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Move, Work, Save, Send: The Political Economy of  
Migration & Remittances

A dissertation submitted in partial satisfaction  
of the requirements for the degree  
Doctor of Philosophy in Political Science

by

Jesse Acevedo

2016

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## ABSTRACT OF THE DISSERTATION

# Move, Work, Save, Send: The Political Economy of Migration & Remittances

by

Jesse Acevedo

Doctor of Philosophy in Political Science

University of California, Los Angeles, 2016

Professor Ronald L. Rogowski, Co-chair

Professor Jeffrey B. Lewis, Co-chair

This three-paper dissertation is about the relationship between remittances and political institutions in developing countries and how institutions shape emigration flows. I build on the political economy, democratization, and international migration literatures to theorize the political consequences from remittances. Drawing on underutilized surveys and extant cross-national databases, I show that remittance inflows alter citizen preferences on redistribution as well as government spending patterns on health and educational outcomes. In addition, I find that institutional quality in migrant-sending countries shapes emigration flows in times of economic crisis. My findings add to established theories of government redistribution, which are largely based on wealthier, industrialized countries, and the nascent field on the political economy of remittances.

The first paper analyzes how remittance recipients view the role of the state and how citizen attitudes change due to fluctuations in remittance income. I use survey data from the most remittance-dependent countries in Latin America to see how preferences for redistribution changed during the course of the Global Financial Crisis of 2008-2009. With the United States as the main source of remittances, the recession had ripple effects in Latin America. I find remittance

receivers are more likely to favor redistribution policies following the economic crisis than before 2009.

The second paper analyzes the political effects of remittances at the country level. I use country-level data to show that the relationship between remittances and government spending is conditional on regime type. Autocratic regimes show greater changes in spending on educational and public health from rising remittances. On the other hand, democracies show mild relationships between remittances and spending. I find that institutions will influence the ways government spending responds to rising remittances.

The final paper argues that political institutions shape emigration flows conditional on economic performance. Using data from the American Community Surveys to measure Latin American migration into the United States, I find that countries with higher quality institutions will experience a brain drain when economic growth is low. I use the example of Venezuela in 2002-2003 when the country saw its intelligentsia emigrate. While economic performance is a strong factor explaining emigration flows, political institutions have the capacity to mitigate or exacerbate them. Together, these three essays show that remittances and migration flows have profound implications for domestic policy, state expenditures, and the consequences of institutional quality and economic crisis.

The dissertation of Jesse Acevedo is approved.

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2016

*Para mis abuelas . . .*

*Ana "Mila" Moreno*

*Ruth "Conchi" Acevedo*

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meet abuelita Conchi. I was three years old. It was my first visit to El Salvador and the country was mired in civil war. And I have been in love ever since. There I began my quest to figure out why my I was not born in San Salvador instead of Los Angeles. I am grateful for every moment I have with my grandmothers. They were the first to open the world to me. I have learned the most about politics through them. I have learned the most about life through them. My grandmother travelled 25,000 miles to reach the United States. My grandmother taught me to smile and laugh in spite of the world we live in. Their respective decisions to migrate and not migrate are the inspiration for my work.

Of course, all remaining errors in this dissertation are mine.

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# CHAPTER 1

## Dissertation Overview

*“No politician can support me. Only God and my son support me.”*  
- Ruth Concepción Acevedo. March 2009. El Salvador.

### 1.1 Remittances and Politics

Many migrants in the developed world have the weekly task of standing in line to transfer apart of their income to family members back their home countries to pay for basic necessities, education, or health expenses. The small sum of money sent by each migrants amounts to billions for many developing countries around the world. For these countries, remittances have become a valuable source of external income. They increase consumption and stimulate local economies. At the same time, remittances will lift many out of poverty. The economic benefits of remittances seem clear, but the political consequences from them are unclear.

