
Member Majority Race	-0.052 (0.035)	0.034 (0.035)	-0.052 (0.035)	0.048 (0.039)
Immigrant Population (%)	-0.041 (0.033)	-0.062** (0.030)	-0.045 (0.032)	-0.073* (0.044)
Change in Migrant Stock (%)	-0.056*** (0.014)	-0.060*** (0.013)	-0.068*** (0.014)	-0.022 (0.019)
GDP Per Capita	0.000*** (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Constant	-0.759*** (0.183)	0.310* (0.167)	-0.255 (0.176)	4.363*** (0.236)
<i>Variance Components</i>				
Individual Level ( $\delta^2$ )	-	-	-	5.390 (0.061)
Country Level				
Constant ( $\tau_{00}$ )	0.097 (0.034)	0.077 (0.028)	0.090 (0.032)	0.174 (0.061)
Observations	15,641	15,641	15,641	15,641
Number of groups	18	18	18	18
-2 X Log-likelihood	20182	20514	20680	70796

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05

## **Discussion**

Latin America provides an excellent context to test one of the workhorse theories of economics that has been applied to immigration attitudes by a number of scholars. It has a highly competitive job market with weak social protections and is marked by recent increases in both high and low skill immigration. Additionally, the high degree of cultural proximity of natives and migrants limits the complexity of intervening cultural concerns often linked to immigration. This migration context is one in which labor competition should theoretically emerge. Although economic theory provides a concise explanation of education's role in shaping immigration attitudes, there seems to be little attitudinal difference between low and high skilled workers across Latin America. If a sense of competition exists among those active in the labor market and immigrants, it does not manifest itself in attitudes toward immigration. Education, especially at the university level, generates a greater degree of tolerance across individuals in different Latin American countries. This suggests that at the core of Latin American educational systems is a process that culminates in individuals who value the diversity and multiculturalism implied by immigration. The tolerance producing effect of education, however, is limited and although it may be capable of reducing anti-immigrant sentiment, it does so only to a small degree.

Economic factors, however, are strongly connected to Latin American attitudes toward immigration. An individual's familial economic situation matters considerably. Also, how an individual perceives the national economy is strongly related to their immigration attitudes. These sociotropic economic concerns are powerful: they shape attitudes regarding the implications of immigration even when immigration is placed in the context of intersecting ethnic groups. In other words, economic issues related to immigration are capable of influencing attitudes toward specific ethnic out groups. For policy makers, concerned about the effects of anti-immigrant sentiment, this finding suggests that by shifting economic perceptions they may

actually be able to reduce anti-immigrant sentiment in general. That task is a difficult one given the inevitable fluctuations in personal and national economic conditions. The more practical implication may be that waves of anti-immigrant sentiment will continue to accompany difficult economic conditions.

These results provide clear evidence that immigration attitudes are not tightly linked to perceived direct job competition between natives and immigrants. Despite a highly competitive and risky job market, Latin Americans, like their European and North American counterparts, are less concerned about immigrants as competitors and more focused on immigration as it relates to broader economic issues. Additionally, attitudes in Latin America are influenced by a complex set of economic and non-economic factors. Education seems to undercut the powerful negative perspectives surrounding immigration and generate what could be described as a more cosmopolitan perspective: an appreciation for immigrants, their culture and their potential economic contribution. Future research should work toward dissecting the relative strength of these factors in South-South migration contexts and generate a more precise understanding of how individuals perceive different immigrant characteristics, both cultural and economic.

# Chapter 3

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## Crossing the Cordillera: Immigrant Attributes and Chilean Attitudes

### Chapter Abstract

Are individuals opposed to immigration because of perceived job competition with immigrants? Despite almost two decades of research, the literature on immigration attitudes continues to struggle for a clear answer. This study is designed to evaluate the labor competition hypothesis by utilizing an alternative and important immigration context, Chile. The cultural proximity of natives and immigrants in Chile mitigates the issue of culture threat, and thus permits an unusually sharp appraisal of the role of economic competition. Also, the prevalence of both high and low skill immigrant labor means that there is potential for competition across multiple employment sectors in Chile. Utilizing data from an original internet survey experiment, I test how an immigrant's skill level influences immigration attitudes. The results suggest that individual immigration attitudes are not influenced by concerns over job competition, but rather evaluations as to the broader economic effects of certain types of immigrants. Well-educated Chileans, like their European and American counterparts, prefer immigrants who pursue high skill employment. Also, the experiment demonstrates that at least among the well-educated, there is considerable tolerance for immigrants of different ethnic groups.

## **Introduction**

A vast majority of the scholarly work analyzing immigration attitudes focuses on individuals within highly-industrialized countries. Comparative scholars continue to use the same cases (United States, Canada and European states) in progressively refined efforts to understand the mechanisms driving variation in attitudes toward immigrants and immigration. Although much of the research on attitudes is confined to highly developed countries, over 40% of the world's international migrants reside in developing countries (Ratha and Shaw 2007). In many cases, such as in Latin America, transnational migration is characterized by intra-regional migration of culturally similar groups in search of work. Whereas scholars examining attitudes in Europe and the US are forced to dissect a complex web of influential cultural differences (language, religion, etc.), many of those cultural issues are largely controlled for in Latin America. This dynamic creates an excellent opportunity to engage in a more targeted assessment of the attitudinal implications of economic competition between native citizens and immigrants. More specifically, in recent decades Chile has become a highly attractive destination for a wide variety of immigrants. Much like the immigrant receiving nations to the north, the influx of immigrants into Chile generates extensive social and political attention. Issues concerning “foreigners stealing natives’” jobs emerged in the late 1990s (Pizarro 2005) highlighting the perceived economic implications often associated with immigration.

Theories articulating how perceived economic and cultural threat relate to immigration attitudes would suggest that Chileans are more likely to support immigration by culturally similar immigrants and economic non-competitors (immigrants with a different economic skill profile than their own). But do Chileans really respond to the perceived threat of job competition from immigrants? In order to assess how the economic attributes of immigrants affect attitudes, I utilize data from a unique survey experiment conducted in Chile. The experiment focuses



specifically on how individuals evaluate immigrants with certain economic skill profiles. The cultural proximity of migrants and natives in Latin America creates a context in which group-based biases are less complex and in which the economic roots of anti-immigration attitudes should be especially identifiable. The experiment addresses two key features of group-based biases—nationality-based and ethnic stereotypes—by including country of origin and ethnicity in the experiment. By manipulating the ethnicity, country of origin and economic skill level of individual immigrants in an experimental framework, I can assess how these factors shape attitudes toward immigrants. The result is a targeted assessment of economic competition, one that overcomes many of the limitations of prior studies. The skill profile of an immigrant has a strong effect on attitudes toward immigrants. However, immigration preferences are not driven by fears of individual economic competition, but rather evaluations of what type of immigrant can best contribute to the country's overall economic development. Also, despite expectations that Chileans would be less supportive of two stigmatized immigrant groups (Peruvians and ethnic minorities), the results suggest that at least among well-educated Chileans, there is a high degree of acceptance and support for these groups. This tolerance is linked to a humanitarian view of immigration.

In the remainder of the essay I review scholarly work investigating the determinants of immigration attitudes focusing on two distinct theoretical approaches to the issue: economic and cultural threat. The second part of the essay justifies the use of an alternative immigration context, Chile, to test the labor competition hypothesis and outlines the unique survey experiment used to do so. I conclude by discussing the implications of immigration attitudes that are linked to broad economic concerns rather than direct labor market competition.

## **Immigration Attitudes and Threat Perception**

A significant portion of the research examining immigration attitudes frames the issue in terms of immigrants and the threat they potentially pose to an individual or group. The theoretical framework for these threat-based arguments stems from formal economic models and socio-psychological theories of inter group dynamics and conflict. There is a wide range of comparative evidence from highly developed countries that provides somewhat conflicting accounts as to the relative importance of these two types of threat in shaping immigration attitudes. Scholars continue to aggressively debate whether labor competition between natives and migrants or concerns over the broader economy influence attitudes all the while trying to wade through a complicated set of collinear non-economic factors.

### *It's the Economy, Tonto*

Scholars frequently leverage individual perceptions of economic issues (personal and national) in an effort to understand the wide variation in immigration attitudes that exists between individuals and across countries. An oft used model to develop the theoretical attitudinal expectations associated with labor competition is the factor proportions model (Mayda 2006; Scheve and Slaughter 2001).<sup>1</sup> The model suggests that as immigrants flow between countries based on the relative abundance of skilled and unskilled labor there are important economic ramifications. In skill abundant economies, low-skilled immigrants will arrive (e.g. the United States) providing competition for native low-skilled workers. This notion of labor market competition can be extended to all workers: an immigrant of equivalent skill to a native worker becomes a threat because of direct job competition and by potentially lowering wages. This micro-level perspective has received varying support. Within the US and cross-nationally there is

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<sup>1</sup> Scholars also derive similar attitudinal expectations from a version of the Heckscher-Ohlin model without factor-price insensitivity (Mayda 2006; Scheve and Slaughter 2001).

some evidence in support of labor competition (Facchini and Mayda 2008; Mayda 2006; Scheve and Slaughter 2001), however, these studies often rely on indirect measures of competition such as level of education as a proxy for skill. More recent work, directly testing the labor competition hypothesis, finds little evidence that a sense of competition, especially among high-skilled workers, exists (Hainmueller, Hiscox, and Margalit 2011; Hainmueller and Hiscox 2007, 2010; O'Connell 2011). Citizens in highly developed countries seem to uniformly prefer highly skilled immigrants and low skill natives are often more anti-immigration than their high skilled (well-educated) counterparts (Hainmueller and Hiscox 2010). Yet, there is evidence in the United States that workers in the high-technology sector are more opposed to immigration of a particular type: H1-B visas (Malhorta, Margalit, and Mo 2011). These findings indicate that the failure of other scholars to uncover economic threat is a function of the dynamics of magnitude vs prevalence. In other words most nationally representative surveys in the US and Europe do not include a significant population that is actually in economic competition with immigrant workers. Other than this recent effort to over-sample areas with salient high-skill immigrant competition ("high-tech" counties in the US), there has been little effort to evaluate labor market competition while accounting for prevalence.

Also, economic fears are not necessarily tied to only job competition. Concerns about immigrants stressing social services and the welfare system are common in the US and Europe. Recent experimental evidence suggests that citizen concerns tend to follow issues related to the broad impact of immigration rather than individualized competition (Harell et al. 2012). A particular type of immigrant can invoke concerns related to larger macroeconomic trends such as unemployment and dependence on the welfare state, as less skilled immigrants are perceived as potentially contributing to both (Harell et al. 2012). The perception of immigrants as a fiscal

burden could be linked to the widespread preference for high skilled immigrants across many highly developed countries. It also may be the case that individuals equate skill level and education, and the more highly educated are thought to be able to adapt to a new host society- both economically and culturally (O'Connell 2011).

### *Culture, Complexity and Experiments*

While economists tend to emphasize the economic determinants of immigration attitudes, there are a large number of non-economic factors that also influence attitudes. A wide range of immigration scholars depict one of the crucial factors influencing immigration attitudes in terms of the cultural threat that certain groups of immigrants can engender among native citizens (Burns and Gimpel 2000; Citrin, Reingold, and D. P. Green 1990; McLaren 2003; Pettigrew, Wagner, and Christ 2007; Sniderman, Hagendoorn, and Prior 2004). The influence that an “in” and “out” group dynamic can have on immigration attitudes may largely depend on the cultural gap that individuals perceive between themselves and immigrants. Culturally dissimilar immigrant groups are thus capable of generating increased opposition to immigration (Sniderman, Hagendoorn, and Prior 2004). Certain forms of contact and a shared sense of marginalization, however, are capable of diminishing this sense of threat (Fetzer 2000).

These studies, in conjunction with the economic work described above, suggest a multifaceted process in which economic and non-economic factors operate simultaneously to shape attitudes. However, much of the early work on immigration attitudes exploring economic and cultural determinants utilizes general immigration questions that fail to identify who was actually immigrating (see Scheve and Slaughter (2001) for an example of this type of question). In the United States for instance, scholars would assume individuals were likely to think of immigration by low-skilled workers who were racially distinct (e.g. Mexican immigrants) and

spoke a language other than English. But across the US geographic regions can have highly distinct immigrant populations and thus entirely different reference points in thinking about immigration. According to both the economic and cultural threat models, ‘who’ individuals think of when asked about immigration should matter enormously. Given that certain patterns of migration have intertwined economic and cultural features, scholars turned to experimental work to dissect these various forms of economic and cultural threat. A number of scholars find that who immigrants are racially, linguistically, religiously or where they come from (country of origin) can have a substantial impact on immigration attitudes (Ayers et al. 2009; Brader, Valentino, and Suhay 2008; Hainmueller and Hangartner 2011; Hopkins 2011; Sniderman, Hagendoorn, and Mark Prior 2004).

Although this experimental work advances our understanding of immigration attitudes by transforming our mode of thinking to incorporate the varied characteristics of immigrants, it still has a number of limitations. First, among experimental efforts to explore the influence of labor market competition there remains significant debate as to whether individual economic concerns actually matter (Hainmueller and Hiscox 2010; Hainmueller and Hopkins 2012; Malhorta, Margalit, and Mo 2011). Second, the complex set of stereotypes, both economic and cultural, that accompany an immigrant’s national origin present particular difficulties for scholars analyzing attitudes in North America and Europe. For instance, Hainmueller and Hangartner (2011) find that Swiss citizens, who are often responsible for making naturalization decisions of immigrants in their communities, are highly influenced by the country of origin of the immigrant. This may imply that certain groups, based on country of origin, are discriminated against because they are viewed as culturally inferior and a threat to a society’s way of life (Hainmueller and Hangartner 2011, 28). In this particular study, however, Swiss citizens were

unaware of the ethnicity of a particular immigrant and are most likely inferring ethnicity from country of origin. Thus the independent effect of ethnicity remains unclear. Another study (Malhorta, Margalit, and Mo 2011) uses broad national identities (Indian, Russian, Canadian) to experimentally examine cultural and economic threat, even though the national identity of immigrants is a blunt measure and it is not clear what characteristic(s) (language, religion, ethnicity, etc.) is driving an individual's response (Hopkins 2011; Sniderman, Hagendoorn, and Prior 2004). Lastly, to the author's knowledge all existing experimental work looks at immigration in highly developed countries that tend to be dominated by low-skilled immigration. Thus the vast majority of experimental research using nationally representative samples finds no evidence that labor competition influences immigration attitudes because it is simply not prevalent in most high-skilled sectors (Malhorta, Margalit, and Mo 2011). Overall, despite the progress made by experiment-based research there is still significant ambiguity around the relative importance of labor market competition and a plethora of non-economic factors.

Given the limitations of previous work focusing on immigration to the US and Europe, this study utilizes the economic and cultural dynamics of immigration to Chile and a unique experimental framework to robustly test the labor market competition hypothesis. To overcome a key limitation of most prior studies, I utilize a sample of respondents predominantly from Chile's capital where the arrival of both high and low skill labor is prevalent (Malhorta, Margalit, and Mo 2011). Where previous studies use national origin as an identifying characteristic of immigrants and scholars are left to wonder how respondents use that information heuristically, this study controls for and explicitly models associated underlying stereotypes (language, religion, ethnicity, economic skill level and country of origin). Additionally, the cultural proximity—shared language and religion—of natives and immigrants minimizes the likelihood

of perceived cultural threat, enabling a more precise assessment of economic competition. The experiment focuses specifically on immigrants pursuing work visas, rather than citizenship or amnesty, which have the potential to trigger cultural concerns among respondents. Thus, by examining an alternative migration context and utilizing an experiment specifically structured to emphasize immigrant skill level and pursuit of employment, I can directly test the labor competition hypothesis, while isolating the effect of two key non-economic factors: ethnicity and national origin.

### **Chile: An Emerging Magnet for Immigrants**

Although immigrants in Chile do not comprise an enormous proportion of the population (<2%), the relative growth of its immigrant population over the past two decades exceeds almost all Latin American countries and many highly developed countries as well. This influx of immigrants has the potential to create an anti-immigrant backlash in communities where immigrants choose to settle and thus raises normative concerns regarding social cohesion in one of Latin America's strongest economies.<sup>2</sup> Peruvian immigrants that tend to occupy low-skill jobs, such as domestic service and construction, have recently arrived in increasing numbers. Between 2002 and 2008 immigration to Chile increased by 70% (International Organization for Migration 2012). These new arrivals are not simply originating from one source, but regional migration, especially among bordering countries, predominates. A large majority (67%) of immigrants arriving in Chile come from South American countries with wide ranging levels of economic development (Pizarro 2005). Additionally, immigrants from OECD countries have increased by 92% since 2006 bringing an additional influx of highly skilled workers (Sottorff and Perez n.d.). These patterns suggest that Chile is increasingly becoming an important regional

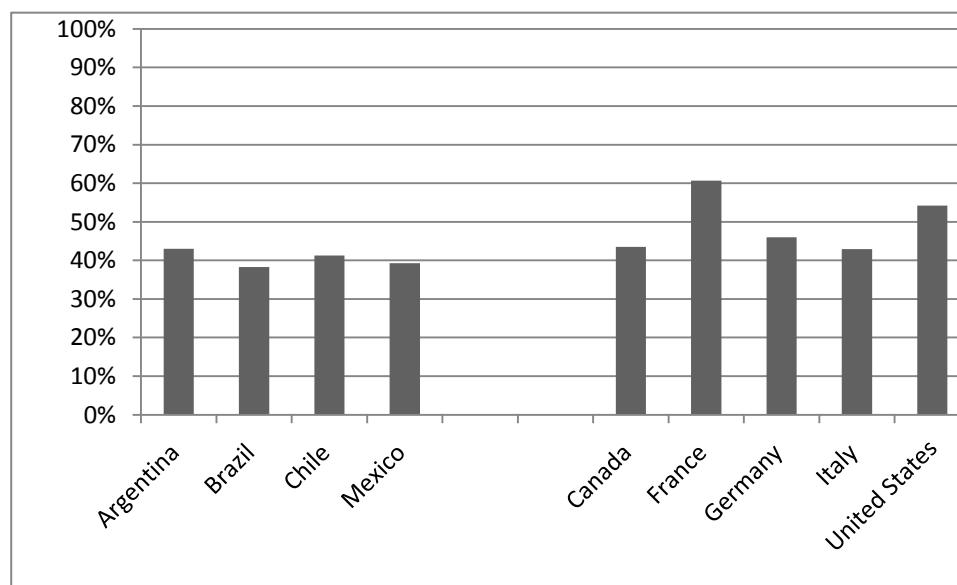
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<sup>2</sup> There is varied evidence as to the effect of an influx and subsequent contact with immigrants. See Hopkins (2010) for a succinct review of these competing findings.

migration hub for a variety of skilled and unskilled workers, which distinguishes this emerging market from many highly-developed economies that experience predominantly low-skilled immigration.

Are Chileans particularly more anti-immigration as compared to regional neighbors and other receiving nations throughout the world? Figure 3.1 shows the levels of support for restrictive immigration policy across a number of highly developed countries and four Latin American countries. Chile is comparable to many countries, in both Europe and Latin America, in terms of level of support for restrictive immigration policy.