This dissertation presents a compilation of three essays on the role migration and remittances play in politics in developing countries. The first two essays investigate the political consequences of remittances. First, I examine how remittance recipients view the home state and how these views change over time. Second, I analyze government spending behavior given the level of remittance inflows and regime type. Third, I investigate emigration flows and the influence of political institutions on the decision to emigrate. Each of the papers argue that the political institutional context shapes the relationship between remittances and political

outcomes.

Migrant remittances have grown to be a major source of external income for many developing countries. Remittance inflows to developing countries grew to \$430 billion in 2014, which is more than three times the amount of official development aid received (Ratha, Plaza and Dervisevic, 2016). A large volume of these remittances is sent from the United States and Western Europe. For example, \$56.3 billion was sent from the United States in 2014. There is also growing migration to the Middle East, which has become a major source of remittances with Saudi Arabia was the second-largest source of remittances in 2014 accounting for \$36.9 billion. Similarly, the top remittance-receiving countries are not confined to a single region. India, China, the Philippines and Mexico make up the top-four receiving countries with at least \$25 billion in inflows. In countries such as Senegal and Honduras, remittances make up at least ten per cent of the GDP.

Remittances are praised for improving the economic status of poor households in developing countries.<sup>1</sup> Increased income from remittances has been found to decrease poverty and provide a buffer against economic downturns in the home country (World Bank, 2006). Although the effects of remittances on growth are unclear, it is known that remittances are often used to invest in education and healthcare. Furthermore, migrant transfers tend to increase in times of economic distress and natural disasters (World Bank, 2016). Despite the injection of extra capital to poorer households, remittances do not have any significant effects on economic growth or reducing inequality.

Work on the political impacts of remittances has been growing in recent years. The literature can be summarized as a debate on whether remittances are a blessing or a curse for developing countries. The contrasting theories about remittances owe much of their development to Albert Hirschman's concepts of voice and exit

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<sup>1</sup>See Singer (2010) for a brief and thorough review of the economic effects of remittances.

(Hirschman, 1970, 1993). The optimistic point of view argues for the democratizing effects of remittances as they can enhance voice among citizens as the costs of political participation decreases. Recipients will rely less on patronage and clientelism and will make new demands of local government. The pessimists highlight that remittances will lead recipients to exit from the political arena, which will lead governments to behave more autocratically. Recipients would find little at stake from local politics and prefer to disengage in politics. The three essays in this dissertation are influenced by the work and concepts from Hirschman and contributes to the ongoing debate about remittances.

I translate the voice and exit concepts from Hirschman to one of engagement and disengagement. In the dissertation, I conceptualize voice as one of engagement with the government. Engagement with government can range from voting, using public services or demanding a greater role for government in the economy. I use exit as a form of disengagement. Remittance recipients will exit through acts of political disengagement such as not voting or substituting government services with private alternatives in the market. The blessing and curse theories make assumptions as to how remittances will affect the political behavior of the recipients. I argue that political institutions shape the behavior of remittance recipients and government actors.

The common theme across the three essays is that political institutions are important in both theorizing and testing the relationship between remittances and political outcomes. I use the concepts of voice and exit to theorize whether remittance recipients will engage or disengage with government. The institutional context determines to what extent remittance recipients will exercise voice or exit. For example, how can remittances enhance voice if there are no channels for political participation? If there are channels to exercise voice and engage with government, would that yield greater benefits than disengagement? Given potential changes in political behavior from remittance recipients, government

actors will also respond to rising remittances. In sum, remittances may not have a marginal effect independent of institutions. Institutions matter in order to understand the role remittances play in politics.

## 1.2 Descriptions of the Essays

The first essay analyzes how remittances influence attitudes towards the state. The global economic recession of 2008-2009 led to major declines in remittance inflows as migrants in developed countries were not able to send as much money back home. Recent research argues that remittance recipients will reject government redistribution because they no longer rely on the state to provide insurance against risk or they seek private alternatives for government goods. However, most of this research assumes that remittances are stable. The 2008-2009 recession illustrates that remittances are not as stable as previously thought, leading us to ask ourselves what the political implications are from their decline.

I raise two different but related questions: 1) Do remittance recipients support redistribution? and 2) Do preferences for redistribution change during and after a shock to remittance inflows? Using three waves of survey data, I find that remittance recipients, who previously showed no significant difference from non-recipients in terms of preferences for redistribution, begin to favor greater government redistribution following the financial crisis even as remittances recovered to pre-crisis levels. I test for possible mechanisms such as dependence on remittances and position in the income distribution to explain this change in preferences. I find that respondents who are more dependent on remittances are more likely to support redistribution following the economic crisis.

The second essay examines how government spending responds to different levels of remittance inflows. The debate over remittances and their political consequences revolves around the impact increased income has on citizens and the

state in the remittance-receiving country. Receiving funds from abroad will increase household income and alter the relationship between recipient and local government. This essay focuses on the latter.

I investigate whether increasing levels of remittances will increase or decrease public expenditures, conditional on regime type. Governments may spend less on their constituents as remittance inflows increase since recipients can substitute government goods with private alternatives. On the other hand, governments can increase public spending as a response to concerns that constituents may opt out of patronage relationships and support opposition groups. I find that remittances have different relationships with each type of spending, conditional on regime type. I find that autocratic regimes spend more on education but less on health and social protection as remittances increase. On the other hand, the relationship between remittances and spending is weak in democracies. I also look at intermediate regimes and I find that they resemble democratic regimes as remittances rise. I complement the analysis with a brief case study of Mexico during democratization. I find public spending by state governments are higher in more competitive states.

The third essay takes a step back and investigates the role of political institutions and emigration. Do poor performing democracies push their citizens to move abroad? Emigration from Latin America is largely characterized by economic motivations as migrants flee poor-performing economies for the United States. At the same time, the act of migration renounces one's democratic rights from these young democracies to become non-citizens in destination countries such as the United States. The institutional context of the home country is often ignored when examining immigration flows.

Over the past twenty years, emigration from Latin America has occurred despite strong economic growth and relative political stability. Are there political factors that contribute to emigration? This essay will look at entries into the

United States by Latin American migrants from 1997 to 2010. I find that the quality of democracy, measured as indices on governances, only matters during periods of low economic growth. Higher quality institutions encourage emigration but that difference diminishes as the economy grows. This suggests that stronger democracies may reduce the costs of emigration more than weaker democracies. I complement these findings with a disaggregation of emigration rates by different levels of human capital. I add a brief case study of Venezuela under the early years of Hugo Chávez's presidency where many of the country's intelligentsia fled due to the changing political climate there.

My dissertation bridges work on international migration, inequality, redistribution and institutions to understand the political effects of remittances. Chapter 2 applies theories from the politics of inequality, which are mainly based on OECD countries, to poor remittance-dependent countries in Latin America. My findings contribute to the role remittances have in preferences for redistribution in poor countries. Chapter 3 underscores the role of institutional context in understanding how governments respond to remittances. The analysis takes into consideration how regime type can influence the way remittances may affect public expenditures. My findings contribute directly to the curse/blessing debate. The relationship between remittances and public expenditures is conditional not only on regime type but the type of spending. The findings in chapter 4 may look counterintuitive, but they provide insight about emigration from developing democracies. While economic performance is indeed important in explaining emigration rates, the institutional quality of the home country can either mitigate or exacerbate outward flows of people.

The essays add to the discussion of how the forces of globalization affects political behavior in developing countries. Migration and remittances have been overlooked in studying the effects of globalization in developed countries (Pritchett, 2006; Kapur, 2010). The increase in income from remittances is distinct from



other external sources of income such as government transfers, foreign aid or natural resource revenue. Remittances are private and transnational transfers. The size of these remittances are largely contingent on the economic fortunes of the migrant abroad, and the economic performance of the destination country. The goal of this dissertation is to bring scholarly attention to the effects of migration and remittances on political life for households in developing countries.