**Figure 3.1- Cross-national support for restrictive immigration policy**



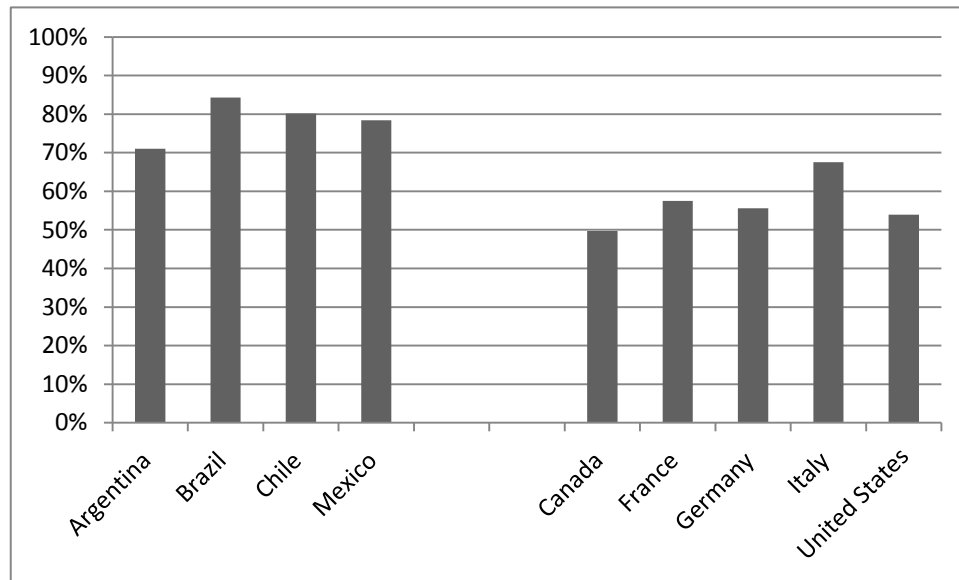
Source: World Values Survey (2009)

However, as Figure 3.2 demonstrates Chileans are far more likely than their US, Canadian or European counterparts to agree that natives should receive hiring priority when jobs are scarce. Given that Argentina, Mexico and Brazil share a similar level of support for native hiring, this may signal that among emerging economies in Latin America there is a heightened concern over job competition as it relates to immigration. It also mirrors attitudes in Ireland—73.7% supported native job priority in 1999 (World Values Survey 2009)—which at the time



was an emerging destination for Polish immigrants, who are frequently white and Catholic. Where cultural differences between natives and immigrants are not as salient, individuals are potentially more focused on the economic implications of immigration, thus providing a more precise test of the labor competition hypothesis.

**Figure 3.2- Cross-national support for native job priority over immigrants**



Source: World Values Survey (2009)

The recent increase of regional migration to Chile has led to certain concerns among Chileans: stress on social services, job competition and rising unemployment as well as the ‘backwardness’ of Andean culture (González, Sirlopú, and T. Kessler 2010; Pizarro 2005; Staab and Maher 2006).<sup>3</sup> The two largest groups of immigrants in Chile are Peruvians and Argentines, who comprise 37% and 17% of the overall immigrant population respectively (Departamento de Extranjería y Migración 2008). However, it is Peruvians who are heavily stereotyped along racial and class lines. Those stereotypes are often subsumed by national identity; Staab and Maher

<sup>3</sup> Unemployment levels in Chile have fluctuated between 10% and 6.5% since 2010. Most recently the government has responded to an upswing in unemployment by increasing jobless benefits (Woods 2012).

(2006) point out, a stereotypical representation of a Peruvian immigrant is an indigenous, uneducated and uncultured individual. This frame is important because it incorporates some of the key elements identified in the immigration literature related to threat. Peruvians (at least in their stereotypical form) should represent a distinct out-group threat and potentially threaten the employment of low-income (less educated) Chileans.<sup>4</sup> Argentines, who come from a society with a much larger percentage of individuals that identify as white and that also has a higher average educational level than Peru, do not attract the social, political or media attention and stereotyping that Andean immigrants do. This immigration dynamic, one marked by ethnically and economically distinct but salient immigrant groups, creates an opportunity to thoroughly explore the impact of three potentially important immigrant attributes: skill level, ethnicity and country of origin.

### **Experimenting with Choice**

In order to test the labor market hypothesis as well as the effect of ethnicity and country of origin in shaping Chilean attitudes toward immigrants, I conducted a unique online survey experiment of Chileans. The results I present below are based on 315 responses to an emailed survey experiment conducted using the Qualtrics survey program.<sup>5</sup>

The experiment utilizes a choice framework (simplified conjoint design) as well as a modified repeated measure factorial design to test the importance of the three aforementioned

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<sup>4</sup> Despite the acceptance of these stereotypes within Chilean society, the actual profile of Peruvian immigrants diverges greatly from this representation. Using Chilean census data Pizarro (2005) finds that the perceived influx of immigrants is actually fairly small in magnitude. During months of interviews with Peruvian immigrants and employers, Staab and Maher (2006) found that the Peruvian women contradicted most stereotypes- they were not from indigenous communities, they were well-educated and often held professional positions before emigrating.

<sup>5</sup> In order to conduct the survey experiment, I utilized a convenience sample generated from an email database provided by a Chilean university. Convenience samples are widely used in psychology and political science when conducting experiments (Druckman et al. 2006).

immigrant characteristics. Each respondent was given a prompt asking them to make a hypothetical choice between two immigrants, deciding which should receive a visa to live and work in Chile.<sup>6</sup> After reading the prompt, each respondent viewed side-by-side photos of the two immigrants with bulleted descriptions of the country of origin of the immigrant and the type of work they were pursuing (See Appendix B). The photos provide the experimental treatment associated with ethnicity.<sup>7</sup> After viewing the descriptions, respondents were then asked to choose which immigrant should receive a visa. Next, each respondent evaluated the degree to which they felt the government should issue a visa for each immigrant (randomized order). The description and photos serve to provide very clear information for the respondent. By showing a photo and describing the country of origin, it helps dissect the various characteristics that national origin is often associated with, such as ethnicity. Rather than describe the educational attainment of the individual, I describe the type of work the immigrant is pursuing. This provides a more direct test of the competition hypothesis because skill-level and educational

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<sup>6</sup> In designing the experiment I drew from design elements and question wording in forthcoming work by Harell et al. (2012) and Hainmueller and Hopkins (2012).

<sup>7</sup> In another survey experiment of Chileans conducted during the same time frame that required individuals to recall information about an immigrant from a fictitious news article, 80% identified the light skinned woman as white, and 75% identified the darker skinned woman as mestizo or indigenous. For both photos I chose actual individuals from Peru and Argentina rather than using stock images from a photo bank and a complex morphing strategy. Superficial judgments from faces are predictive of a number of different social and political outcomes (e.g. electoral success) (Ballew and Todorov 2007; Lawson et al. 2010). Todorov et al. (2008) argue that facial evaluations occur along two critical dimensions or traits: trustworthiness and dominance. I pre-tested the two photos using a small pool of Mechanical Turk workers (n=50) and had respondents randomly evaluate one of the two photos along three traits: trustworthiness, dominance and femininity. There was no statistically significant difference between the two photos on any of the three traits. Other scholars suggest that facial similarity between respondent and photo subject (Bailenson et al. 2008) and attractiveness (Efrain and Patterson 1974) can also influence decisions. Even among whites, there is a preference for the non-white immigrant suggesting that facial similarity is not driving the results. Also, the two women were rated equally in terms of femininity, which O'Toole et al. (1998) suggest is largely synonymous with attractiveness.

attainment are not necessarily accurate predictors of the type of employment an immigrant will pursue or find (Chiswick 2011; Pizarro 2005). Although the experiment does not explicitly describe the linguistic or religious characteristics of each immigrant, I largely control for these two factors—found to be important in determining immigration attitudes in a number of studies (Chandler and Tsai 2001; Hopkins 2011; Sniderman, Hagendoorn, and Prior 2004)—by using immigrants from predominantly Catholic and Spanish speaking neighboring countries.<sup>8</sup>

Each respondent was presented only one pairing and asked to make a choice as to which immigrant should receive a visa. The four different randomly assigned pairings of immigrants encompass all possible combinations of the three characteristics. Table 3.1 provides a clear description of each of the four randomly assigned pairings.

Each immigrant characteristic was specifically selected to reflect immigration dynamics in Chile and most accurately test the labor competition hypothesis. In the experiment, the immigrant is either from Argentina or Peru, which, as previously noted, are the two national groups that make up over half of the immigrant population in Chile. One immigrant is white and the other mestizo, in order to test how Chileans respond to an immigrant from a racial out-group. Similar experimental work (Harell et al. 2012) utilized two minority immigrants, which cannot adequately test the in-group/out-group dynamic that much of cultural threat theory rests on. The selection of the type of work being pursued by both immigrants was strategic in two ways: 1) There is a heavy concentration of Peruvian immigrant women working in domestic service (Pizarro 2005) thus this depiction fits with conceptions of an important group of immigrant workers in Chile. 2) A wide range of academic degrees in Chile carry the title of “engineer”, so

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<sup>8</sup> There are certainly differences between Peruvian, Argentine and Chilean Spanish and depending on your region of origin in each country, accents are quite distinguishable. However, in each case the respondent is likely to presume the immigrant speaks Spanish.

an immigrant pursuing a job generally described as “engineer” could represent competition to a large number of high-skill workers.<sup>9</sup> Lastly, both potential immigrants are female which reflects the high percentage of female immigrants in Chile, but also helps eliminate possible confounding factors associated with social evaluations of male and female faces (Todorov et al. 2008).

**Table 3.1- Randomly Assigned Immigrant Pairings w/ Three Characteristics**

	<b>Immigrant 1</b>	<b>Immigrant 2</b>
<b>Pairing 1</b>	White Argentina Engineer	Mestizo Peru Housemaid
<b>Pairing 2</b>	White Argentina Housemaid	Mestizo Peru Engineer
<b>Pairing 3</b>	White Peru Engineer	Mestizo Argentina Housemaid
<b>Pairing 4</b>	White Peru Housemaid	Mestizo Argentina Engineer

The sample of respondents included in the experiment is highly educated, as I utilized a convenience sample derived from a university database of emails. This sample attribute has two important advantages. First, as outlined in the review of literature above, highly educated individuals are more likely to be tolerant of culturally distinct immigrants. This would suggest that cultural concerns are less salient an issue among this set of respondents, who as a result may

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<sup>9</sup> A substantial proportion (20%) of the respondents who reported their profession indicates that they are an “engineer”.

be more focused on the economic implications of immigration. Second, many prior studies have not been able to adequately test one side of the competition hypothesis: competition among high-skilled workers. This sample provides a direct avenue for testing that form of competition. Therefore, although the sample is not-representative of the broader population in terms of educational attainment, this characteristic assists in developing a more accurate test of labor market competition.<sup>10</sup>

In the following section, I present results from the dichotomous choice that respondents were asked to make between immigrants as well as the separate evaluations of support for each immigrant to receive a visa.

## **Results**

Each respondent was asked to make a choice between two immigrants in a randomly assigned pairing. Within each randomly assigned group, if 50% of respondents chose one immigrant and 50% chose the other, we could conclude that there is indifference toward the two immigrants. In other words, the combination of characteristics creates an equal likelihood of being chosen. Therefore, a very basic and first step is to examine the proportions within each pairing to determine if the respondents are indifferent.<sup>11</sup> Table 2 presents the results from a simple equality of proportions test. Each proportion of responses is significantly different from .5

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<sup>10</sup> Malhorta, Margalit, and Mo (2011) oversample in areas where H1-B visa holders would likely compete for jobs (e.g. Silicon Valley) and find evidence that immigration attitudes are related to job competition.

<sup>11</sup> One potential confounding factor is the ethnicity of the respondent. Harell et al. (2012) restrict their analysis to white Canadians because minority respondents are likely to view minority immigrants differently than their white counterparts creating an additional conditional relationship. Although I estimate models using the full sample, I reestimate the analysis of proportions and primary choice model using just white respondents (N=227) and find substantively similar results (See Appendix Table B.1 and B.2).

except in the first pairing. This indicates that respondents are most likely indifferent with respect to the immigrants in pairing 1, but have a marked preference for a particular immigrant in the other pairings. Substantively, one strong pattern emerges from this simple inspection of the dichotomous choice data: in the three pairings which do not demonstrate indifference respondents overwhelmingly prefer the immigrant who is looking for work as an engineer.<sup>12</sup>

**Table 3.2- Equality of Proportions Test**

<b>Pairing</b>	<b>Mean</b>
1	0.585 (0.059)
2	0.806*** (0.042)
3	0.291*** (0.051)
4	0.745*** (0.049)

Standard errors in parentheses.

\*\*\*  $z < 0.01$ , \*\*  $z < 0.05$

To more thoroughly analyze the choice portion of the experiment, I use a logit model to estimate the effect of each immigrant characteristic on the likelihood of selecting immigrant 1 or immigrant 2.<sup>13</sup> In this case there are four assigned pairings (choice sets) and within each pairing

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<sup>12</sup> One potential criticism is that the survey forces individuals to make a choice even if they are indifferent. Although it is likely that random choice across a significant portion of the sample would result in indifference (i.e. individuals arbitrarily picking immigrant 1 or 2 because they are indifferent), it is possible that there could be some systematic reason apart from the characteristics of the immigrants motivating choice. To test for this possible relationship, I conduct the same equality of proportions test, but only for respondents who rate each immigrant on the 1 to 7 visa support scale differently (equally would possibly indicate indifference). The results (not shown) mirror those of the whole sample: indifference in the first pairing and a statistically significant proportion choosing the immigrant pursuing work as an engineer in the three other pairings.

<sup>13</sup> Although, conditional logit models are frequently used to examine the results of multiple choice experiments because they allow for researchers to account for the characteristics

two different orderings, which are randomized. The goal is to determine which factor(s) or immigrant characteristics increase the likelihood of choosing one immigrant over another. Table 3.3 presents the results from a logit model estimating the effect of each immigrant characteristic while controlling for the pairing in which the choice was made.

The dependent variable is coded dichotomously, indicating a respondents preference for immigrant 1 (I1) or immigrant 2 (I2). Both the economic immigrant characteristic and ethnicity characteristic significantly affect the probability of choosing I2 over I1. The probability of choosing I2 increases when I2 is pursuing work as an engineer. This confirms the pattern in the proportions observed above. Additionally, ethnicity has a significant effect on the probability of selecting I2: the probability decreases if the immigrant is white suggesting that respondents are more supportive of the minority immigrant. The effect associated with national origin is insignificant. One unique element to these findings is that there is a significant preference for an immigrant from an ethnic out-group, which counters theory underpinning the cultural threat argument.

The analysis of the dichotomous choice data is somewhat limiting, however, because it does not give us a precise sense of the variation that may exist in attitudes toward each of the two immigrants. Respondents were asked to choose one immigrant over another even if they preferred that the government provide visas to both potential immigrants or not provide visas at all. To address this, each respondent was also asked to evaluate their level of support for each

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associated with the chooser and choice, respondents in this experiment were only asked to make a single choice (See Iyengar and Hahn (2009) or Blais et al. (2011) for recent applications of the conditional logit model). I do, however, examine the robustness of the standard logit model by estimating a conditional logit model, in essence a fixed effects model, using the pairing as the grouping category. This would help control for the effect associated with the alternative choice since none of the pairings overlap in terms of alternatives. The results (Appendix B, Table B.3) mirror those of the logit model with pairing dummies (Table 3.3).



respective immigrant after making a dichotomous choice. To analyze this data, I begin by comparing the means of visa support across immigrant characteristics in Table 3.4.

**Table 3.3- Immigrant Choice as a Function of Immigrant Characteristics**

Parameters	Logit Estimates
Engineer	1.553*** (0.257)
Argentina	-0.847*** (0.256)
White	-1.005*** (0.247)
Pairing 2	0.514 (0.383)
Pairing 3	0.356 (0.340)
Pairing 4	0.341 (0.347)
Constant	-0.131 (0.328)
N	315
Pseudo R <sup>2</sup>	0.161
Log-likelihood	-183.118
Robust standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

**Table 3.4- Mean Values of Visa Support by Immigrant Characteristics**

	Engineer		Housemaid		<i>combined</i>
	Argentina	Peru	Argentina	Peru	
Mestizo	5.85	5.95	5.43	5.73	5.75
White	5.3	5.62	5.24	5.55	5.43
<i>combined</i>	5.7		5.47		

Note that in every instance, the mean support for an immigrant's visa is greater for engineers and that there is a pattern of greater support for mestizo immigrants as well.

Additionally, the mean value of support is consistently higher for Peruvians than Argentines. The differences between combined averages are statistically significant.<sup>14</sup> This suggests that Chileans are more supportive of immigrants pursuing visas if they are engineers, ethnic minorities or come from Peru. However, this basic analysis does not fully account for the unique structure of the data. Because each respondent is asked the same question twice, analyzing these repeated measures is appropriately done by using a multi-level model.<sup>15</sup> In this case, there are two observations (*i-level*) for each respondent (*j-level*). The characteristics of each immigrant and whether it was the first or second immigrant evaluated constitute the independent variables at the first level. The second level accounts for respondent level factors that could shift the mean level of visa support between respondents. This modeling strategy permits an evaluation that accounts for both within-unit and between-unit variation that is more readily interpretable than repeated measures ANOVA (Harell et al. 2012). Table 3.5 shows the results from the random intercept model. I include a dichotomous variable to account for the order in which the immigrants were evaluated and the possible decline in support for the second immigrant being evaluated.<sup>16</sup>

Even though the dichotomous choice data suggest that an immigrant's ethnicity and employment interest are influential in shaping a respondent's choices about immigrants pursuing work visas, the assessments of general work visa support for each immigrant indicate all three immigrant characteristics are important predictors of visa support. On average, immigrants receive higher levels of visa support if they are from Peru, are a minority or are an engineer.

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<sup>14</sup> Using one-tailed significance tests.

<sup>15</sup> See Harell et al.(2012) who use a similar approach to analyze a repeated measures immigration experiment.

<sup>16</sup> The results indicate that if the immigrant appeared second, the respondent would on average lower their visa support by .24 points on a 7 point scale.

**Table 3.5- Visa Support Based on Immigrant Characteristics**

<b>Parameters</b>	<b>Random Intercept</b>
Engineer	0.212** (0.094)
Argentina	-0.309** (0.094)
White	-0.245** (0.094)
Order	-0.244** (0.094)
Constant	5.881*** (0.120)
<i>Variance Components</i>	
Immigrant Level ( $\delta^2$ )	1.381*** (0.110)
Respondent Level	
Constant ( $\tau_{00}$ )	1.063 *** (0.150)
Observations	630
Number of groups	315
-2 X Log-likelihood	2284.783
Standard errors in parentheses	
*** p<0.01, ** p<0.05	

The results indicating greater support for engineers mirror recent findings that citizens generally prefer high-skilled labor (Hainmueller, Hiscox, and Margalit 2011; Hainmueller and Hiscox 2010; Harell et al. 2012). Given that this particular sample is highly educated—almost 45% report having a graduate degree—it provides a strong test of one side of the economic threat perspective. If highly-educated professionals fear job competition from other skilled individuals, we would expect them to have lower support for high-skilled or well-trained immigrants. I further examine this relationship in two ways. First, I include the respondent's educational level

as a second-level variable to estimate visa support (See Appendix Table B.4). In this first model, education of the respondent is insignificant. To more accurately test the competition hypothesis, I then interact the respondent's education with the dichotomous variable (*Engineer*) indicating the immigrant's employment objective. The interaction is insignificant, suggesting that the effect of immigrant skill level is not conditioned by the respondent's level of education.<sup>17</sup> In other words, Chileans prefer engineers and seem unaffected by any underlying sense of job competition.