## CHAPTER 2

# Remittances and Preferences for Redistribution Through the Global Financial Crisis

*¿No hay trabajo alla?* (Are there no jobs over there [in the United States]?)  
- “El Gordo.” El Salvador. March 2009.

### 2.1 Introduction

There is a growing literature on the political economy of remittances in developing countries. Remittances to the developing world are largely praised as a significant source of income that pull many households out of poverty and improve human capital. By 2008, the global volume of remittances grew to be a greater source of income than foreign aid and foreign direct investment (Sirkeci, Cohen and Ratha, 2012). Recent scholarly work has paid attention to the political consequences of remittances from economic policy choices, voting behavior, and government spending. The literature implicitly assumes that remittances are stable and the time period in all empirical studies is when these inflows are consistently growing.

However, the global economic recession in 2008 and 2009 produced major declines in remittances around the world, and hurt those that are dependent on these private transfers. The financial crisis that hit the United States in late 2008 and 2009 left many migrant workers without employment, especially those in the construction sectors. Consequently, these migrants sent fewer remittances to their

families back home. For example, the housing crisis that began in the United States in 2008 eventually led to declining remittances that negatively affected Central American economies a year later.<sup>1</sup> In a region where remittances can make up as much as 20% of the GDP, the global financial crisis exposed remittance-dependent countries to greater economic risk from abroad.

This paper will focus on whether remittance recipients will favor government redistribution before and after the global financial crisis. Most of the recent studies on the political economy of remittances argue that recipients will reject government redistribution because as they now have an alternative source of economic security apart from the state (Doyle, 2015; Ahmed, 2012). This increase of income from abroad will then sever the relationship between recipient and state. The literature only looks at remittances as a stable source of income, and the possibility of their decline are not considered. How do recipients respond to a decline in remittance income in terms of how they view the government?

I argue that remittance recipients will favor government redistribution as an additional insurance against risk. Remittance recipients will not sever ties with their governments since remittance senders do not have strong economic security themselves. When remittances are in decline, we should expect remittance recipients to favor redistribution. The experience of the remittance decline will *expose* recipients to greater economic risk. Even if remittances return to pre-crisis levels or close to them, recipients understand that this supplemental income (or main source of income) is not as stable as they had previously thought. This experience can occur through two possible channels. First, losing remittance income will move the household to the poorer end of the income distribution (inequality channel). Second, remittances can be either supplemental income or sole income (dependency channel). The more dependent one is on remittances, the more likely one will support redistribution to protect oneself from risk.

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<sup>1</sup>See Inchauste and Stein (2013)

I test the argument using survey data from Latin American countries where remittances contribute substantially to the economy and in the population. The countries selected for the analysis are the Dominican Republic, Guatemala, El Salvador, Honduras and Nicaragua. These countries mainly receive remittances from the United States and experienced a sharp decline in the private transfers following the economic crash of late 2008. I use three waves of the Latin American Public Opinion Project (LAPOP) survey (2008, 2010, 2012) to capture the contexts of peak, crash and recovery of remittance inflows. Prior to the economic crisis, there are no significant differences between remittance recipients and the rest of the population in regards to position on redistributions. Remittance recipients begin to diverge from the rest of the population in 2010 in favor of redistribution and there is a clear difference by 2012. Those who highly depend on remittances are more likely to favor redistribution following an economic crisis.

This paper incorporates ideas from the politics of inequality and redistribution, along with recent work on the political economy of remittances. I use the economic crisis to examine whether sudden drops in remittances affects attitudes on politics. Nearly all the work on remittances takes place under the context of rising remittances or make cross-sectional comparisons, but very few estimate its longitudinal effects.<sup>2</sup> Any sort of affect from the remittance decline may have implications on other political behaviors such as change in party preferences and engagement with the state. Also, economic crisis may reverse previous findings on how remittances disengage recipients with the local state.