Although educational level might serve as a proxy for skill, there is a significant debate about the mechanism through which education affects immigration attitudes: tolerance or economics.<sup>18</sup> To avoid the potentially complex relationship between education and skill, I conduct a more direct test of the labor competition hypothesis. Over 20% of respondents reported their occupation as some type of engineer. Given that one of the immigrant characteristic describes the hypothetical immigrant as pursuing work as an engineer, this should provide the most explicit test of job competition among a particular set of skilled workers. To examine this relationship, I compare the mean value of visa support toward immigrants looking for work as an engineer (5.33) and immigrants looking for work as a housemaid (5.13), but only among respondents who identified themselves as engineers. Although average support for an immigrant engineer is higher than an immigrant housemaid, the difference is not statistically significant. It does, however, suggest that there is no evidence of heightened animosity among Chilean engineers toward immigrants pursuing engineering work. Thus, even under conditions of

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<sup>17</sup> Normally, I would initially model the slope of *Engineer* as a random slope, however, because of the structure of the data that model is unable to converge. I check the robustness of the results by estimating a model of only respondents with completed university education. Engineer is a strong and positive predictor of visa support among the university educated. Results not presented.

<sup>18</sup> See Hainmuller and Hiscox (2007) for a description of the debate.

explicit competition—common occupation—the results provide little support for economic threat in the form of job competition.

The results associated with country of origin and ethnicity were not exactly expected, at least in terms of direction. So what explains greater support for Peruvian and mestizo immigrants? Respondents were asked an open ended question to explain their initial choice between immigrants. Some of those responses indicated the following: an individual from Peru or from a particular cultural background has fewer opportunities and therefore should have priority in receiving a visa. Qualitative answers do not necessarily provide a clear statistical basis for believing that Chileans think about immigration in terms of immigrant needs, but they provide an indication of what might be driving this particular relationship. Given that a large majority of respondents are well-educated—a function of the university provided email database—this story would offer supportive evidence to the notion that the more educated are more tolerant.<sup>19</sup>

Overall, the results from the dichotomous choice experiment and immigrant specific evaluations of visa support indicate that Chileans have a strong preference for skilled workers and show no measurable fear related to job competition. Additionally, who immigrants are

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<sup>19</sup> Some might suggest that the responses are not driven by a preference for Peruvian immigrants, but rather distaste for Argentines. Anecdotally, Argentines are often perceived by other Latin Americans as exhibiting hubris. A common joke to illustrate the point: Three South Americans are walking together as a rainstorm begins to drench them. Thunder booms and lightning flashes. The Peruvian covers his head. "My bad luck never ends." The Chilean yells, "Let's run for shelter!" The Argentinian just smiles and looks toward the sky. "God is taking pictures of me again!" However, as I have outlined above, Peruvians do not escape the ire of Chilean stereotypes either. There are also longstanding national rivalries between Chile and Peru (See Sangha (2012) for a stylized summary of the pisco rivalry). Given the negative stereotypes that exist of both Peruvians and Argentines, I have little reason to believe one would exert more influence than the other over Chilean attitudes.

ethnically and where they come from significantly affect Chilean support for individual work visas.

### **Discussion**

As scholars pursue an increasingly refined understanding of the variation in immigration attitudes throughout the world, they have largely ignored important immigration centers outside of highly-developed countries. Chile is likely to experience a continued increase in immigration over the next decade if its economy continues to grow. The attitudes of Chilean citizens toward the various groups of immigrants that arrive represent an important social issue. And the focus on Chile provides better leverage on the economic competition theory than other immigrant receiving contexts.

Chileans, in some ways, appear to be much like their European and American counterparts: in this particular sample they are more supportive of high-skilled than low-skilled immigration. These findings add to the mounting evidence that micro-level economic theories of immigration attitudes are relatively poor predictors of actual attitudes. To paraphrase many of the respondents' open-ended comments, an engineer can do more for the Chilean economy than a housemaid. For those individuals making economic evaluations of immigrants, it seems to be less about how the immigrant affects a person directly and more what value that immigrant represents economically. In Chile, a country which prides itself on two decades of post-dictatorship economic and democratic success, skilled immigrants may represent a better asset in achieving continued economic development.

There is preliminary evidence that Chilean attitudes are not simply driven by economic factors. Among this group of mostly well-educated Chileans there is greater support for ethnic minority and Peruvian immigrants. Why do we see support for these marginalized groups in

terms of immigration? Fetzer (2000) argues that there is greater support for immigrants among individuals from other marginalized groups (racial minorities, minority religions, etc.) because of a shared recognition and sympathy among those outside groups. If education serves to promote greater appreciation and tolerance of outsiders, as Fetzer (2000) argues, it may also generate an understanding of the immigrant experience and accompanying marginalization. As one respondent suggests, “It’s important to give humble people opportunities so they can help themselves and their families.”<sup>20</sup> Just as Americans seem to appreciate the effort made by immigrants to learn English (Hopkins 2011), well-educated Chileans may recognize the effort of certain immigrants to improve their lives. They also recognize that immigration has a humanitarian quality: it is a means to improve one’s life. Unlike the US, Canada and some Western European countries, Chile has long been a country of emigration. How that experience influences immigration attitudes and whether it helps generate the increased support for certain immigrants as seen in this experiment requires further research.<sup>21</sup>

In Chile, perceptions of the value an immigrant brings to the overall economy may be critically important to understanding immigration attitudes. This has implications for the treatment of immigrants, but also the type of immigration policy individuals will support. In

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<sup>20</sup> Author’s translation. The immigrant the respondent is discussing was depicted as a mestizo Peruvian woman looking for work as a housemaid.

<sup>21</sup> There are also two other important aspects of this experiment that are worth noting. First, the experiment focuses on work visas rather than citizenship. The choice to focus on work visas was an attempt to accentuate the dynamics of labor competition rather than other long-term social and economic considerations associated with citizenship. How Chileans would respond to different immigrants pursuing citizenship could potentially involve other factors, and thus is an area for future research. Second, the high-level of overall visa support among respondents is likely a function of the “legal” frame used in this immigration scenario. This study does not attempt to discern the difference in attitudes toward documented and undocumented workers in Chile, although in all likelihood undocumented workers would likely generate more anti-immigrant attitudes. See Hood and Morris (1998) for a discussion of the dynamics associated with immigrant documentation and context.

emerging economies, just as in the United States and Europe, policy makers will likely have far less opposition to policies permitting highly-skilled immigration. Additionally, even in the context of certain shared cultural attributes, an immigrant's national identity and their ethnicity are both important in shaping evaluations of immigrants among the well-educated. For scholars studying both the United States and Europe, where national identities are often associated with broad cultural and economic stereotypes, it is important to dissect the components underlying these assumptions. To advance our understanding of immigration attitudes, we need to more thoroughly evaluate the various factors often subsumed by national identity.

There is a certain unifying quality to patterns of migration throughout the world today: immigrants are not often met with open arms. Yet, there is little evidence that what drives those varied and often negative attitudes is related to concerns about labor competition, whether in Chile or highly-developed economies. As migration patterns shift and countries and communities continue to deal with the seemingly inevitable conflict that accompanies immigration, we should be cognizant of the broader economic and cultural calculations that individuals make regarding what constitutes a "desirable immigrant."



# Chapter Four

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## Immigration Attitudes in Latin America: Culture, Economics, and the Catholic Church<sup>1</sup>

### Chapter Abstract

This essay analyzes the role economic and cultural threat play in shaping immigration attitudes in Latin America. By examining immigration attitudes in a South-South migration context that is characterized by the religious and linguistic similarity of migrants and natives, I can conduct a rigorous appraisal of existing theories. I also incorporate an exploration of how a pro-immigrant religious institution, the Catholic Church, may be capable of affecting immigration attitudes. The results indicate that economic concerns influence opinions about immigration in Latin America, yet the effect of cultural concerns is less definitive. Additionally, the strong discourse of the Catholic Church does not have an apparent effect on immigration attitudes, even among its most devout members. Individuals who are members of certain minority religious groups are more supportive of immigration, which likely results from a shared sense of marginalization that generates greater empathy for immigrants.

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<sup>1</sup> This essay was published in *The Latin Americanist* (Lawrence 2011). The version presented here includes only minor changes from the published version.

## **Introduction**

The United Nations estimates that approximately 176 million persons reside in a country other than their country of birth; the number of migrants in the world today is double what it was in 1970 (United Nations 2005). Immigration is at the forefront of the world's agenda, yet most academic research has primarily focused on immigration to highly developed countries and not South-South migration between developing nations. As of 2005, South-South migration was almost as likely to occur as South-North migration (Ratha and Shaw 2007). Many of the same issues that dominate the immigration debate in highly developed countries, such as concerns over wages, social services and crime, also predominate in developing countries with significant migrant populations (Gindling 2009; Grimson and G. Kessler 2005). More broadly, attitudes toward immigration can have significant effects on the lives of immigrants and on immigration policy (Espenshade and Calhoun 1993). This paper explores two particular questions. First, to what extent does economic and cultural threat influence immigration attitudes in Latin America? Second, does a religious institution, the Roman Catholic Church, affect immigration attitudes within that context? Current evidence suggests that immigration attitudes are partially influenced by perceived economic and cultural threat, but there have been significant differences as to the magnitude of those effects across different countries. Given the linguistic and religious similarities of native and immigrant populations, South-South migration within Latin America provides an excellent case to further our understanding of the specific elements related to cultural identity and economic concerns that influence immigration attitudes.

There are two distinct explanations that are most often used to account for variation in immigration attitudes. One focuses on self-interest and the potential economic threat that immigration and immigrants may pose to certain individuals within a host-nation. Immigrants are often assumed to take away jobs, stress social services and lower wages, which can translate

into a lack of support for immigration among those who would suffer from such effects. The other explanation emphasizes cultural concerns and suggests that individuals may develop attitudes based on a perception that immigration has culturally corrosive effects. More specifically, evidence suggests that linguistic and religious differences can serve as triggers in generating opposition to immigration (Sniderman, Hagendoorn, and Prior 2004). Latin America represents a unique migration context where regional international migration is coupled with significant amounts of inter-continental emigration to the United States and Europe. Although much of the regional migration that takes place involves movement to contiguous countries, there are still important ethnic differences between migrants and host-country citizens. However, linguistic and religious differences, which often characterize South-North migration, are not nearly as prevalent within Latin America. Given the large emphasis placed on perceived cultural threat as a driving force of immigration attitudes, Latin America provides a unique context to explore the limits of the cultural threat hypotheses.

Contributing to the dynamics of migration in Latin America is the presence of a historically powerful and influential religious institution, the Roman Catholic Church. Despite changes in the political and social landscape, the Church still wields considerable social and political clout (Gill 1999). Its involvement in lobbying for comprehensive immigration reform and its substantial pro-immigrant discourse raise an important question as to the extent, if any, that the Church influences immigration attitudes. More broadly, analyzing the possible influence the Church has on immigration attitudes will help expand our understanding of the effect religion and religious institutions have on public opinion in general.

This paper focuses on developing an analysis of immigration attitudes that explores the simultaneous effects of economic and cultural factors in a South-South migration context. It also

constructs a theoretical framework that suggests a religious institution, the Catholic Church, could significantly influence immigration attitudes. I then test a variety of hypotheses concerning the determinants of immigration attitudes and provide a comprehensive analysis of the results. Lastly, I conclude by summarizing my findings and laying the groundwork for future research on immigration attitudes.

### **Immigration Attitudes: Economics, Culture and Identity**

The literature examining attitudes toward immigration is extensive, but tends to emphasize attitudes in Europe and North America. A large number of studies have focused on two important explanatory factors: economic self-interest and perceived cultural threat. Research suggests that lower skilled-workers in developed countries are less receptive to immigration because immigrants provide potential competition within that sector of the labor market (Espenshade and Calhoun 1993; Simon 1987). These findings have been supported by more recent scholarly work, which has found a similar incidence of lower support for immigration within low-income groups (Espenshade and Hempstead 1996; Scheve and Slaughter 2001). Sniderman, Hagendoorn, and Prior (2004, 51) points out, “Standard measures of self-interest impute gains and losses on the basis of indirect indicators such as social class.” Their study, which examines both economic self-interest and experimentally manipulated economic threat, demonstrates that concerns over economic well-being are related to opposition to immigration.

There is also further cross-national evidence, which suggests economic self-interest influences immigration attitudes (Mayda 2006; O’Rourke and Sinnott 2006). Labor market theory based around the Heckscher-Olin model would suggest that skilled individuals are more likely to support immigration in countries with a high relative skill composition of natives to migrants. Controlling for country-level and individual-level factors generates results consistent

with these labor market predictions (Mayda 2006; O’Rourke and Sinnott 2006). Age also may play an important role in forming immigration attitudes, which could be a function of either economic concerns over pension benefits or of other social considerations (O’Rourke and Sinnott 2006, 857). Despite these robust findings, other researchers have found that economic self-interest is not a strong predictor of attitudes regarding immigration policy (Burns and Gimpel 2000; Citrin et al. 1997; de Figueiredo and Elkins 2003). Recent experimental work suggests that economic theory may not accurately predict immigration opposition (Brader, Valentino, and Suhay 2008; Hainmueller and Hiscox 2010; Sniderman, Hagendoorn, and Prior 2004). As a result of these varied findings, the picture regarding the importance of economic self-interest in forming immigration attitudes remains murky.

A significant body of literature suggests that one of the most crucial components affecting immigration attitudes involves perception of cultural threat. As Sides and Citrin (2007, 501) note: “Public opinion is not insensitive to the economic consequences of immigration, but more important are deeply held symbolic attitudes, such as beliefs about cultural unity or homogeneity.” Massey (1995) argues that the American fear about immigration is not based on economics, but rather it is a fear of cultural change, one that will decrease the power European Americans have. Sniderman, Hagendoorn, and Prior (2004) found the most significant factor in producing a negative reaction to immigrant minorities was the result of perceived cultural threat. Two important triggers in generating anti-immigrant opinions among the Dutch population —the group studied in Sniderman’s work—were the language and religion of immigrants. Those types of triggers are not nearly as present among regional immigrants in Latin America, which makes generalizing Sniderman’s findings across different migration contexts difficult.

National identity may also be crucial in producing hostility toward immigration and immigrants (Legge 1996). De Figueiredo and Elkins (2003), utilizing multiple data sets covering a number of countries, found that national pride plays an important role in determining attitudes toward immigration, but that it takes on two unique forms: nationalism and patriotism. They determine that nationalists are much more hostile toward immigrants, while patriots are no different than average citizens in attitudes toward immigrants. There is also evidence suggesting that nationalism can manifest itself through religious beliefs and significantly affect attitudes toward immigration (McDaniel, Nooruddin, and Shortle 2010). Whether immigration generates concern over cultural and national identity may be a function of the cultural, ethnic and religious differences between immigrants and the native host-country population. As Sides and Citrin (2007, 500) note, the religious and ethnic distinctiveness of the Muslim population in Europe has the potential to keep concerns about national identity salient. Although the literature highlights a number of potentially influential factors that help shape immigration attitudes it does not provide a clear image as to the precise determinants of immigration attitudes across different immigration contexts.<sup>2</sup>

There are two particular areas that the immigration literature does not adequately address, with which this paper will grapple. A large majority of immigration studies on individual attitudes focus primarily on highly-developed nations with immigrant populations that are often culturally and linguistically dissimilar; it seems only logical that studies outside this particular

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<sup>2</sup> There is extensive literature examining other potential determinants of immigration attitudes. For racism see Clark and Legge (1997). For contact theory see Ellison and Powers (1994), Quillian(1995), Hood and Morris (1998) and McLaren (2003).

context are necessary to provide a more precise understanding of immigration attitudes.<sup>3</sup> As previously mentioned, linguistic and religious differences that often exist among migrants and natives in South-North migration are not as salient in South-South Latin American migration. This crucial difference necessitates a more in-depth examination as to the role of cultural fear in determining immigration attitudes. Secondly, the immigration literature fails to empirically investigate the role institutions may have in shaping immigration attitudes.<sup>4</sup> Much of what follows is an effort to theoretically and empirically investigate both the economic and cultural determinants of immigration attitudes in Latin America, while incorporating an institutional perspective focusing on the role of religion and the Catholic Church.

### **The Roman Catholic Church, Immigration and Religious Influence**

Given the extensive voluntary participation in religious institutions and organizations throughout the world, there has been a wide range of research into the effect of religion and religious institutions on political and social attitudes in general. A diverse group of scholars find that affiliation with a particular religious denomination or an individual's level of religious involvement can have an effect on social and political attitudes (Djupe and Gilbert 2002; J. C. Green 2007; Knoll 2009; Wald, Owen, and Hill 1988). More directly related to this study, Knoll (2009) finds evidence that religion plays a critical role in shaping immigration attitudes in the United States. In this section, I detail the Catholic Church's perspective on immigration in Latin America and outline a theoretical framework that suggests how it could influence some of its members.

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<sup>3</sup> One notable exception is recent work by Orcés (2009) that evaluates the relationship between democratic attitudes and immigration attitudes in Ecuador utilizing data from the Latin American Public Opinion Project (LAPOP).

<sup>4</sup> See Itçaina (2006) for an extensive examination of the role of the Catholic Church and immigration in Spain.

The modern history of the Roman Catholic Church in Latin America is inextricably linked to the region's political and social transformations of the late 20<sup>th</sup> century. The Church's role has varied across nations, but the development of liberation theology in the 1960s and 1970s helped create an institution with a distinct orientation toward social justice issues. The rise of Protestantism has created a competitive environment in which the Catholic Church is forced to compete for members. Gill (1994) argues that this competition may have fueled some of the progressive Church reforms as well as the Church's opposition to military rule in many Latin American countries. Since the fall of Latin America's military regimes, the Church has searched for ways to position itself in a modern and increasingly democratic and socially liberal society.

Despite the rise of evangelical Protestantism in Latin America, the Catholic Church remains a powerful institution with political and social influence. The Church is still highly involved in issues concerning the poor, social justice and in some instances exhibits an unwavering commitment to certain moral issues. The Church hierarchy continues to push issues of social justice and programs to alleviate poverty are well funded by a range of local, national and international Catholic organizations (B. H. Smith 1998, 65). Evidence from Chile and Peru also suggests that the Church still plays active political and social roles, but has adapted and continues to adapt to the changing political and economic landscape (Brooks 1999; Haas 1999). Although the Catholic Church faces religious competition and declining membership, its power and influence are still integral components of Latin America's broader institutional framework.

Despite the Catholic Church's significant social and political influence, its effect on immigration attitudes is somewhat less clear. The Catholic Church's immigration discourse, both globally and within Latin America, promotes the incorporation and acceptance of migrants into their host communities. Pope John Paul II (1996) called upon the Catholic community and



dioceses to provide a safe and accepting community for illegal migrants marginalized in foreign societies and to prevent the spread of xenophobia and racism often directed at disadvantaged migrants. A large amount of activity at both the grassroots and national levels demonstrates the spread of the Catholic Church's pro-immigrant discourse throughout Latin America. Hagan (2006) has concluded that the Catholic Church's communitarian social theology results in social justice activities related to migration concerns. In 2000, the Argentine Bishops submitted a formal request for the normalization and amnesty of undocumented workers and remained active in lobbying for comprehensive immigration reform (FCCAM 2007). The Chilean Catholic Migration Institute has partnered with the International Organization for Migration to disseminate information to migrants concerning their economic, social and cultural rights (INCAMI-Instituto Católico Chileno de Migración 2008). Most recently, the Central American Episcopal Council released a statement reaffirming the Church's pro-immigrant perspective, its desire for governments to address the concerns of migrants and for all of its organizations and members to provide companionship to migrants throughout their struggles (Concejo Episcopal Latinoamérica 2007). The message from the Church is explicitly pro-immigrant, but its actual effect on immigration attitudes may depend on a number of factors.

There is an extensive amount of literature that focuses on religion and its influence on members' attitudes. In the mid-1950s researchers began to reveal a link between denomination, religious attendance and political tolerance (Stouffer 1992). More recently, Beatty and Walter (1984) found that people who attended church regularly were less politically tolerant. Perhaps more directly related to immigration attitudes is evidence concerning the relationship between religion and prejudice. In an extensive review of the literature regarding religion and prejudice, Hunsberger and Jackson (2005) conclude that religious content may very well influence which

groups are objects of prejudice and which groups are not (for instance homosexuals instead of ethnic minorities in some cases). In Allport and Ross' (1967) seminal work, they found churchgoers were generally more prejudiced than nonchurchgoers. Rudman (2004) has also pointed out that there are implicitly biased attitudes, which Hunsberger and Jackson (2005) argue may not be influenced through religious teachings related to tolerance.

For some scholars, such as Wald, Owen and Hill (1988), denominations are capable of creating a common political outlook among members. Thus, as Knoll (2009) outlines, an individual's religious affiliation, which represents a choice to adhere to a particular religious tradition, can theoretically be a significant determinant of individual political and social attitudes. Other scholars, however, argue that religious affiliation matters, but only for particular types of religious adherents (Green 2007; Knoll 2009). Devout members or those that attend church frequently would be more likely to adopt cues from religious leaders (Zaller 1992). Given the large number of non-devout Catholics throughout Latin America, it seems unlikely they would be aware of the pro-immigrant discourse emanating from the Church.

Additionally, the interesting nature of immigration in Latin America is that, despite ethnic differences, many of the regional migrants are Catholic, creating a religious link between groups otherwise divided along ethnic or national lines. Putnam (2007, 161) argues that racial integration in United States megachurches and Catholic parishes occurs because religiously-based identities may "cut across (while not effacing) conventional racial identities." A recent Pew Research Center study finds that the most religiously committed Catholics in the United States are generally more pro-immigrant (Smith 2006). Also, there is evidence to suggest that in the United States, church attendance itself is associated with more liberal immigration policy views (Knoll 2009).

Two things are very clear with respect to the Latin American Catholic Church: It continues to wield a relatively large amount of power both politically and socially, and it has a decidedly pro-immigrant discourse. The Church's influence—if it exists at all—over individual attitudes regarding immigration is unknown. There is divergent evidence as to the effects of religion on prejudice and tolerance as well as attitudes in general. If religion increases prejudice, as some evidence suggests, then we should expect Catholics to be less supportive of immigration than their non-religious counterparts. However, based on the Church's influential public role and its pro-immigrant stance as well as the findings of some of the literature related to religion and attitudes, I expect that the most devout Catholics will be more likely to support immigration. The first hypothesis can be stated as follows:

**Hypothesis 1:** *Highly devout Catholics will be more supportive of immigration than non-devout Catholics and members of other religious groups.*

### **Economic and Cultural Determinants**

Historical immigration to Latin America has had a significant demographic impact on the region, but more recent patterns of migration are centered on regional cross-border movement and emigration to highly-developed nations. South-South migration in Latin America is driven by a number of factors, but both economics and political violence have played an important role in determining migration patterns (Pellegrino 2000). Given the geographic and cultural proximity, much of the intraregional migration taking place in Latin America tends to be toward countries with structures that provide employment and a higher degree of social equity (Pizzarro and Villa 2005, 5). Regional immigrants represented over 60% of the total immigrant population residing in Latin America in 2000 (ibid). International regional migration has become a divisive issue throughout Latin America. For instance, Bolivian migrants in Argentina have been blamed for the country's economic woes and were the focus of large street protests led by certain labor

unions (Grimson and G. Kessler 2005). In Costa Rica, Nicaraguans have largely been racialized and criminalized by the public and media (García 2004). I expect that immigration attitudes in Latin America are driven by economic and non-economic factors as the literature suggests. As migrants pursue work abroad, they may be perceived as a threat to certain economic groups. Individuals who are not satisfied economically or are not able to meet their basic needs will be more likely to oppose immigration because of its potential negative economic consequences. These two hypotheses can be stated in the following manner:

**Hypothesis 2:** *Higher levels of individual economic satisfaction are associated with greater support for immigration.*

**Hypothesis 3:** *Greater ability to meet individual economic needs is associated with greater support for immigration.*

Additionally, skilled workers in countries with a relatively high level of GDP per capita, however, will be more likely to support immigration because immigrants (presumably lower skilled) pose little direct economic threat (Mayda 2006). The corresponding hypothesis is as follows:

**Hypothesis 4:** *Skilled individuals will be more likely to support immigration than unskilled individuals, but only in countries at a high-level of economic development (relative to the region).*

More specifically, I suspect that factors serving as proxies for perceived cultural threat, such as national pride, will have a mitigated effect due to the linguistic and religious similarities of migrants and natives. Chandler and Tsai (2001) find that in the United States perceived threats to the English language have a strong negative impact on immigration views. Although a majority of Latin American citizens speak some form of Spanish, there are distinct differences in accents and vocabulary across nations. These differences, however, may not be as salient a marker as speaking an entirely foreign language. If religiously-based identities are able to cut

across racial identities, as Putnam suggests (2007), then the combination of a common language and religion could have profound effects on how immigrants are perceived by natives. Because natives may not perceive migrants as highly different in certain cultural aspects, economic concerns should be far more influential in shaping immigration attitudes. The resulting hypothesis can be stated as follows:

**Hypothesis 5:** *An individual's level of national pride is not associated with support for immigration.*

### **Data and Measurement**

I utilize data from the 2002 Latin Barometer Survey, which covers 17 Latin American nations.<sup>5</sup> The data are highly useful given the breadth of concepts that the Latin Barometer Survey incorporates. The dependent variable used in this study is a simple measure of support for laws restricting immigration. I have dichotomized the variable creating two categories of individuals: those that support restrictive immigration laws and those that do not. Individuals that do not support restrictive immigration laws are understood to be supportive of immigration (coded as 1).<sup>6</sup> In a previous cross-country study, Mayda (2006) utilized a similar dichotomous variable from the World Values Survey. A majority of respondents (59.01%) included in the sample support immigration (see Figure 4.1). Support varies considerably across countries. The

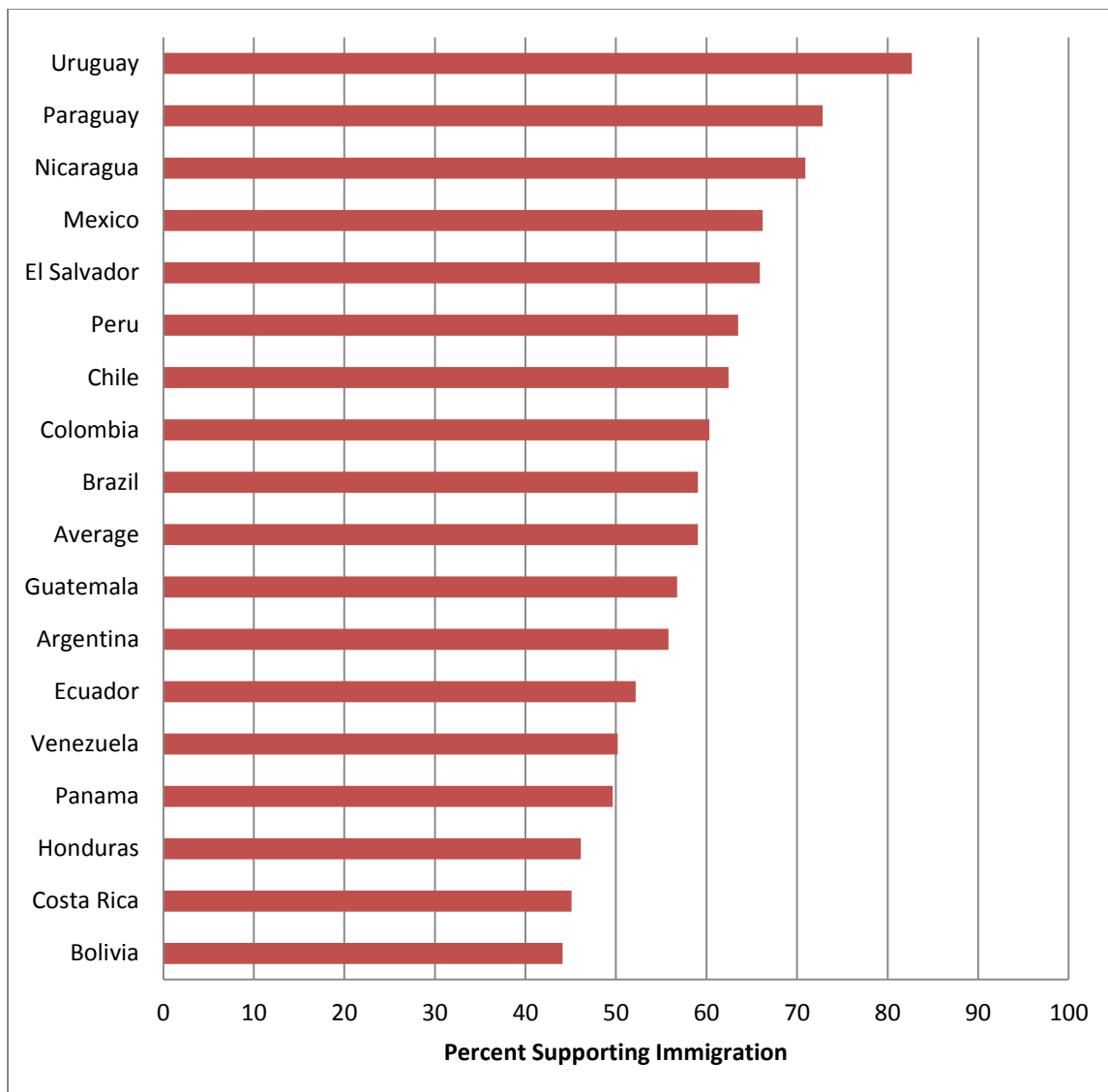
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<sup>5</sup> The Latin Barometer does not include questions concerning immigration in each annual wave of the survey making any sort of analysis across time impossible.

<sup>6</sup> The question, which uses a five point scale, states the following: "There ought to be laws to prevent immigrants entry into (Country)." Responses of *Neither Agree/Nor Disagree* were dropped from the sample because such responses are highly vague and may be a result of the respondents lack of understanding of the question. This required dropping 3,115 responses, but given the large size of the sample it should have little effect on the results. In an effort to test for potential problems, I estimated a multi-level multinomial logit model, which returns similar results (not presented). Also, to assess the robustness of the multi-level model, I estimate a logit model using all the individual level predictors and country dummies to account for any country-level variation (See Appendix, Table C.2). The results of the logit model mirror those of the multi-level model, which suggests the econometric approach is not simply driving the results.

highest level of support in the sample is in Uruguay (82.68%) and the lowest level of support is in Bolivia (44.09%). The advantage of using this particular variable is that it does not incorporate specific reference to economic, cultural or social issues and therefore provides a measure of more general attitudes toward immigration.

**Figure 4.1- Support For Immigration in Latin America**



To examine the hypothesized institutional effect associated with the Catholic Church, I utilize a simple and straightforward measure of an individual's level of devoutness interacted with a dichotomous Catholic variable. Of those respondents included in the sample, 73.3% identify themselves as Catholic. Among Catholics, 10.67% identify as *very devout*, 41.16% as *devout*, 36.67% as *not very devout* and 11.5% as *not at all devout*. Rather than constructing a theoretically complicated index of religiosity, a measure of devoutness suggests a degree of attachment, spiritual involvement and interest in both the religion and potentially the Church's discourse. The more devout an individual, the more likely they will be to internalize the pro-immigrant discourse of the Catholic Church. Also, how well the pro-immigrant message is disseminated in each country may be a function of how prevalent the institution or representatives of the institution are in the daily lives of parishioners. Priests often have significant involvement with the community that they serve, through formal religious ceremonies and community outreach programs. Clergy public speech, shown to be pervasive in the United States, is a potentially critical element in shaping public opinion (Djupe and Gilbert 2002). Thus the number of clergy in a given region could influence the salience of the Catholic Church's message. I include a country level predictor of priests per capita to try and account for this potential influence.<sup>7</sup>

To test the various hypotheses associated with economic self-interest, I utilize a number of different predictors. A measure of satisfaction with an individual's personal economic situation is included along with a measure of the ability of an individual to meet their basic

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<sup>7</sup> This figure is developed from estimates of the number of priests per country produced by the Observatorio Pastoral (Vargas 2005), which is part of the Latin American Episcopal Council.

needs.<sup>8</sup> The variables are not highly correlated (.37) and can provide evidence as to the degree to which economic disadvantage may shape immigration attitudes. I also include a measure of satisfaction with the national economy given differences in findings over the effects of personal and general economic satisfaction on immigration attitudes (Burns and Gimpel 2000). I expect that those personally dissatisfied with their economic situation and those that are unable to meet their most basic needs will be less likely to support immigration because of heightened vulnerability to the perceived negative economic consequences that are often associated with immigration.

Findings from both cross-national and single country analyses suggest that skill level can have varying effects on immigration attitudes. I include a dichotomous variable, which places individuals employed as professionals, salesman, medium and high level executives as well as business owners in the skilled category. To account for the effect of high relative skill ratio of natives to migrants, which Mayda (2006) as well as O'Rourke and Sinnott (2006) have found to contribute to more positive attitudes toward immigration, I include a country level (second level) variable of GNI per capita based on purchasing power parity drawn from the World Bank's World Development Indicators (World Bank 2004). Skilled individuals from countries with higher levels of GNI should on average be more supportive of immigration because those countries are often prime regional receiving nations for lower skilled workers, who subsequently pose no direct economic threat to the highly skilled. Conversely, skilled workers within countries with low levels of GNI will be less supportive of immigration.

To further account for the effects associated with an increased presence of migrants, I incorporate two additional country level variables: percent of the population that is foreign born (percent migrant) and net migration flows. Both variables are generated from the United Nation's

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<sup>8</sup> For actual question wording and responses please refer to Appendix C.



World Migrant Stock Population Database (United Nations 2005). Some countries may have substantial migrant populations, but more recent rates of migration can be relatively low.

Argentina for example has a net migration rate of -.6%, but 4.2% percent of its total population consists of migrants. Other countries have very small migrant populations in absolute terms, but the rate of migration has recently increased dramatically.

In Chile the migration rate is relatively high at 5.3%, while the size of its immigrant population is quite small (1.2%). Evidence demonstrating an effect associated with the size or flow of immigrant populations on attitudes is somewhat mixed (Citrin et al. 1997; Mayda 2006; McLaren 2003; Quillian 1995; Sides and Citrin 2007). For instance, fluctuation in immigration rates had no effect on Canadian immigration attitudes from 1975-2000 (Wilkes, Guppy, and Farris 2008). However, Hopkins (2010) suggests that the local influx of immigrants coupled with negative and salient national rhetoric can significantly affect attitudes toward immigration. Although unable to assess local immigration conditions with Latin Barometer data, either national circumstance (influx/aggregate size) could create a situation in which immigration becomes a salient political and social issue, which may decrease support for immigration as migrants become the scapegoat for economic and social problems.<sup>9</sup> The sense of fear, whether cultural or economic, among natives could increase given a large out-group presence. Similarly, high rates of immigration may raise awareness among the media, politicians and public as to the perceived negative consequences of immigration. Therefore I expect support for immigration to be lower in countries with higher net migration rates or relatively larger immigrant populations.

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<sup>9</sup> Grimson and Kessler (2005) describe a rise in anti-immigrant sentiment in Argentina associated with economic turmoil and Bolivian migration.

To address national and cultural identity issues, I include a measure of national pride.<sup>10</sup> Much of the previously reviewed literature suggests that high levels of national pride are related to lower levels of immigration support. Common religion, language or ethnic heritage often comprise the integral components of national identity (Citrin, Reingold, and Green 1990). Although, natives may develop highly negative ethnic stereotypes of regional migrants, which Burns and Gimpel (2000) argue are influential in establishing attitudes, the common language and religion shared between many regional migrants and the citizens of their host country could potentially alleviate cultural concerns. Contrary to what much of the literature suggests, I expect that national pride will not be a strong determinant of immigration attitudes.

Clark and Legge (1997) demonstrate that xenophobia has a strong negative effect on immigration attitudes. Unfortunately, the Latin Barometer Survey does not contain a question that could directly measure xenophobia or racism. To account for these effects, I incorporate a dichotomous measure of tolerance into the model. Individuals were asked to select up to five items from a list of things they considered important to teach children. Those that selected the response, *tolerance and respect for other people*, are presumed to be non-xenophobic. A majority of the sample falls into this category (72%). Additionally, there are also measures to address the role of behavioral norms associated with different demographics: age, gender, education and political ideology. Lastly, I include a measure of city/town size to account for any effects associated with area of residence. Given that an influx of immigrants into a small community has potential to create significant and rapid social change, which can generate

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<sup>10</sup> The Latin Barometer survey does not provide adequate questions to create a division between nationalism and patriotism as outlined by De Figueiredo and Elkins (2003). The measure of national pride used in this analysis may not result in consistent findings due to the failure to create a division between nationalists and patriots.

resentment toward immigrants, I expect that individuals from smaller towns will be less likely to support immigration.<sup>11</sup>

### *Model Choice- A Multilevel Approach*

A number of options exist to examine cross-national survey data. Previous research examining immigration attitudes across a variety of countries utilizes various approaches including two-stage WLS regression. I take an alternative methodological approach to examine immigration attitudes in Latin America. Given the importance of controlling for contextual variables and the theoretical interest associated with many country level factors, multi-level modeling offers an efficient approach to analyzing hierarchical data. Employing standard models for data analysis (OLS, ANOVA) for multi-level data structures can cause low standard errors and result in more frequent Type 1 errors (Steenbergen and Jones 2002, 220). Multilevel modeling allows me to evaluate cross-level interactions in order to examine the potential conditionality of certain relationships that may be context dependent. To achieve this, I employ a hierarchical generalized linear model, which utilizes a form of logistic regression.