This paper begins with a brief review of the literature on the politics of inequality and redistribution followed by recent work on the role of remittances in redistribution. The third section presents the argument that remittances will lead to greater demand for redistribution. I then present the Latin America context

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<sup>2</sup>Frankel (2011) shows how remittance levels rise and decline responding to home-country economic performance.

and the importance of remittances in those countries. The fifth section presents the research design followed by the logistical regression results. The sixth section presents the main results and tests the proposed mechanism. The final section concludes.

## **2.2 Preferences for Redistribution**

### **2.2.1 Inequality or Risk?**

Understanding how a decline in remittances might affect preferences for redistribution requires a broader understanding of how to account for such preferences in the first places. The literature on the preferences for redistribution often looks at an individual's economic standing or experience. One strand of work focuses on the role of income levels in explaining preferences for redistribution. Meltzer and Richard (1981) argue that the greater distance in income between the median and mean voter, the higher the tax rate and level of redistribution. The Meltzer-Richard framework can be applied to explain individual preferences. Lupu and Pontusson (2011) show that middle-income voters will support redistribution if their incomes are closer to low-income voters than it is between rich voters.

Income and income inequality are important explanatory factors in explaining preferences for and levels of government redistribution across developed countries. Those with lower incomes are more likely to favor government redistribution to keep them away from poverty (Rehm, Hacker and Schlesinger, 2012). Lupu and Pontusson (2011) argue that the structure of inequality is more important to understanding preference for redistribution and government social spending. Social affinity and distance between income classes can explain in particular why middle-income voters will support (or not support) redistribution. For example, middle-income individuals can empathize with low-income individuals if the distance between their incomes is smaller. Given the closer proximity to poor indi-

viduals than to affluent incomes, middle-income voters will be favorable to greater redistribution. The prospects for upward mobility can interact with inequality.

The second strand recognizes the insurance aspect of redistribution and focus on the role of risk. Economic risk can shape favorable attitudes for government redistribution since it can be perceived as an insurance mechanism (Moene and Wallerstein, 2001). The probability of possible unemployment and future loss of income can drive citizens to support redistribution (Iversen and Soskice, 2001; Rehm, 2009, 2011). Iversen and Soskice (2001) show that workers with specific skillsets, not transferable to other sectors, are more likely to support redistribution to protect themselves from possible unemployment in the future. Those with general skills that are transferable across different sectors are likely to oppose redistribution. The role of risk applies to workers or sectors that are vulnerable to possible losses whether that is in the domestic labor market or in the global labor market as the country opens up to trade (Rehm, 2009).

Economic shocks can also shape attitudes about redistribution. Studying American attitudes to redistribution during the Great Recession, Margalit (2013) finds a short-lived effect on economic hardship and support for redistribution. Ideology was undermined by personal economic hardship during the recession as both unemployed Democrats and Republicans favored redistribution. The effect was particularly apparent among Republicans, but they soon reverted to opposing redistribution as their employment situation improved. The role of economic shock has the potential to either temporarily shift attitudes on redistribution or produce persistent change.

### **2.2.2 Remittances and Redistribution**

There is near consensus that remittances will generate a substitution effect and lead to decreases in government redistribution. Remittances increase the

income of the household and reduces poverty in many countries. In doing so, basic necessities are met and relationships with government actors can change. In particular, remittances sever clientelistic ties with political actors (Ahmed, 2012; Abdih et al., 2011; Burgess, 2012; Diaz-Cayeros, Magaloni and Weingast, 2003; Tyburski, 2012; Pfutze, 2012; Escribà-Folch, Meseguer and Wright, 2015). Households are no longer dependent on government goods since migrant income from abroad allows households to increase consumption in the private market. In other words, remittance recipients can opt out of government services and goods.