I begin by estimating an individual level (level-1) model of support for immigration expressed in equation 1:

$$(1) \text{ImmigrationSupport}_{ij} = \beta_{0j} + \beta_{1j}\text{NationalPride}_{ij} + \beta_{2j}\text{Tolerance}_{ij} + \beta_{3j}\text{SatisfactionNationalEconomy}_{ij} + \beta_{4j}\text{PersonalEconomicSatisfaction}_{ij} + \beta_{5j}\text{BasicNeeds}_{ij} + \beta_{6j}\text{Skilled}_{ij} + \beta_{7j}\text{Catholic}_{ij} + \beta_{8j}\text{Devout}_{ij} + \beta_{9j}\text{Education}_{ij} + \beta_{10j}\text{Age}_{ij} + \beta_{11j}\text{PoliticalIdeology}_{ij} + \beta_{12j}\text{Female}_{ij} + \beta_{13j}\text{CitySize}_{ij} + \varepsilon_{ij}$$

The intercept is represented by  $\beta_{0j}$  and the level-1 disturbance term (error term) is  $\varepsilon_{ij}$ , while  $\text{ImmigrationSupport}_{ij}$  represents support for immigration for  $i$ th respondent living in  $j$ th country (Rahn and Rudolph 2005, 541). In order to incorporate the effect of country level factors, I estimate a level-2 model that models the intercept ( $\beta_{0j}$ ) as a function of the

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<sup>11</sup> Fennelly and Federico (2008) have found that rural residents in the United States hold more restrictionist views toward immigration policy.

aforementioned country level factors. The factors included are hypothesized to alter the mean level of immigration support across countries and therefore  $\beta_{0j}$  is considered a random intercept.

$$(2) \beta_{0j} = \gamma_{00} + \gamma_{01}\text{PriestPerCapita}_j + \gamma_{02}\text{PercentMigrant}_j + \gamma_{03}\text{GNIPerCapita}_j + \gamma_{04}\text{NetMigrantFlow}_j + \delta_{0j}$$

As Rahn and Rudolph (2005) as well as Steenbergen and Jones (2002) point out, including the level-2 error term ( $\delta_{0j}$ ) is critical in order to avoid making the assumption that the factors included in the model account for all of the variance that is context dependent. Finally, I have hypothesized that the effect of an individual's skill level (Skilled) is dependent upon a country's GNI per capita. In order to account for this conditional relationship, I model the slope of Skilled ( $\beta_{6j}$ ) as a function of GNI per capita.

$$(3) \beta_{6j} = \gamma_{60} + \gamma_{61}\text{GNIPerCapita}_j$$

I then estimate both the random intercept model as well as the full model (random coefficient model) using STATA and GLLAMM.<sup>12</sup>

### *Analysis of Variance*

A way of further justifying the use of multi-level modeling is to demonstrate the percent of variance in the dependent variable that is attributable to higher level predictors. In this case, I am particularly interested in the variance associated with support for immigration that is attributable to country level factors. To calculate the variance at the country level, an empty model of immigration support is run (Table 4.1). To then calculate rho ( $\rho$ ), a measure of inter-class correlation, with a dichotomous dependent variable it is necessary to use the j level (country level) variance component, tau, in the following equation:

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<sup>12</sup> Rahn and Rudolph (2005) provide a clear and concise description of their hierarchical model. I use their general format in an attempt to achieve their clarity and thoroughness.

$$\rho = \tau_{00} / (\tau_{00} + (\pi^2/3))$$

The results indicate that 5.9% of the variance is attributable to the country level.<sup>13</sup> The country level variance component is significant ( $p < .05$ ), suggesting that contextual country-level factors are important in explaining the variance associated with immigration support. The following analysis focuses on both individual and country level predictors of immigration attitudes.

**Table 4.1- Analysis of Variance**

Parameter	Immigration Support Estimate
Fixed Effects	
Constant	60.36* (1.16)
Variance Components	
Country Level ( $\tau_{00}$ )	.46* (.08)
-2 X Log Likelihood	19,464.7
* $p < .05$	

## Results

Table 4.2 presents the results from both the random intercept model (column 1) and the random coefficient model (column 3). The random coefficient model incorporates the cross-level interaction. I also include a random intercept model with an individual level interaction term (Catholic\*Devout) to examine any potential institutional effects associated with the Catholic Church (column 2). Given the consistent findings across all three models and the insignificant

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<sup>13</sup> Directly calculating the percent of variance associated with the individual level is not possible when using logistic regression.

interaction terms, I focus on the estimates from the random intercept model in Column 1 in order to calculate predicted probabilities.

**Table 4.2- Determinants of Immigration Support**

Parameters	Immigration Support		
	Column 1	Column 2	Column 3
	Random Intercept Model	Random Intercept Individual Level Interaction	Random Coefficient Model
<i>Individual Level Factors</i>			
National Pride	-0.026 (0.027)	-.026 (0.027)	-.026 (0.027)
Tolerance	0.08 (0.042)	0.08 (0.042)	0.08 (0.042)
Satisfaction w/ National Economy	-0.019 (0.024)	-0.019 (0.024)	-0.019 (0.024)
Personal Economic Satisfaction	0.111*** (0.027)	0.111*** (0.027)	0.111*** (0.027)
Meet Basic Needs	0.115*** (0.024)	0.115*** (0.024)	0.115*** (0.024)
Skilled	0.034 (0.042)	0.034 (0.042)	0.031 (0.05)
Catholic	-0.151** (0.051)	-0.153* (0.0537)	-0.152** (0.051)
Devout	0.028 (0.023)	0.033 (0.051)	0.028 (0.023)
Catholic*Devout	---	-0.006 (0.056)	---
Education	0.048*** (0.005)	0.048*** (0.005)	0.048*** (0.005)
Age	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Political Ideology	-0.021** (0.007)	-0.021** (0.007)	-0.021** (0.007)
Female	-0.004 (.038)	-0.004 (0.038)	-0.005 (0.038)
City Size	-0.008 (0.009)	-0.008 (0.009)	-0.007 (0.008)

Table 4.2- (continued)

Parameters	Immigration Support		
	Column 1 Random Intercept Model	Column 2 Random Intercept Individual Level Interaction	Column 3 Random Coefficient Model
<i>Country Level Factors</i>			
Priests Per Capita	4.16 (2.75)	4.16 (2.75)	3.874 (2.337)
Percent Migrant	-0.081 (0.050)	-0.081 (0.050)	-0.078 (0.045)
GNI Per Capita	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Net Migrant Flow	-0.099** (0.037)	-0.099** (0.037)	-0.090** (0.032)
<i>Cross Level Interactions</i>			
GNI Per Capita * Skilled	---	---	0.000 (0.000)
Constant	0.434*** (0.102)	0.436*** (0.103)	0.412*** (0.087)
<i>Variance Components</i>			
Country Level Constant ( $\tau_{00}$ )	0.339* (0.062)	0.339* (0.034)	0.16* (0.04)
Skilled ( $\tau_{66}$ )	---	---	0.016 (0.015)
Constant, Skilled ( $\tau_{06}$ )	---	---	-0.004 (0.027)
Number of Level 1 Units	12356	12356	12356
Number of Level 2 Units	17	17	17
-2 X Log Likelihood	16110.38	16110.37	16113.68

Standard errors in parentheses.

\* p&lt;.05, \*\*p&lt;.01,

\*\*\*p&lt;.001

A number of individual level factors are highly significant in determining immigration support. Perhaps the most interesting results concern the effect of being Catholic. I hypothesized that devout Catholics would be more likely to support immigration, but to some degree the results contradict my expectations. The interaction term between Catholic and devout in the random intercept model is insignificant. The Catholic dummy variable, however, is significant and negative across all three models. The predicted probability of a Catholic individual supporting immigration is .56, while for a non-Catholic the predicted probability is .61.<sup>14</sup> Devoutness does not seem to have an independent effect on immigration attitudes as the coefficient is consistently insignificant. Given that Catholics seem generally less supportive of immigration, it raises serious questions as to the hypothesized effect of the Catholic Church on immigration attitudes. These preliminary results suggest that the Church's pro-immigrant discourse may not have had its desired effect.<sup>15</sup>

In order to further investigate these counterintuitive findings, I removed Catholic from the model and added dichotomous variables for all other religious groups.<sup>16</sup> Individuals who identify as Evangelicals and "Other" religion are more supportive of immigration than their Catholic counterparts. This may suggest that some feature of other religious groups (minority status), as compared to Catholics, increases immigration support. Knoll's (2009) findings in the US suggest that empathy among minority religious groups generates greater support for liberal immigration reform. A similar pattern of marginalization and empathy appears to exist in Latin America as well.

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<sup>14</sup> All predicted probabilities are calculated from the estimates in column 1. All variables are held at their means, except dichotomous variables, which are held at 0.

<sup>16</sup> Results of this specification are not shown, but the use of multiple dummies to model religious affiliation had no effect on the general estimates of other independent variables.



Two factors, personal economic satisfaction and ability to meet basic needs, which are both related to economic threat, are positive and highly significant. These findings support the earlier hypotheses that personal economic concerns will be related to immigration support. More specifically, individuals satisfied with their personal economic situation and able to meet their needs are more likely to support immigration. The predicted probability of supporting immigration of those who perceive their personal economic situation as very good is .66, while those who perceive it as very bad have a predicted probability of .56. Moving from those who are able to cover their needs well and save, to those that have great difficulty meeting their needs results in a .08 decrease in the predicted probability of supporting immigration. These results suggest that within Latin America an individual's personal economic situation, which can serve as a proxy for perceived economic threat, affects immigration attitudes significantly.

Increased education, which has been previously shown to be strong a predictor of higher support for immigration, seems to have a similar effect in Latin America. As education increases, so does the predicted probability of supporting immigration. The magnitude of the change in predicted probability of supporting immigration between an individual who has completed a university education and an individual with no education is .09. Two competing theories have been used to account for the relationship between education and immigration attitudes. One suggests education generates more tolerance and acceptance, while the other relates educational attainment to socio-economic position and labor market theory.<sup>17</sup> Labor market theory would suggest that individuals with high levels of education in underdeveloped or developing countries would be less likely to support immigration because they occupy employment sectors most likely

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<sup>17</sup>Burns and Gimpel (2000) as well as Fennelly and Federico (2008) provide brief overviews of these different theoretical approaches. For an extensive analysis of the competing theories and hypotheses associated with education see Hainmuller and Hiscox (2007).

to be affected by immigration. Yet, in this model education has a positive and significant relationship across a number of developing countries. This evidence suggests that throughout Latin America education is capable of generating increased tolerance, which translates into greater support for immigration.<sup>18</sup> Another less optimistic interpretation would be that the more educated are simply aware they should be more tolerant and respond in-kind (Jackman 1978).

Political ideology has a significant and negative effect, which reflects previous findings in other countries and regions (Chandler and Tsai 2001; McLaren 2003; Mayda 2005). More conservative individuals are less supportive of immigration. The difference in the predicted probability of an individual who identifies themselves to the far 'left' versus an individual who identifies themselves to the far 'right' is .05. Conservatives in Latin America, as in many developed nations, are less supportive of immigration than their left leaning counterparts.

Despite extensive evidence to suggest that national pride is a significant predictor of immigration attitudes in a variety of contexts, it is insignificant in this particular model. However, to the author's knowledge this is the first analysis of immigration attitudes solely focusing on South-South migration in Latin America. The insignificant result does not provide sufficient evidence to demonstrate a complete lack of concern over cultural and national identity in Latin America, but it does raise doubt as to the salience of cultural and national identity concerns across different immigration contexts. Given the limitations of the data, I am unable to differentiate between nationalists and patriots, whom are shown to have significantly different attitudes toward immigration (De Figueiredo and Elkins 2003). However, these preliminary results suggest that how immigrants differ from citizens of a host country may influence general attitudes toward immigration. If cultural and national identity is linked to language and religion,

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<sup>18</sup> These findings are similar to those of Hainmuller and Hiscox (2007) who find that education is positively related to immigration support throughout Europe, but that the relationship is not a function of labor market fears.

then migrants sharing those fundamental components with natives could be less likely to evoke concerns over cultural change or loss.

The country level variables generally did not perform as expected. I hypothesized that the effect of skill level on immigration support would be conditionally related to the level of GNI per capita. The non-significant coefficient of the cross-level interaction term (column 3) suggests that traditional labor market theory may not be as strong a predictor of immigration attitudes as some of the literature suggests. GNI per capita could potentially be an inadequate proxy to examine the relative skill ratio of natives to migrants. A key element that may also be missing from the model is some measure of geographic proximity or spatial modeling. Argentina, for instance, has the highest GNI per capita of the 17 countries, but migrants from a relatively poor nation such as Nicaragua are far more likely to simply cross the border to Costa Rica, rather than make the long journey south. Adding a measure of relative wealth as compared to bordering nations, might be a more appropriate method to analyze the contextual effects associated with a country's position as a regional receiving nation.<sup>19</sup>

Despite the insignificant findings associated with GNI per capita and skill level, net migrant flow exerts a negative and significant effect on immigration support. The predicted probability of supporting immigration in a context of high migrant inflow (for this sample) is .47, while in the case of high migrant outflow the predicted probability is considerably higher at .68. Interestingly, the size of the actual migrant population (percent migrant) does not seem to have

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<sup>19</sup> In an effort to further test the potential contextual effects that may be associated with receiving countries, I estimate a random intercept multi-level model dropping GNI per capita and percent migrant and including a receiving country dichotomous variable. The receiving variable is highly correlated with both GNI per capita (.69) and percent migrant (.55). Villa and Pizarro (2005) identify five regional receiving nations that are included in the sample: Mexico, Venezuela, Chile, Costa Rica and Argentina. Although I do not present the results, there are no significant differences across individual level variables and "receive" is insignificant.

an effect. The combination of these two results strongly indicate that trends in migration patterns rather than the size of the migrant population are far more influential in affecting individual immigration attitudes. Increased migrant inflows may result in more negative attention from the media, public and government resulting in less immigration support.

Lastly, the density of priests in a population (priests per capita) appears to have little effect on immigration attitudes. Given that the positive discourse of the Catholic Church seems to have little effect on Catholics in general, the actual distribution of priests may be of little importance as to the degree to which the pro-immigrant message is adopted by parishioners.<sup>20</sup>

Before moving on to discuss the implications of the analysis it is important to examine the predictive capability of the model and more specifically how much of the variance in the dependent variable the model is able to explain. One way of examining a logit model's predictive capability is to calculate the proportion of reduced error (PRE). The model correctly predicts 60% of the responses of immigration support and therefore has an error rate of 40%. The modal category of the dependent variable, which is immigration support, has an error rate of 41%. The resulting PRE value is:  $(41-40)/40 = .025$  or 2.5%. Although, the model does not perform remarkably well it does demonstrate an improvement over the modal category.

To calculate an estimate of the variance associated with immigration support that the model explains, I utilize a ratio of the variance of the linear predictor over the sum of the variance of the linear predictor, the individual level error variance and the intercept (second-level) variance. The individual level error variance is fixed for logit models at 3.29, while the intercept variance can be found in Table 2.<sup>21</sup> The resulting pseudo  $R^2$  is equal to .04, indicating

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<sup>20</sup> The coefficient associated with tolerance is also insignificant.

<sup>21</sup> The variance of the linear predictor can be calculated using STATA's post-estimation `xtlogit` commands.

that the model explains 4% of the variance associated with immigration support. The relatively low percentage may be more a reflection of the survey data, rather than the quality of the model itself. The important factor is that the hierarchical model does provide a greater understanding of the determinants of immigration support by utilizing both individual and country level predictors.

### **Discussion**

The goal of this paper was to examine the determinants of attitudes toward immigration in Latin America, concentrating on the role of cultural threat and the possible effects a religious institution, the Catholic Church, might have on those attitudes. This initial exploration suggests that in a region with religiously and linguistically similar native and migrant populations, personal economic concerns—not cultural fear or religious discourse—shape immigration attitudes. What seems evident is that varied cultural and economic contexts can have significant effects on the determinants of immigration attitudes.

Although a portion of this paper focused on constructing a theoretical argument around the potential influence of a still powerful religious institution, the Catholic Church, I find little evidence to support that theory. Catholics in Latin America are generally less supportive of immigration. Church attendance among Catholics has been declining rapidly over the last twenty years, and the inability of the Church to instill its pro-immigrant message to the devout as well as non-devout may be a function of the increasing secularization of Latin American society. Although there is evidence to suggest that the Church still holds a place of significance both socially and politically, attitudes toward immigration may not be an issue over which the Church holds much sway. What the results highlight is a need to further investigate how the Church's pro-immigrant message is disseminated and whether it actually reaches a broad segment of the

Catholic population. Further investigation of the institutional component of immigration attitudes will require both an understanding of how institutions can shape attitudes as well as a contextual approach to analyzing attitudes cross-nationally.

Religion, however, does matter. Individuals who are members of minority religious groups (e.g. Evangelicals) have also likely experienced a degree of marginalization in Latin American society. This shared sense of marginalization has the potential to create empathy for immigrants (Fetzer 2000; Knoll 2009). Common experience can serve as a bridge between distinct groups; perhaps more so than any religiously based messaging.

There are also important contextual features that drive Latin American immigration attitudes. The sheer number of migrants within a country does not seem to matter, but heavy inflows of migrants create far more negative attitudes toward immigration. A stable migrant population with a long historical association and presence in a host nation will not have the same perceived disruptive effect that can be created by a substantial and recent wave of immigration. Migration is not static, and the influence of migration flows on attitudes indicates that countries experiencing increases in immigration may also find growing support for restrictive immigration policy.

In large part, immigration attitudes in Latin America are affected by economic factors. The roles of cultural and national identities in forming immigration attitudes are somewhat less clear. This paper began by suggesting that the shared linguistic and religious identity among migrants and natives in Latin America could potentially mitigate concerns of cultural erosion that are often associated with immigration. The preliminary findings of this study suggest that cultural fear may not be a salient predictor of immigration attitudes in Latin America. Although these findings are quite divergent from much of the previous literature on immigration attitudes,

they mark a step in the process of clarifying how certain common elements of cultural identity may be capable of attenuating cultural concerns that are so often associated with immigration. Further scholarly research is still needed, however, to extend our understanding of how and under what specific conditions perceived cultural threat influences immigration attitude

# Chapter 5

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## The Contours of Connections: How Migration Shapes Immigration Attitudes

### Chapter Abstract

Research regarding immigration attitudes tends to focus on a single dimension of migration in order to evaluate attitudes: the arrival of foreigners into a country. This narrow framework ignores the fact that migration is a dual process of sending and receiving. Individuals in migration hubs, areas of both emigration and immigration, such as Latin America are in a unique position to think about immigration as one aspect of a broader migration process. What effect does this conceptualization of migration have on attitudes? To address this particular question, I explore the effect that two types of connections to emigrants—familial and financial—have on immigration attitudes. Individuals who have close family members living abroad are likely to understand the immigrant experience and the challenges facing immigrants. I argue that this particular form of contact between an individual and a migrant helps generate a more empathetic response toward immigrants in general. However, emigration has other important implications beyond personal connections. Remittances, a critical feature of modern emigration, are capable of generating greater individual economic stability and thus have the potential to reduce concern about the economic implications of immigration. Utilizing data from 14 Latin American countries, I examine how familial connections to emigrants and remittances affect immigration attitudes. I find that individuals with family members living abroad have more favorable attitudes regarding immigrants suggesting that this important aspect of migration can generate greater empathy for immigrants. Additionally, individuals who receive remittances are more supportive of immigrants receiving social services, which partially reflects the enhanced economic stability often associated with diversified sources of income.



## Introduction

In the last 20 years there have been two major flows of migrants throughout the world: South-North and South-South (United Nations 2012). A critical feature of these two flows is that they create migration hubs: countries that both send and receive significant numbers of migrants. Chile serves as a prime example of this dual migration. Long thought of as primarily a sending nation—approximately 6% of the Chilean population lives abroad—Chile has experienced a dramatic rise (90% increase) in immigration during the last decade as regional migrants have flocked to its stable and growing economy (Martinez Pizarro 2011). In these contexts individuals must grapple with the impact of immigration, but may also have firsthand knowledge regarding the necessity, consequences and benefits of emigration through familial connections to emigrants and remittances. The World Bank estimates that official remittance flows to developing countries will exceed \$400 billion by 2014 (Ratha and Silwal 2012). In Latin America that translates into millions of individuals who receive direct financial benefit from the diaspora of family and friends. Therefore one of the unique attributes in these migration hubs is a significant population that views migration through a dual lens.

Literature examining immigration attitudes is vast, but most frequently examines the determinants of immigration attitudes in highly developed countries.<sup>1</sup> And although scholars have identified a host of economic and sociopsychological factors that influence immigration attitudes, the limited quantity of emigrants from highly developed countries means that scholars studying immigration attitudes generally ignore the broader dynamics of migration.<sup>2</sup> Certain aspects of emigration—familial linkages to emigrants and remittances—do however, relate to

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<sup>1</sup> See Ceobanu and Escandell (2010) for an overview of some of this literature.

<sup>2</sup> Orcés (2010) utilizes a Migration Connection Index to control for the influence of connections to emigrants. I discuss the limitations of this approach in detail in the Data and Analysis section.

important determinants of immigration attitudes more generally. A number of scholars suggest that certain forms of contact are capable of engendering more positive attitudes toward out-groups (Allport 1979; Fetzer 2000; Pettigrew 1998). Individuals who have close relatives who emigrate have extensive contact with a migrant (emigrant) and receive detailed information regarding their experience (Massey 1990). This personalization of migration could potentially create an empathetic response toward migrants in general.

Other scholars have identified an individual's economic evaluations as a critical element influencing immigration attitudes (Citrin et al. 1997; Mayda 2006; Scheve and Slaughter 2001). Remittances can have a wide array of implications for recipients: a principal source of income to cover necessities, supplemental income to enhance education or make larger capital investments or a form of private insurance by diversifying sources of income for an individual (Brown 2006). Regardless of how remittances are utilized, they provide additional income and likely enhance the economic stability of the recipient(s). If personal economic concerns influence immigration attitudes and remittances reduce those concerns, we could expect remittances to reduce anti-immigrant sentiment. Thus, in migration hubs there is an important and significant alternative economic factor which could affect immigration attitudes.

In this essay, I expand on the immigration attitudes literature by evaluating attitudes through a migration framework that incorporates the important dynamics of both emigration and immigration. I argue that both familial connections to emigrants and remittances play an important role in shaping immigration attitudes in Latin America. This approach provides a micro-level understanding of the attitudinal impact of remittances, thus demonstrating an important ancillary effect of this increasingly prevalent international flow of capital. Additionally, this alternative perspective expands on the existing immigration attitudes literature

by demonstrating a clear connection between a certain form of migrant contact (a close family member who lives abroad) and more positive immigration attitudes. Most importantly, this research highlights a critical distinction between principally receiving countries, such as the United States, and migration hubs that experience both significant inflows of immigrants as well as high levels of emigration.

I test these arguments using 2008 data from 14 Latin American countries collected by the Latin American Public Opinion Project (LAPOP). LAPOP provides extensive cross-national survey data that include important information regarding connections to emigrants, remittances and immigration attitudes. This unique set of questions allows me to accurately test whether remittances and familial connections to emigrants affect immigration attitudes.

The remainder of the essay develops the aforementioned arguments and provides a clear analysis of the empirical evidence used to test each one. The first section provides a concise theoretical discussion and situates the argument within the context of literature on immigration attitudes, contact theory and remittances. The subsequent section describes the data and statistical methodology I utilize. I then present results from the statistical analysis and lastly provide concluding thoughts and suggestions for future research.

### **Attitudes, (E)Migrant Networks and Remittances**

Scholars explaining immigration attitudes often fall into two distinct approaches related to perceived threat: economic and sociopsychological. The economic set views immigration as a competitive framework in which conflict over jobs, wages, social services, etc. (realistic group conflict theory) prompts animosity toward an out-group (immigrants) (Esses, Jackson, and Armstrong 1998). Within this approach there is a rigorous debate about the impact of economic self-interest vs. sociotropic economic concerns on immigration attitudes. For some scholars there

is a clear link, based on formal economic theory related to job competition, between economic self-interest and immigration attitudes (Mayda 2006; Scheve and Slaughter 2001). Others suggest that these models of economic self-interest are poor predictors of attitudes and what really matters are sociotropic evaluations related to immigration and the national economy (Citrin et al. 1997; Hainmueller and Hiscox 2007, 2010; Hainmueller and Hopkins 2012; Harell et al. 2012; Lahav 2004). In Latin America, there is evidence suggesting that both an individual's personal economic situation and their evaluation of the national economy influence attitudes (Lawrence 2011; Orcés 2009). Yet, despite the important economic implications of remittances for individuals and families, scholars have largely ignored this important form of capital as it relates to immigration attitudes.

An alternative perspective (sociopsychological), one grounded in social identity theory, suggests an individual's self-identity is based on their attachment to a group. Thus intergroup comparisons serve to solidify one's identity and are likely to create a cascade of group based stereotyping employed to clearly separate "in" and "out" groups.<sup>3</sup> In this variant of group conflict, anti-immigrant sentiment is born of cultural rather than economic threat (Fetzer 2011; Sides and Citrin 2007; Sniderman, Hagendoorn, and Prior 2004). Scholars have begun to explore the contours of group based identity and immigration attitudes in more detail. Religion, language and ethnicity can be important elements in defining identity and subsequently influencing immigration attitudes (Brader, Valentino, and Suhay 2008; Harell et al. 2012; Hopkins 2011; Knoll 2009; McDaniel, Nooruddin, and Shortle 2010). These approaches suggest that stark differences between groups can engender anti-immigrant sentiment, but what reduces animosity toward immigrant out-groups? One element that seems to connect groups is a shared sense of marginalization (Fetzer 2000). For instance, minority status, in terms of religion, may produce

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<sup>3</sup> See Tajfel (1982) for an overview of social identity theory and intergroup conflict.

empathy for immigrants (Knoll 2009) suggesting that perceptions of shared experience are capable of generating common identity among different ‘out’ groups. Scholars also propose that certain forms of contact (“true acquaintance” in Allport’s (1979) terms) are capable of reducing negative attitudes toward out-groups. And although various studies (Fetzer 2000; McLaren 2003; Sides and Citrin 2007) have examined contact with immigrants, few have explored how contact with migrants (emigrants) can influence immigration attitudes.

Given these prior theoretical perspectives, I outline two mechanisms through which a broader migration framework can enhance our understanding of immigration attitudes. The first focuses on the relationship between an individual and an emigrant. As previously mentioned, many studies of immigration attitudes suggest that group identity is a critical element shaping perceptions about immigration. When group boundaries and perceived cultural threat exist, certain factors are capable of mitigating out group anxiety and prejudice. Contact theory, as first detailed by Allport (1979), suggests that under certain conditions contact between groups can generate increased levels of tolerance. The type of contact that Allport (1979) and subsequently Pettigrew (1998) describe can take on two forms—casual or substantive—with very different ramifications.<sup>4</sup> Casual contact would involve passing an individual in the street and could serve to actually reinforce negative stereotypes. More substantive contact could occur, for instance, between co-workers and is marked by aspects of equality and mutual dependence (Fetzer 2000). Arguably this type of contact can reduce out-group anxiety and alter negative perceptions. Meta-data analysis indicates that across a wide range of contact there is substantial evidence to suggest contact reduces out-group prejudice (Pettigrew and Tropp 2006). Other studies have found that the quality of contact can have a significant impact on out-group attitudes (Dixon and

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<sup>4</sup> Pettigrew (1998) highlights the four elements defining more substantive and threat reducing contact: shared goals, equal status, cooperation and formal recognition.

Rosenbaum 2004; Stephan, Diaz-Loving, and Duran 2000). Extending this logic to migrants would imply that contact between natives and migrants could generate reduced anxiety and more positive perceptions of immigration, depending on the type of contact and nature of the relationship.

A potentially critical type of relationship that can significantly alter out group perceptions is intergroup friendship (Pettigrew 1998). When a family member emigrates, it creates a de facto friendship or familial connection to a member of a new group: migrants. In other words an emigrant can serve as a bridge toward understanding migration in general terms creating a more positive perception of immigrant groups. In emigrant families, the term migrant takes on a new association built around a familial connection: a migrant is no longer a stranger, but a father, mother or sibling. There is strong evidence that migrant networks—migrants, former migrants and families and friends of migrants—are instrumental in reducing the uncertainty and risk associated with migration (Massey 1990). They serve to transfer information, provide security and safety nets for new and potential immigrants thus creating a reinforcing cycle of migration (Massey 1990). A non-migrant who is immersed in the network is likely aware of both the struggles immigrants face and the benefits of immigration as well. Just as friendship with an out-group member can shift an individual's reference point in thinking about a group, emigration creates a new frame of reference for a broad group of individuals: migrants. This de-facto form of migrant contact is likely to undermine negative stereotypes of immigrants and generate greater empathy for immigrants as well. This theoretical logic provides the following hypothesis:

**Hypothesis 1:** *An individual who has a close familial connection to an emigrant will be more supportive of immigrants than an individual with no familial connection, ceteris paribus.*

There is another aspect of migration that could also be influential in shaping immigration attitudes: remittances. The vast majority of literature on remittances focuses primarily on the impact of remittances on economic growth, development and familial economic well-being. Findings from a wide array of studies suggest that remittances have a positive impact on investment (Leblang 2010), poverty reduction and household expenditures (Acosta et al. 2008; Adams Jr. and Cuecuecha 2010; Adams Jr. and Page 2005). On an individual level, remittances can serve as an important safety net (Duany 2010). Individuals who have a remittance-based safety net would be less concerned about the potential economic impact of immigration in their own country. In areas such as Latin America, where governments have limited social welfare systems including very limited access to unemployment insurance, the influx of remittances can significantly alter the stability of an individual's economic situation. Although there is mixed evidence as to the importance of economic self-interest in determining immigration attitudes (Hainmueller and Hiscox 2010; Mayda 2006; Scheve and Slaughter 2001), remittances could logically serve to generate more positive attitudes. This perspective is summarized by the following hypothesis:

**Hypothesis 2:** *Individuals who receive remittances will be more supportive of immigrants than individuals who do not receive remittances, ceteris paribus.*

### **Data and Analysis**

In order to test the hypotheses regarding remittances and familial connections to emigrants, I utilize Latin American Public Opinion Project (LAPOP) data from 14 Latin American countries. The data include approximately 23,000 respondents. I provide descriptive statistics for the dependent variable and all independent variables in Appendix D.

To operationalize support for immigrants I use a specific immigration related question included in the LAPOP survey: "To what degree do you agree that the (country) government

should provide social services such as healthcare, education, housing, to foreigners who come to live or work in this country?” This specific policy question has two distinct advantages. First, remittances are theorized to provide a social safety net for families. Asking individuals about social services for foreigners should arguably trigger less concern among those with diversified sources of income (remittance recipients). Second, it is a question about the treatment of immigrants rather than the perceptions of immigration in general. If the contact that exists within migrant network groups serves to undermine negative stereotypes and generate empathy, we would expect it to affect how people want immigrants (generally speaking) to be treated. The question does not specify a particular group of foreigners thus maintaining a general framing of immigration issues. As Table 5.1 shows, there is considerable variation in the degree to which Latin Americans think foreigners should receive social services.

**Table 5.1- Agreement with Provision of Social Services for Foreigners**

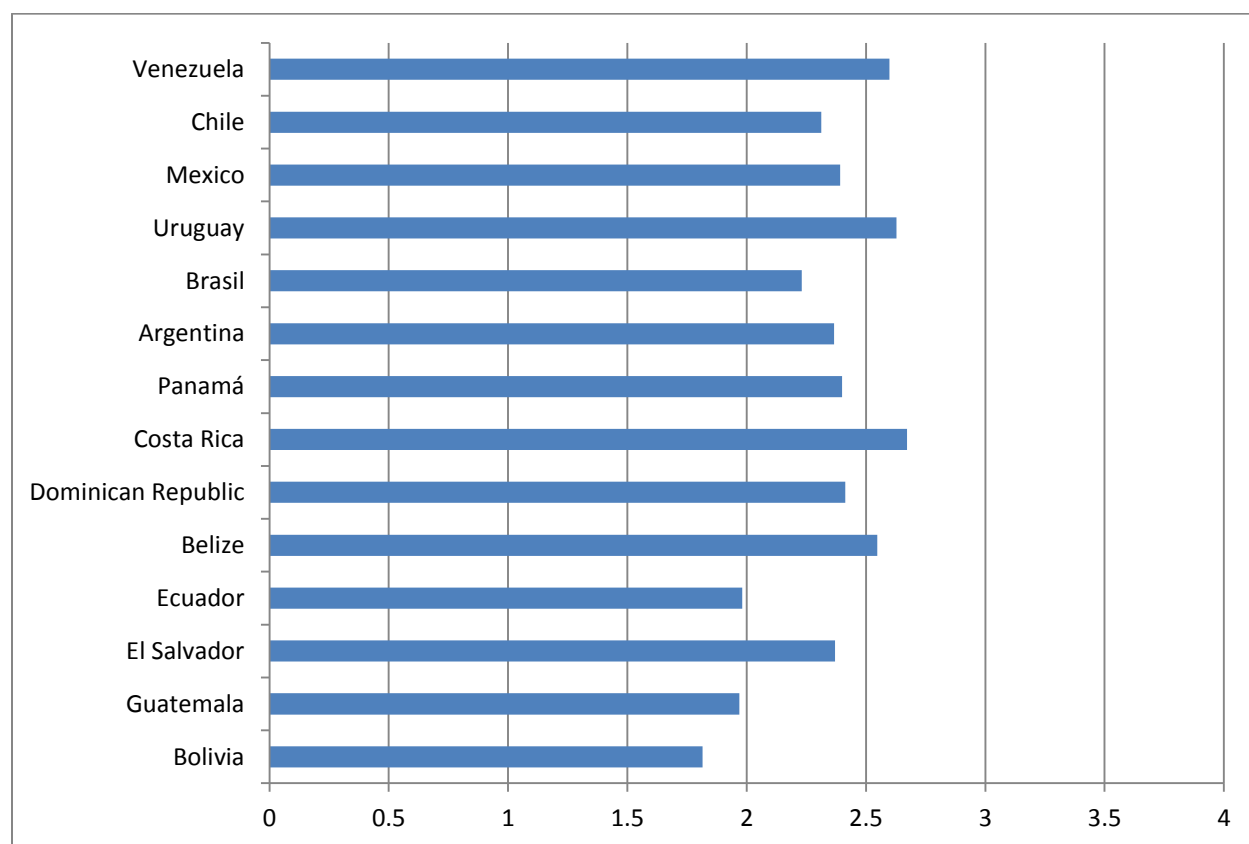
<b>Response</b>	<b>Percent</b>
Strongly Agree	17.86
Somewhat Agree	13.82
Neutral	14.84
Somewhat Disagree	28.96
Strongly Disagree	24.52
Total	100

Figure 5.1 shows a country-by-country breakdown of the average level of agreement (0-4 scale) with countries arranged from highest GDP/capita (Venezuela) to lowest (Bolivia).<sup>5</sup>

<sup>5</sup> Data on GDP/capita are from the World Bank (2012).



**Figure 5.1. Average Agreement with Provision of Social Services for Foreigners by Country**



Prior work (Orcés 2010) has briefly examined the importance of migrant networks in shaping immigration attitudes, but it uses a Migration Connection Index to demonstrate a positive relationship between an individual's attachment to migrant networks and their attitudes toward immigrants in Latin America. The index combines familial connections and remittances thus masking important variation associated with these two conceptually different mechanisms influencing immigration attitudes. As outlined above, there are two distinct processes at work; one based on contact and the other economic, which I argue should be modeled separately to more accurately test these parallel processes. In order to examine the effect of remittances on immigration attitudes, I employ a simple dichotomous question asking individuals if their family receives remittances. A large percentage (13%) of individuals surveyed from the 14 countries report receiving remittances, which reflects the importance of this form of capital movement in

Latin America. Although the question does not assess from whom the family receives remittances, it provides a clear measure as to whether remittances flow to the family or not. To assess the impact of familial emigrant connections, I evaluate responses based on the following question: “Do you have close relatives who used to live in this household and are now living abroad?” This question is useful because it establishes the existence of a ‘close’ familial connection to an emigrant thus providing a direct test of the contact argument outlined above. An even larger percentage (22%) of respondents report having close-family living abroad, providing a clear picture as to the breadth of migrant networks that exist across Latin America.

As outlined above, scholars have engaged in extensive research related to immigration attitudes and have identified a host of factors that are likely to influence those attitudes. I control for perceptions of an individual’s personal economic situation as well as individual perceptions of the national economic situation. I also control for a wide range of other important indicators: education, gender, wealth, age, religion, employment status, ethnicity and city size (population). Question wording and summary statistics are available in Appendix D. I also include a measure of an individual’s likelihood of migrating in the next three years to assess the degree to which future immigration plans might alter current attitudes regarding immigrants.

To estimate the effect of remittances and familial emigrant connections on attitudes toward immigrants receiving social services, I use a model of the following equation:

$$(1) \text{SocialServicesForForeigners}_{ij} = \beta_{0j} + \beta_{1j} \text{EmigrantFamilyMember}_{ij} + \beta_{2j} \text{ReceiveRemittances}_{ij} + \beta_{3j} \text{PlanToMigrate}_{ij} + \beta_{4j} \text{NationalEconomicSituation}_{ij} + \beta_{5j} \text{PersonalEconomicSituation}_{ij} + \beta_{6j} \text{Wealth}_j + \beta_{7j} \text{Female}_{ij} + \beta_{8j} \text{Age}_{ij} + \beta_{9j} \text{Catholic}_{ij} + \beta_{10j} \text{White}_{ij} + \beta_{11j} \text{Mestizo}_{ij} + \beta_{12j} \text{Indigena}_{ij} + \beta_{13j} \text{Unemployed}_{ij} + \beta_{14j} \text{OtherWork}_{ij} + \beta_{15j} \text{CitySize}_{ij} + \varepsilon_{ij}$$

Although there is mixed evidence regarding the effect of country-level factors influencing immigration attitudes, both a country's level of development and migration rate could play an important role in shaping immigration attitudes (Facchini, A. Mayda, and Puglisi 2010; A. M. Mayda 2006). An ANOVA model indicates that 5.4% of the variance associated with the social services dependent variable is attributable to the country-level.<sup>6</sup> In order to incorporate the effect of country level factors, I estimate a level-2 model that models the intercept ( $\beta_{0j}$ ) as a function of two country level factors: GDP/capita and net migration rate. The random intercept model is specified by the following equation:

$$(2) \beta_{0j} = \gamma_{00} + \gamma_{01}\text{NetMigrationRate}_j + \gamma_{02}\text{GDP/Capita}_j + \delta_{0j}$$

The results from this baseline specification are presented in Table 5.2. Both familial connection to an emigrant and receiving remittances exert a positive and significant effect on agreement with social service provision for foreigners. The effect of having a familial connection to an emigrant (.128) is almost double that of the effect of remittances (.077). This set of results provides initial evidence supporting the hypotheses that remittances and familial connections would be associated with more positive attitudes toward immigrants. Additionally, results from the model indicate that other economic and non-economic factors are important in determining immigration attitudes. Perceptions of both the national economy and an individual's personal economic situation are both positively and significantly ( $p < .001$ ) associated with agreement concerning government provision of social services to foreigners. As prior research has indicated, national economic conditions can have a significant impact on individual immigration attitudes.

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<sup>6</sup> I present results from the ANOVA model in Appendix D.