Governments respond to rising remittances by reducing public spending, and in some cases, increase patronage. Ahmed (2012) argues that increases in remittance inflows, and the substitution effect they produce, will incentivize governments to increase their own consumption and be more corrupt. Remittances, just like remittances, can act as a safety valve for autocratic governments to hold on to power (Iskander, 2010). Others find that the substitution effect not only breaks clientelistic ties but also leads to decreases in corruption and losses for incumbent parties (Tyburski, 2012; Pfutze, 2012; Escribà-Folch, Meseguer and Wright, 2015). Adida and Girod (2011) note that remittance recipients will bypass government assistance to acquire and develop public goods. Duquette-Rury (2014) finds that remittances, when sent collectively, will empower recipients and lead to greater engagement with local government officials to distribute more public goods.

Doyle (2015) argues that remittance recipients will reject redistribution and hesitate to bear the costs of such policies. Remittances act as a substitute to social welfare transfers in protecting households from economic risks. Furthermore, Doyle argues that remittance recipients are more likely to favor right-wing parties who also favor decreasing redistribution and result in decreasing government spending. His argument is based on two assumptions. First, “those who begin receiving remittances from abroad on a regular basis will have expectations of higher future income and consequently expectations of upward social mobil-

ity” (789). In line with Benabou and Ok (2001), prospects of social mobility will influence recipients in opposing government redistribution. Second, the tax on remittances, via consumption taxes, will likely outweigh the returns from social transfers. Doyle’s argument resonates with the state of the literature on the political economy of remittances where recipients will have greater autonomy from the state and choose market alternatives.

Most work on remittances assume that they are stable and that recipients are reticent about government distribution. However, the volume and consistency with which remittances are sent are conditional to the economic fortunes of the migrants abroad. The literature does not consider the possibility of declining incomes from migrants. The financial crisis of 2008-2009 caused remittances to decline for the first time since 2000 (Sirkeci, Cohen and Ratha, 2012; Inchauste and Stein, 2013). Give the literature’s assessment that remittance recipients will reject redistribution, should we expect recipients to change their preferences when remittances decline?

### **2.3 Theory: Remittances and Redistribution**

Remittances have been found to decrease poverty and improve human capital but they do not necessarily decrease inequality. The early waves of migration are composed of middle class individuals, who were better able to bear the high costs of moving to a new country. As migrant networks develop in the destination country, the cost of migration decreases and allows individuals from lower incomes to bear the costs of moving. Studies of rural communities show that villages with high prevalence of migration see reduced inequality upon receipt of remittances, whereas those with low prevalence see increases in inequality (Stark and Bloom, 1985; Stark, Taylor and Yitzhaki, 1986; Barham and Boucher, 1998; McKenzie and Rapoport, 2007) Acosta et al. (2008) find that remittances increase inequality in



Latin American countries where migrants are from the middle incomes of society and more educated than the rest of the population, as in Peru and Ecuador. In countries where migrants tend to be from the poorer classes, such as those in Central America, remittances have an equalizing effect (Acosta et al., 2008; Acevedo and Cabrera, 2014).

Remittances can act as insurance for developing countries when local economies experience economic downturns or crises. Remittances have been shown to increase in response to economic downturns (Frankel, 2011; Kapur, 2010). These international transfers can also become a valuable source of aid for many families when countries experience natural disasters (Clarke and Wallsten, 2004; Yang and Choi, 2007; Yang, 2008). The rise in unemployment caused by the economic recession in the United States and other developed countries in late 2008 and 2009 suddenly left many households in developing countries with less income. Migrants are often hardest hit by economic crisis in developed countries and the remittances sent home see significant declines (Roig and Recaño-Valverde, 2012; Inchauste and Stein, 2013; Orozco, 2009). Since the recession, remittance levels have recovered, but whether they are still a stable source of insurance is a new question.

### **2.3.1 Income/Inequality Channel**

Remittances can affect preferences for redistribution in two ways. One is that remittances move the household positively along the income distribution of the country. In line with Lupu and Pontusson (2011), if middle-income citizens receive remittances, then such increases in income will distance them from the poor even more. Remittances will make households more socially mobile and have expectations of higher incomes in the future, especially if remittances are used for investment (Doyle, 2015, 789). In addition, the increased income from remittances will generate a substitution effect where households will prefer to seek private market alternatives and reject government goods. Since they are

consuming non-government goods, recipients will be less supportive of taxation on consumption to support redistribution that they will find costly.

What about in times of crisis when remittances drop? The loss or significant decrease of remittance income will pull households negatively along the income distribution to a position where they would be without remittances. In this case of the middle-income household, losing remittances will pull that household closer to the poor. With the total drop in income, remittance receiving households will likely support government redistribution to make up for the loss of income. However, recipients may return to pre-crisis attitudes once remittances recovers. Similar to job loss for Americans during the recession in Margalit (2013), the negative shock in remittances will produce a transient effect. Remittance recipients will likely favor redistribution when remittances decline because they are pulled negatively along the income distribution. This effect will cease when remittances recover to pre-crisis levels.

### **2.3.2 Risk/Insurance Channel**

Diversifying against risk is a major motivation for migration. Poor and middle-income households may choose to send a family member abroad to diversify against risk (Stark and Bloom, 1985; Massey et al., 1993). The surplus in income generated by remittances will allow households to meet basic necessities and also cover health and education expenses. Furthermore, this external income protects the household from local economic risks.

Remittances are not directly taxed by governments, but can be indirectly taxed through consumption. Migrants abroad send their remittances directly to the household and can be untraced by governments. The empirical work on remittances find that remittances are nontaxable since they are difficult to track (Chaudhry et al., 1989; Abdih et al., 2011; Pfutze, 2012; Wright, Meseguer and

Escriba, 2012; World Bank, 2006). Remittances are mainly sent through informal channels though the use of formal channels such as bank transfers have increased recently (Singer, 2010). Governments may have a disincentive to tax remittances directly because that can result in fewer remittances sent through formal channels (Freund and Spatafora, 2008). However, remittances can be extracted through consumption taxes such as the VAT as funds are often spent on consumer goods. Ralph et al. (2008, 53) find that consumption-based taxation is preferable over other types of taxation in remittance-dependent economies.

Remittances sent home can act as sole income or supplemental income for the recipients, and the level of dependency can affect attitudes towards redistribution. If one is dependent on remittances as a major source of income, then that person may be unlikely to support redistribution. The (indirect) taxes paid for with remittances may outweigh the gains from social transfers (Doyle, 2015). Regardless of the level of dependency of remittances and assuming they are stable, households may reject redistribution through the substitution effect. On the other hand, why would a recipient reject additional income in the form of government transfers? Given insufficient income from domestic sources such as formal employment, the remittance recipient may benefit from government distribution.

If remittances are supplemental to total income, then households could bear the costs of taxation and accept government redistribution as an additional insurance mechanism. These types of recipients can still reject redistribution because of the costs. However, with remittances as supplemental income, such households can cover the costs of taxation that would otherwise be paid for with domestic-based income. To assure greater insurance against risk, households may bear the costs of redistribution through remittances to diversify their income sources.

In the event of a negative shock to remittances, recipients may feel more inclined to support redistribution through a learning process. If risk is a primary driver for supporting redistribution, then a sudden decline in remittances will

change how recipients view that. The amount of remittances sent, and consistency with which they are sent, are based on the economic contexts of the destination country of migrants. Experiencing a sudden loss of income will influence recipients to demand insurance against possible losses of remittances in the future. The greater the loss, the more likely recipients will favor redistribution. In this regard, I expect those who rely on remittances as sole income to favor redistribution when remittances decline and when they recover. The economic crisis in the source country exposes the illusion of remittances as a stable and permanent source of income. Recipients go through a learning process during the crisis, which produces a permanent effect on their preferences for redistribution.