**Table 5.2- Government Should Provide Social Services to Foreigners**

<b>Parameters</b>	<b>Random Intercept</b>
<i>Individual-level</i>	
Emigrant Family Member	0.128*** (0.027)
Receive Remittances	0.077** (0.038)
Plan to Migrate	-0.020 (0.026)
National Economic Situation	0.157*** (0.012)
Personal Economic Situation	0.106*** (0.014)
Wealth	0.007 (0.005)
Female	-0.005 (0.021)
Age	-0.002*** (0.001)
Catholic	-0.135*** (0.022)
White	0.038 (0.037)
Mestizo	0.074** (0.034)
Indigenous	0.079 (0.050)
Unemployed	-0.134** (0.044)
Other Work	-0.004 (0.022)
City Size	-0.006 (0.007)
<i>Country-level</i>	
Net Migration Rate	-0.018 (0.010)
GDP/capita	0.000 (0.000)
Constant	1.779*** (0.162)

**Table 5.2 (continued)**

<i>Variance Components</i>	
Individual Level ( $\delta^2$ )	1.916
Country Level ( $\tau_{00}$ )	0.041
Observations	21,271
Number of groups	14
-2 X Log-likelihood	74244

Standard errors in parentheses

\*\*\*  $p < 0.001$ , \*\*  $p < 0.05$ , \*  $p < 0.01$

The unemployed (as compared to the employed) are less likely to agree that immigrants should receive social services. Also, as discussed in prior work (Fetzer 2000; Knoll 2009; Lawrence 2011), the majority religious group demonstrates more negative attitudes toward immigrants than small minority religious groups suggesting that a shared sense of marginalization may exist between religious minorities and immigrants. Neither of the country-level factors has a significant effect ( $p > .05$ ) on attitudes toward foreigners and social services.

One potential concern with the aforementioned model is the relatively small number of second-level units. Although there is not a clear consensus on the number of level-2 units required to conduct multi-level analysis, there is some evidence to suggest that multilevel modeling using a small number of level-2 units can result in biased standard errors (Hox and Maas 2005).<sup>7</sup> Given that this essay is primarily focused on two individual-level factors rather than country-level predictors, I re-estimate the individual-level baseline model with country dummies rather than a random intercept. The results, presented in Table 3, are substantively identical to those of the multilevel model suggesting that the standard errors and subsequently the inferences were not significantly affected by the small number of level-2 units.

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<sup>7</sup> It should be noted there is a debate about the degree to which bias actually occurs. See Gelman (2006) for an alternative take.

**Table 5.3- Government Should Provide Social Services to Foreigners w/ Country Dummies**

<b>Parameters</b>	<b>Estimate</b>
Emigrant Family Member	0.128*** (0.026)
Receive Remittances	0.076** (0.038)
Plan to Migrate	-0.020 (0.026)
National Economic Situation	0.157*** (0.012)
Personal Economic Situation	0.107*** (0.014)
Wealth	0.007 (0.005)
Female	-0.005 (0.021)
Age	-0.002*** (0.001)
Catholic	-0.133*** (0.022)
White	0.043 (0.037)
Mestizo	0.078** (0.034)
Indigenous	0.088* (0.051)
Unemployed	-0.135*** (0.044)
Other Work	-0.005 (0.021)
City Size	-0.006 (0.007)
Constant	1.925*** (0.074)
Observations	21,271
R <sup>2</sup>	0.064

Robust standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.05, \* p<0.01

Coefficients for country dummies not shown.

There is another more substantive issue with the baseline model. A number of the variables represented as exogenous factors influencing attitudes toward social services do not necessarily operate independently of one another. In other words, the baseline model fails to accurately address a more complicated causal process. For instance, an individual who has a close family member living abroad is more likely to receive remittances. A significant portion of the theory undergirding work on explaining remittance flows focuses on remittances as a form of intra-family contract (see Holst, Schäfer, and Schrooten (2011)). However, familial ties are neither a guarantee of remittances or the only form of remittances as collective remittances often delivered through hometown associations (HTAs) are prevalent in Latin America (Goldring 2004). Thus we would expect respondents in our sample who have close familial emigrant connections to be more likely to receive remittances than individuals who do not have those close familial emigrant connections. Table 5.4 shows the pattern of remittances between those with familial connections and those without connections. Remittances and familial emigrant connections are correlated at .52 ( $p < .001$ ), providing empirical evidence of this intuitive relationship.<sup>8</sup>

**Table 5.4- Percent of Respondents with and without close familial emigrant connections who receive remittances**

	<b>No Familial Emigrant Connection</b> (N=16,614)	<b>Familial Emigrant Connection</b> (N=4,521)
<b>Does Not Receive Remittances</b>	97.80%	67%
<b>Receives Remittances</b>	2.20%	33%

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<sup>8</sup> To further examine this relationship, I estimate a bivariate multilevel model regressing remittances on emigrant family member. Individuals with close emigrant family members are over 20% more likely to receive remittances than individuals with no close emigrant family members. Results from the regression are presented in Appendix D.

### *An Alternative Model: Path Analysis*

Arguably there are other important relationships between the independent variables not modeled in the baseline specification. Given that remittances provide individuals with an additional source of income, remittances likely affect wealth. Also, if remittances serve as a safety net then it is highly plausible they could also shape an individual's perception of their current economic situation. These potentially important and illustrative direct and indirect relationships are not represented in the parsimonious baseline model. One pragmatic method for handling this type of relationship is a form of structural equation modeling: path analysis. Path analysis is widely used in the social sciences as a method for more closely examining causal relationships (Kline 2011). Path analysis involves using a series of equations to more accurately model the direct and indirect effects of variables on an outcome of interest. In this particular instance, I argue that the effect of a familial connection to an emigrant influences immigration attitudes directly, but also that the effect of familial connections operates indirectly through remittances and their subsequent impact on wealth and economic attitudes. The set of equations used to generate the path analysis are outlined below.<sup>9</sup> I include all of the individual-level factors from the multilevel baseline model as exogenous controls as well as include country dummies.<sup>10</sup>

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<sup>9</sup> Given that this set of equations constitutes a recursive structural model it is considered identified by definition (Kline 2011).

<sup>10</sup> Path analysis relies on using multiple regression equations to calculate direct and indirect effects. Given the cross-national nature of the data, I control for country-specific variation in the dependent variable in each model by including a set of exogenous country dummies. Additionally, path analysis traditionally relies on a linear regression framework to be able to calculate indirect effects. However in this case, remittances, which are hypothesized to mediate the effect of familial emigrant connection, is a dichotomous variable. As Imai et al. (2010) suggest, extending a linear mediation framework to nonlinear models is wrought with problems. Therefore, I use a linear probability model to estimate the effect of familial emigrant connection on remittances. Two problems are likely to occur when using linear probability models: nonsensical estimates (above 1 or below 0) and heteroskedasticity. In this bivariate case



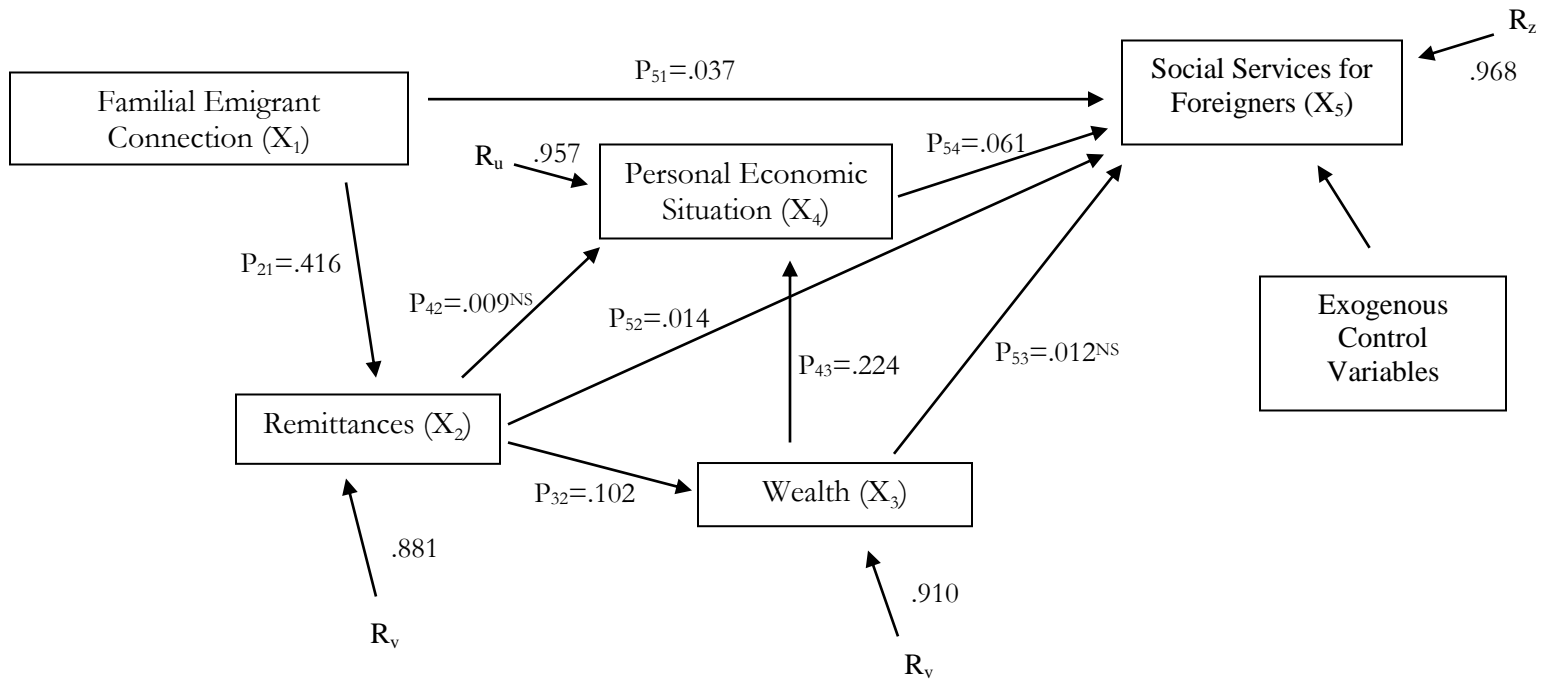
The following are the set of equations for the model specified in Figure 5.2.<sup>11</sup>

$$X_2 = p_{21}X_1 + p_{2u}R_u$$

$$X_4 = p_{42}X_2 + p_{43}X_3 + p_{4u}R_u$$

$$X_5 = p_{51}X_1 + p_{52}X_2 + p_{53}X_3 + p_{54}X_4 + \text{Exogenous Controls} + p_{5u}R_u$$

Figure 5.2- Path Diagram of Direct and Mediating Effects on Social Services for Foreigners<sup>12</sup>



One of the distinct advantages of path analysis is the ability to evaluate the direct and indirect effects of independent variables on an outcome. Table 5.5 provides a summary of the indirect, direct and total effects associated with a familial connection to an emigrant. Familial emigrant connection exerts a positive and significant direct effect on attitudes concerning social services for immigrants. A one standard deviation change is associated with a .037 increase in

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the estimates that are produced fall between 0 and 1, and I utilize robust standard errors to address heteroskedasticity.

<sup>11</sup> Note that each equation includes a set of country dummies that are not formally shown in the equations or path model.

<sup>12</sup> All coefficients are standardized. NS superscript indicates an insignificant effect.

agreement with providing social services to immigrants. The indirect effect, although significant, is quite small (.004) resulting in a total effect of .043. This is smaller than the total direct effect of an individual's personal economic situation as a one standard deviation increase in personal economic satisfaction is associated with a .061 increase in agreement with providing services. Remittances exert both direct and indirect effects on service agreement, but the total effect is considerably smaller than that of a familial emigrant connection. The indirect effect of remittances flows through wealth and subsequently individual evaluations of personal economic situations. This is evidence of a clear economic channel through which remittances affect immigration attitudes. Additionally, the effect of a familial emigrant connection operates indirectly through remittances, wealth and personal economic satisfaction while also exhibiting a strong direct effect. Given the substantial direct effect, this provides evidence that contact with an emigrant is capable of shifting attitudes toward immigrants. This indicates that individuals do not simply have isolated attitudes regarding immigration, but rather are cognizant of migration as a dual process. Overall the results provide strong evidence that in the context of migration hubs, such as Latin America, connections to emigrants and remittances are important factors influencing immigration attitudes.

**Table 5.5- Direct and Indirect Effects on Agreement with Social Service Provision for Immigrants**

Parameter	Direct Effect	Indirect Effect	Total Effect
Familial Emigrant Connection	0.037	0.006	0.043
Remittances	0.014	0.001	0.015
Wealth	--	0.014	0.014
Personal Economic Situation	0.061	--	0.061

Note: All coefficients are standardized and significant ( $p < .05$ ). Insignificant coefficients and non-hypothesized relationships are indicated by the -- symbol.

## **Discussion**

Although there is a tremendous scholarly effort to better understand a wide variety of phenomena related to immigration, different streams of immigration research often fail to engage one another. Given the significant emphasis on understanding immigration attitudes in the United States and Europe, little attention has been afforded to the unique dynamics of emigration and immigration in developing regions such as Latin America. This work highlights the importance of these dual processes in relation to immigration attitudes.

The evidence presented above suggests that the millions of dollars flowing to Latin America in the form of remittances have important implications for immigration attitudes. Remittances, which can serve to enhance wealth and stabilize an individual's economic situation, have an impact on political behavior. And although this economic channel is influential, close familial connections to emigrants are even more critical in determining immigration attitudes. These connections are capable of directly impacting attitudes toward immigrants, which has two important implications. First, contact with migrants can improve perceptions of immigrants and possibly immigration. When migrants are no longer strangers, but family, contact has the potential to shift individual attitudes regarding the treatment of immigrants. This has important societal implications because it suggests that certain forms of contact, such as intergroup friendship, are likely to reduce social conflict. Second, and perhaps more importantly for the study of attitude formation, individuals do not simply view immigration in isolation, but rather as part of much larger process of migration. Latin American immigration attitudes are thus not simply responsive to the economics of migration, but integrally connected to the sociopsychological effects that migrant networks exert.

As scholars continue to debate the merits of economic and non-economic explanations of immigration attitudes, the evidence presented here suggests that emigration has important

consequences for political behavior. To further explore the underlying mechanisms linking emigrant connections and remittances to immigration attitudes will require more in-depth analysis of qualitative data and longitudinal information on the transformation of attitudes. Extending this work to other migration hubs beyond Latin America is a logical next step. Yet, there is clear evidence that suggests migrant networks and their associated economic and psychological levers are influential in shaping immigration attitudes. Understanding exactly which levers are moving is an important area for further investigation.

# Chapter 6

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## Conclusion

The preceding dissertation focuses centrally on explaining immigration attitudes in Latin America. The four essays are linked in their effort to shed light on extant theory by utilizing the economic, cultural and migration features of this important migration hub. In Chapters 2 and 3, I set out to provide two tests of the labor competition hypothesis. Importantly, there is no evidence to suggest individuals in Latin America make pocketbook calculations related to immigration and competition for employment. Despite a heavy scholarly emphasis on using parsimonious economic models of self-interest to explain immigration attitudes, I conclude that individuals care considerably more about the broader economic implications of immigration. Chapter 4 takes an alternative approach to advancing the scholarly understanding of immigration attitudes by examining how a religious institution shapes immigration attitudes. Although the Catholic Church has engaged in a global effort to incorporate and defend migrants, this message and action does not translate into more positive perceptions of immigration among Latin American Catholics. Religion, however, does play an important role in shaping immigration attitudes. Individuals who are from marginalized religious groups likely empathize with immigrants who are discriminated against and thus view immigrants more positively. Chapter 5 suggests that attitudes toward immigration in Latin America are formed in a context of migration; one defined by both emigration and immigration. This alternative framework is critical to understanding attitudes because emigration has a substantial impact on how individuals understand a complementary process: immigration. Both contact with emigrants and the financial benefits of emigration (remittances) are important factors in shaping immigration attitudes.

How do these four essays collectively advance scholarship regarding immigration attitudes? Immigration scholars all too often find themselves corralled into a particular theoretical approach. The result is a wide of array of work that often avoids directly speaking to

each other. Principally, economists stick to their economic models, sociologists to group identity/contact and psychologists to various nuanced experimentation with immigration attitude formation. In some ways it is a literature bifurcated by theoretical approach and social science sub-fields. But more recent and comprehensive work (Brader, Valentino, and Suhay 2008; Fetzer 2000; Hainmueller and Hopkins 2012; Harell et al. 2012) attempts to frame migration as a set of competing explanations—most often framed in terms of economic and cultural conflict—which arguably provides a more accurate portrayal of the complex set of factors that influence immigration attitudes. Thus, we have a set of work that gives us considerable insight into the individual determinants of attitudes. Scholarship is an iterative process, not one marked by frequent paradigmatic shifts, but rather the careful testing and repeated evaluation of logical theory. The four essays presented here utilize an important migration hub, Latin America, coupled with a diverse set of methodological approaches as well as unique data to advance our understanding of the underlying economic, social and psychological processes that influence attitudes. Collectively, it is a body of research without an a priori attachment to a particular approach or model. The result is a set of unique findings that contribute significant evidence to help delineate a long-standing debate among scholars, while simultaneously offering an alternative framework to approach the analysis of immigration attitudes.

Although some scholars (Mayda 2006; Scheve and Slaughter 2001) suggest that pocketbook concerns associated with labor competition are instrumental in shaping attitudes, this dissertation finds that in the emerging economies of Latin America this is simply not the case. These findings add credence to a growing number of studies that question the inherent assumptions of parsimonious economic models of human behavior (Hainmueller and Hiscox 2007, 2010; Hainmueller and Hopkins 2012). This has important implications for the study of

immigration attitudes, but also for thinking about behavioral economics more broadly. Although scholars often shy away from null findings, the lack of a pocketbook effect is critical to understanding the mindset and origin of opinions toward immigrants and immigration. This, coupled with evidence presented here that individuals evaluate the broad economic implications of immigration, is a strong indicator that strict self-interest has extensive limitations in explaining immigration attitudes. This concept and debate is not unique to immigration attitudes: from trade to development scholars debate the effectiveness of using economic self-interest to explain behavior.<sup>1</sup> Debating through incremental refinement and adjustment is critically important, but it also reveals that within the realm of immigration attitudes research there is an opportunity to advance an alternative framework to assist in moving the debate forward.

One potential avenue, outlined in Chapter 5, is to approach immigration attitudes as part of the larger migration phenomenon that involves the complementary processes of emigration and immigration. The fact that individuals are influenced by their contact with emigrants is critical for two reasons. One, it demonstrates how a strong inter-group connection can engender more positive attitudes toward an out-group. Two, connections to emigrants not only serve to inform potential future migrants, but they also generate an important reference point through which individuals can understand immigration. Just as individuals are capable of looking beyond their pocketbooks, Latin Americans who are connected to a migrant network are able to look beyond a narrow conception of immigration. They have extensive contact with an individual who belongs to a group that includes both emigrants and immigrants: migrants. A major contribution of the dissertation is to demonstrate that not only can alternative migration contexts be used to precisely test highly debated extant theory, but that the underlying features of migration—

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<sup>1</sup> See Fordham and Kleinberg (2012) for a discussion of the debate within scholarship on trade attitudes. Banerjee and Duflo (2012) offer a wide array of examples associated with economic self-interest and development.



emigration and immigration—are intertwined. While this serves to differentiate this work from the large body of research focused on immigration in North America and Europe, it also provides new motivation for immigration research. Immigration attitudes are thus understood by using a migration framework that highlights the various components of this multifaceted process.

### **Moving Forward**

Not only do the four essays provide a set of important interrelated findings, but they help illuminate potential avenues to generate a clearer and more precise understanding of immigration attitudes. One of the limits of most of the research on immigration attitudes, including this dissertation, is that the data are cross-sectional. For instance, Chapter 2, which focuses on economic self-interest and the influence of education, only ascertains the effect of education at a single point in time. If education, especially university education, generates more tolerance, panel data could help track how pre and post university individuals perceive immigrants and immigration. This type of longitudinal study could also help address the economic self-interest debate by examining the relationship between an individual's evolving employment situation and their immigration attitudes. Although, difficult and expensive, this type of data collection is critical to more accurately assess some of the causal linkages outlined in these essays.

As noted above, a connection between an individual and an emigrant has a significant impact on immigration attitudes. How far reaching are these network effects? Despite a burgeoning literature in political science built around network analysis and a heavy emphasis on understanding immigration patterns through migrant networks, we have almost no understanding of how networks shape immigration attitudes. By thinking of networks in terms of migration and migrants rather than strictly immigrants, there are multiple sources of connection to investigate. If social networks are able to diffuse information about migration, direct contact with a migrant

might not be necessary to reduce fears regarding immigration. This type of analysis has especially important implications in migration hubs such as Latin America, Southeast Asia and Africa.

In general, studies of immigration attitudes often put forth a set of explanatory factors that do not explicitly test causal mechanisms. Skill level or educational attainment for instance serves as a proxy for labor market competition. The underlying reason is a pragmatic function of pursuing quantitative research with accessible data while trying to test an observable implication of a parsimonious theory. The conclusions we draw are from representative samples and survey data with little effort to incorporate a qualitative approach. In an effort to make a more qualitative assessment of an individual's thought process, I included an open ended question associated with the survey experiment presented in Chapter 3. Individuals revealed why they chose one particular immigrant over another, thus providing critical details about what motivated their choice. Without these responses I would have made inferences as to their underlying decision-making process based on a set of underlying assumptions. Approaching immigration attitudes from a distinctly qualitative perspective could help overcome some of the theoretical limitations posed by simple models of economic self-interest and help scholars build more integrated theories to extensively test.

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# A

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## Appendix to Chapter 2

### Data Description

#### *Independent Variables*

##### *Education*

What level of education do you have? What was the last year you completed? What sort of technical school, what sort of institute, etc.?

Interviewer recodes response into the following categories: Illiterate, Incomplete Primary, Complete Primary, Incomplete Secondary/Technical, Complete Secondary or Technical, Incomplete College/University, Complete College/University.

##### *Perception of National Economy*

And over the next 12 months do you think that, in general, the country's economic situation will be much better, a little better, about the same, a little worse or much worse than now?

Response Categories: Much worse, A little worse, About the same, A little better, Much better

##### *Ability to Meet Basic Needs*

Does the salary you receive and your total family income allow you to cover your needs in a satisfactory manner? Which of the following statements describes your situation?

Response Categories: It's not sufficient and we have major problems, It's not sufficient and we have problems, It's just sufficient and we don't have major problems, It's sufficient and we can save.

##### *Member Majority Racial/Ethnic Group*

Variable constructed from aggregated survey data for each country to determine largest ethnic/racial group.

##### *Skill Level*

Those individuals that indicated employment or temporarily out of work were included in the labor force sample. Based on self-reported occupation, individuals were categorized as follows:

High Skill: Professional (Doctor, lawyer, accountant, architect), Professional, Senior Management

Medium Skill: Business owner, Middle Management

Low Skill: Farmer/Fisherman, Self-employed-informal, Other

*Change in Migrant Stock*

This is an estimate of the increase or decrease in the immigrant population between the years 2005-2010. The measure does not reflect the net migration rate, which would be immigration compared to levels of emigration.

**Table A.1- Distribution of Ordinal Dependent Variables**

<b>Question Wording</b>	<b>Allow Many</b>	<b>Allow Some</b>	<b>Allow Few</b>	<b>Allow None</b>	<b>Don't Know/ No Answer</b>	<b>Total Responses</b>
To what extent do you think (country) should allow people of the same race or ethnic group as most of (country's) people to come and live here?	4,858 24.04%	5,842 28.90%	5,193 25.69%	2,901 14.35%	1,418 7.02%	20,212
How about people of a different race or ethnic group from most of (country's) people?	2,881 14.25%	6,035 29.86%	6,360 31.47%	3,276 16.21%	1,660 8.21%	20,212
How about people from poorer countries?	2,973 14.71%	4,541 22.47%	6,042 29.89%	4,761 23.56%	1,895 9.38%	20,212



**Table A.2- Distribution of Continuous Dependent Variable**

<b>Is (country) made a worse or a better place to live in by people coming to live here from other countries?</b>	<b>Number of Respondents</b>	<b>Percent (%)</b>
Worse	802	3.97
1	780	3.86
2	1,041	5.15
3	1,456	7.2
4	1,859	9.2
5	4,830	23.9
6	2,620	12.96
7	2,089	10.34
8	1,696	8.39
9	646	3.2
Better	949	4.7
Don't Know	1,207	5.97
No Answer	237	1.17
Total	20,212	100

**Table A.3- Summary Statistics<sup>1</sup>**

Variable	Mean	Standard Deviation	Minimum Value	Maximum Value
Education	2.789	1.752	0	6
Perception of National Economy	1.900	0.892	0	4
Ability to Meet Basic Needs	1.494	0.838	0	3
City Size	4.297	2.250	0	7
Age	39.047	15.916	16	94
Female	0.495	0.500	0	1
Catholic	0.707	0.455	0	1
Member Majority Race	0.569	0.495	0	1
Immigrant Population (%)	1.831	2.276	0.1	10.2
Change in Migrant Stock (%)	3.010	5.778	-1.6	23.2
GDP Per Capita	4972.691	2725.155	1004.13	9877.01

<sup>1</sup> Based on the sample included in the models presented in Table 7 (N=15,641).

## Comparison Model Outside Labor Force Sample

Table A.4 Outside Labor Force Sample

Immigrants Make Country Better	
Variables	(1) Random Intercept
Education	0.077*** (0.023)
Ability to Meet Basic Needs	0.109*** (0.040)
City Size	0.009 (0.016)
Age	0.000 (0.002)
Female	-0.162** (0.074)
Catholic	-0.010 (0.074)
Member Majority Race	0.099 (0.067)
Immigrant Population (%)	-0.067 (0.043)
Change in Migrant Stock (%)	-0.012 (0.018)
GDP Per Capita	0.000 (0.000)
Constant	4.802*** (0.257)
<i>Variance Components</i>	
Individual Level ( $\delta^2$ )	5.395 (0.103)
Country Level	
Constant ( $\tau_{00}$ )	0.153 (0.058)
Observations	5,475
Number of groups	18
-2 X Log-likelihood	24806
Standard errors in parentheses	
*** p<0.01, ** p<0.05	

### **Robustness Check Using Multiple Imputation**

Because a large number of observations are lost due to responses of ‘don’t know’ to the questions used to generate both dependent and independent variables, I use Amelia II (Honaker, King, and Blackwell 2009) to impute values (5 imputations) for those responses—coded as missing in the above analysis—and any additional missing values as well. I then evaluate the imputed data using the variables included in the baseline model. Table 1C shows the averaged estimates across the five imputed data sets. There are no substantively interesting differences between the imputed model estimates and those of the baseline models, suggesting that the reduction in sample size is not dramatically affecting the results.

**Table A.5- Multiple imputation estimates of baseline models**

Variables	(1) Immigrants From Poorer Countries	(2) Immigrants of Same Ethnicity	(3) Immigrants of Different Ethnicity	(4) Immigration Makes Country Better
Education	0.011 -0.011	0.039*** (0.011)	0.042*** (0.010)	0.050*** (0.013)
Ability to Meet Basic Needs	0.067*** -0.022	0.122*** (0.020)	0.084*** (0.019)	0.154*** (0.022)
City Size	0.026** -0.009	0.037*** (0.010)	0.034*** (0.009)	-0.010 (0.009)
Age	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	0.001 (0.001)
Female	-0.075*** -0.03	-0.119*** (0.032)	-0.100*** (0.032)	-0.169*** (0.035)
Catholic	-0.132*** (0.034)	-0.134*** (0.035)	-0.106*** (0.035)	0.003 (0.040)
Member Majority Race	-0.041 (0.032)	0.059 (0.033)	-0.032 (0.033)	0.044 (0.039)
Immigrant Population (%)	-0.040 (0.029)	-0.066** (0.028)	-0.054 (0.028)	-0.068 (0.043)
Change in Migrant Stock (%)	-0.050*** (0.013)	-0.054*** (0.012)	-0.062*** (0.012)	-0.015 (0.018)
GDP Per Capita	0.000*** (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Constant	-0.503*** (0.161)	0.545*** (0.153)	-0.054 (0.155)	4.903*** (0.228)
<i>Variance Components</i>				
Individual Level ( $\delta^2$ )	-	-	-	2.367** (0.012)
Country Level				
Constant ( $\tau_{00}$ )	0.275*** (0.048)	0.260** (0.046)	0.263** (0.046)	0.408** (0.070)
Observations	19.509	19.509	19.509	19.509
Number of groups	18	18	18	18
-2 X Log-likelihood	-	-	-	-

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

Columns 1-3 are logit estimates

# B

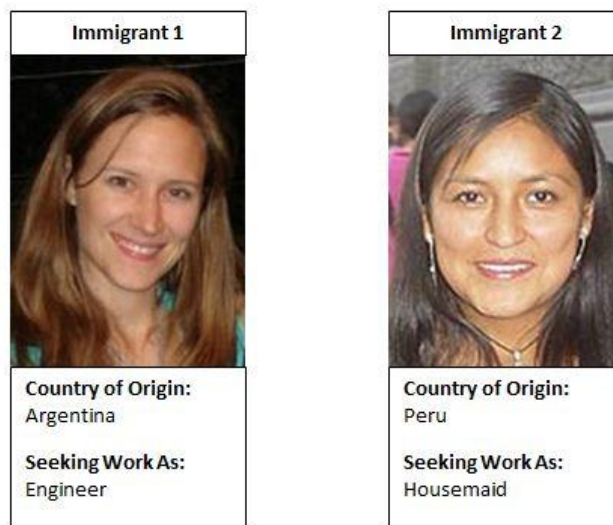
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## Appendix to Chapter 3

### Example of Randomly Assigned Experimental Pairing<sup>1</sup>

#### Section 3: Immigration

Every year the government must make decisions about who to give visas to so that foreigners are able to live and work in Chile. We would like to get your opinion on who you think should receive a work visa. We are going to show you two photos of immigrants and a description of each one. We would like you to tell us which potential immigrant you would choose to receive a visa to live and work in Chile. We want to make it clear this is a hypothetical exercise and does not impact any real-life decisions.



Based on the information provided and your personal opinion, if you had to choose between the two, which potential immigrant should receive a resident visa to live and work in Chile?

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<sup>1</sup> I utilized experimental work by Hainmueller and Hopkins (2012) and Harell et al. (2012) to help develop question wording and a general experimental framework. The experiment differs from these comprehensive studies in terms of its focus on certain immigrant characteristics, which are hypothesized to be critical influential factors in the Chilean context. In the experiment, both immigrants are presented in terms of prospective employment and pursuing work visas, which is one form of legal entrance into Chile. To clarify what this means for respondents I describe this form of visa as generally permitting an individual to “live and work in Chile.”

On a scale from 1 to 7, where 1 indicates that Chile should absolutely not give the immigrant a visa and 7 indicates that Chile should definitely give the immigrant a visa, how would you rate the first immigrant?

On a scale from 1 to 7, where 1 indicates that Chile should absolutely not give the immigrant a visa and 7 indicates that Chile should definitely give the immigrant a visa, how would you rate the second immigrant?

### Robustness Checks and Alternative Specifications

Table B.1- Equality of Proportions Test Among White Respondents

Pairing	Mean
1	0.558 (0.076)
2	0.779*** (0.050)
3	0.241*** (0.056)
4	0.758*** (0.056)

Standard errors in parentheses.

\*\*\*  $z < 0.01$ , \*\*  $z < 0.05$

**Table B.2- Immigrant Choice as a Function of Immigrant Characteristics Among White Respondents**

Parameters	Logit Estimates
Engineer	1.679*** (0.303)
Argentina	-0.782** (0.304)
White	-0.749** (0.304)
Pairing 2	0.164 (0.448)
Pairing 3	0.169 (0.420)
Pairing 4	0.206 (0.421)
Constant	-0.030 (0.407)
N	227
Pseudo R <sup>2</sup>	0.165
Log-likelihood	-130.819
Robust standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

**Table B.3- Immigrant Choice as a Function of Immigrant Characteristics**

Parameters	Conditional Logit Estimates
Engineer	1.096*** (0.368)
Argentina	-0.304 (0.293)
White	-1.519*** (0.318)
N	312
Pseudo R <sup>2</sup>	0.095
Log-likelihood	-186.344
Standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

**Table B.4- Visa Support, Immigrant Characteristics and Education**

Parameters	Random Intercept	Random Intercept and Cross-Level Interaction
Engineer	0.212** (0.094)	-0.590 (0.590)
Argentina	-0.246** (0.094)	-0.240** (0.094)
White	-0.309** (0.094)	-0.296*** (0.094)
Order	-0.244** (0.094)	-0.237** (0.117)
Education	0.125 (0.065)	0.068 (0.077)
Education*Engineer	-	0.114 (0.082)
Constant	5.000*** (0.475)	5.386*** (0.552)
<i>Variance Components</i>		
Immigrant Level ( $\delta^2$ )	1.381 (0.110)	1.381 (0.110)
Respondent Level		
Constant ( $\tau_{00}$ )	1.043 (0.149)	1.043 (0.147)
Observations	630	630
Number of groups	315	315
-2 X Log-likelihood	2281.117	2281.117

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05



## Appendix to Chapter 4

### Specific Question Wording

*Immigration Support* : What impact, if any, do the citizens of other countries who come to live in (country) have on your country? From each of the following statements that I am going to read out, please tell me if you strongly agree, tend to agree, neither agree nor disagree, tend to disagree or strongly disagree . “There ought to be laws to prevent immigrants entry into (country).”

*National Pride* : How proud are you to be (nationality)? Are you very proud, fairly proud, a little proud, or not proud at all?

*Tolerance*: Thinking on qualities that children can be encouraged to learn at home. Which do you consider to be especially important to teach to a child? Tolerance and respect for others

*Satisfaction w/National Economy*: In general, how would you describe the present economic situation of the country? Would you say that it is very good, fairly good, about average, fairly bad, or very bad?

*Personal Economic Satisfaction*: In general, how would you describe your present economic situation and that of your family? Would you say that it is very good, good, about average, bad or very bad?

*Basic Needs*: Does your salary and the total of your family’s salary allow you to satisfactorily cover your needs? Which of the following situations do you find yourself in? [1] Covers them well, I can save [2] Covers them all right, without great difficulty [3] Does not cover them, there are difficulties [4] Does not cover them, there are great difficulties

*Skilled*: A dichotomous variable. Individuals who reported one of the following jobs were coded as 1: Professional (doctor, lawyer, pawnbroker, architect, Owner of a business, Wage earners: professional, high executive, medium executive.

*Devout*: How would you describe yourself? Very devout, devout, not very devout, or not devout at all? (*Immediately followed the question asking about respondent’s religion*)

*Political Ideology*: In politics, people normally speak of ‘left’ and ‘right’. On a scale where 0 is left and 10 is right, where would you place yourself?

## Summary Statistics

**Table C.1-. Country-Level Predictors**

Country	Net Migrant Flow (1995-2000)	Percent Migrant (2000)	Priests Per Capita (2002)	GNI Per Capita (2002)
Argentina	-0.60	4.20	0.16	10190.00
Bolivia	5.20	1.10	0.14	2390.00
Brazil	-1.30	0.40	0.10	7450.00
Colombia	1.20	0.30	0.19	6150.00
Costa Rica	6.20	7.90	0.19	8560.00
Chile	5.30	1.20	0.15	9420.00
Ecuador	2.60	0.80	0.16	3340.00
El Salvador	-1.00	0.40	0.11	4790.00
Guatemala	1.00	0.40	0.08	4030.00
Honduras	-1.60	0.40	0.06	2540.00
Mexico	3.00	0.50	0.15	8800.00
Nicaragua	0.70	0.60	0.09	2350.00
Panama	3.40	2.90	0.14	6060.00
Paraguay	-0.80	3.20	0.20	4590.00
Peru	-2.00	0.20	0.11	4880.00
Uruguay	-1.00	2.70	0.14	7710.00
Venezuela	-0.10	4.20	0.10	5220.00
Mean	1.19	1.85	0.13	5792.35

## Robustness Check

Table C.2 Determinants of Immigration Attitudes

	Immigration Support
Parameters	Logit Model
National Pride	-0.027 (0.027)
Tolerance	0.08 (0.042)
Satisfaction w/ National Economy	-0.02 (0.024)
Personal Economic Satisfaction	0.111*** (0.027)
Meet Basic Needs	0.115*** (0.024)
Skilled	0.036 (0.042)
Catholic	-0.150** (0.051)
Devout	0.026 (0.023)
Education	0.048*** (0.005)
Age	0.001 (0.001)
Political Ideology	-0.021** (0.007)
Female	-0.005 (.039)
City Size	-0.008 (0.009)
Constant	0.158 (0.100)
N	12356
Log-likelihood	-8021.23
Pseudo R <sup>2</sup>	0.044

Standard errors in parentheses.

\* p<.05, \*\*p<.01, \*\*\*p<.001

\*Country dummies are included for all countries except Panama, which is excluded to avoid multi-colinearity.

Coefficients for each country dummy variable are not shown.

# D

## Appendix to Chapter 5

### Summary Statistics for All Variables

Table D.1- Summary Statistics

Variable	Mean	Standard Deviation	Min	Max
Social Services for Immigrants	2.278689	1.430179	0	4
Emigrant Family Member	0.214047	0.4101694	0	1
Receive Remittances	0.088148	0.2835169	0	1
Plan to Migrate	0.183254	0.3868839	0	1
National Economic Situation	1.631752	0.914505	0	4
Personal Economic Situation	1.919844	0.8120025	0	4
Wealth	5.849795	2.406474	0	10
Female	0.514409	0.4998041	0	1
Age	39.52118	15.99192	18	101
Catholic	0.70984	0.4538469	0	1
White	0.29458	0.4558642	0	1
Mestizo	0.516901	0.499726	0	1
Indigenous	0.073715	0.2613133	0	1
Unemployed	0.052795	0.223629	0	1
Other Work	0.412393	0.4922767	0	1
City Size	1.927225	1.546571	0	4
Net Migration Rate	5.099756	7.172687	-0.6	23.2
GDP/capita	6145.213	3094.594	1734	11298

## ANOVA

Table D.2- ANOVA Government Provision of Social Services to Foreigners

Parameter	Estimate
Fixed Effects	
Constant	2.335*** (0.067)
Variance Components	
Country Level ( $\tau_{00}$ )	0.061
Individual Level ( $\delta^2$ )	1.968
-2 X Log-likelihood	81732
Standard errors in parentheses	
*** p<0.001, ** p<0.05, * p<0.01	

## Additional Model

Table D.3 - Receive Remittances

Parameters	Logit Random Intercept
<i>Individual-level</i>	
Emigrant Family Member	2.893*** (0.064)
Constant	-4.018*** (0.225)
<i>Variance Components</i>	
Country Level ( $\tau_{00}$ )	0.657
Observations	21135
Number of groups	14
-2 X Log-likelihood	8744
Standard errors in parentheses	
*** p<0.001, ** p<0.05, * p<0.01	