## 2.4 Case Selection

This paper will test the argument on the major remittance recipient countries in Latin America. Guatemala, El Salvador, Honduras, Nicaragua and the Dominican Republic are countries that rank not only as the biggest remittance-receiving countries in the region but also in the world. As shown in Figure 2.1, the share of households in these countries that receive remittances is higher than in the rest of Latin America.<sup>3</sup> The United States is home to large migrant communities for these five countries and these migration corridors are critical in producing large remittance inflows to the home country.<sup>4</sup> Figure 2.2 present the volume of remittance inflows as a share of GDP and remittances per capita over time. These countries are remittance dependent as inflows make a significant part of GDP since the turn of the 21st century. In per capita terms, these countries also rank

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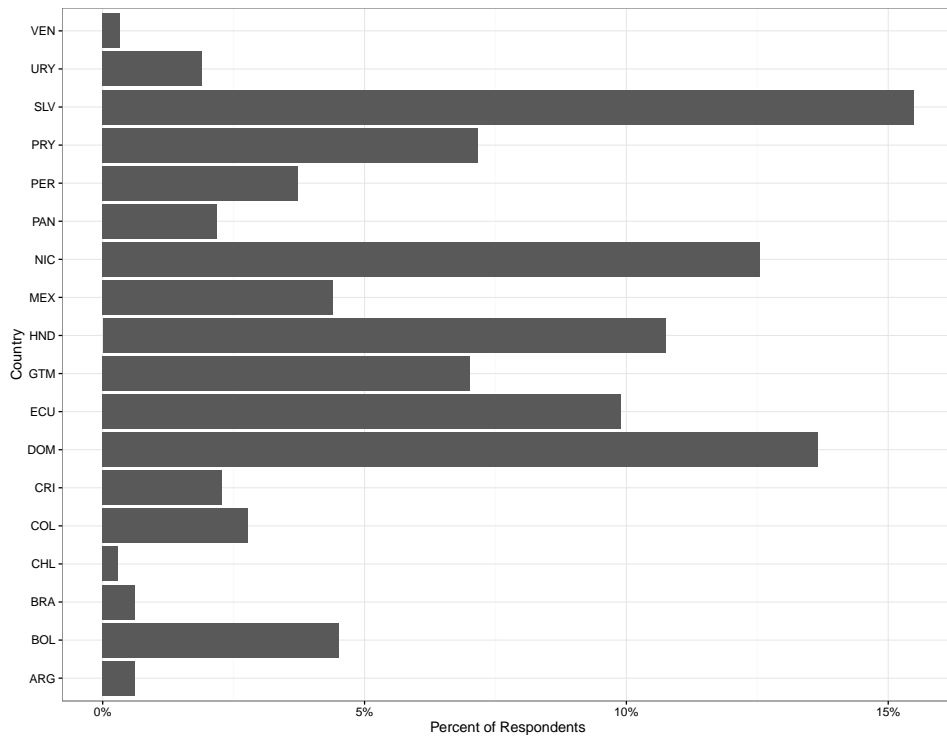
<sup>3</sup>Paraguayan migrants tend to migrate to Brazil and Argentina.

<sup>4</sup>See Brücker, Stella and Marfouk (2013), Fajnzylber and Lopez (2008) and Ratha, Mohapatra and Silwal (2011).

among the highest in the region.<sup>5</sup>

The large migrant populations in the United States make the American economy critical to the economic fortunes of households back home. The five countries selected for this study are those where remittance inflows are dependent on the performance of the American economy. Figure 2.3 the drop in the percent change in remittance per capita long with the the percent change in GDP per capita. We see that the drop in remittances corresponds with the drop in GDP per capita in 2009. The recession in the United States affected the economies of the selected countries through the decline in remittances (Sirkeci, Cohen and Ratha, 2012). By 2012, remittances and GDP per capita recovered to pre-crisis levels.

Figure 2.1: Households Receiving Remittances (2008-2012)



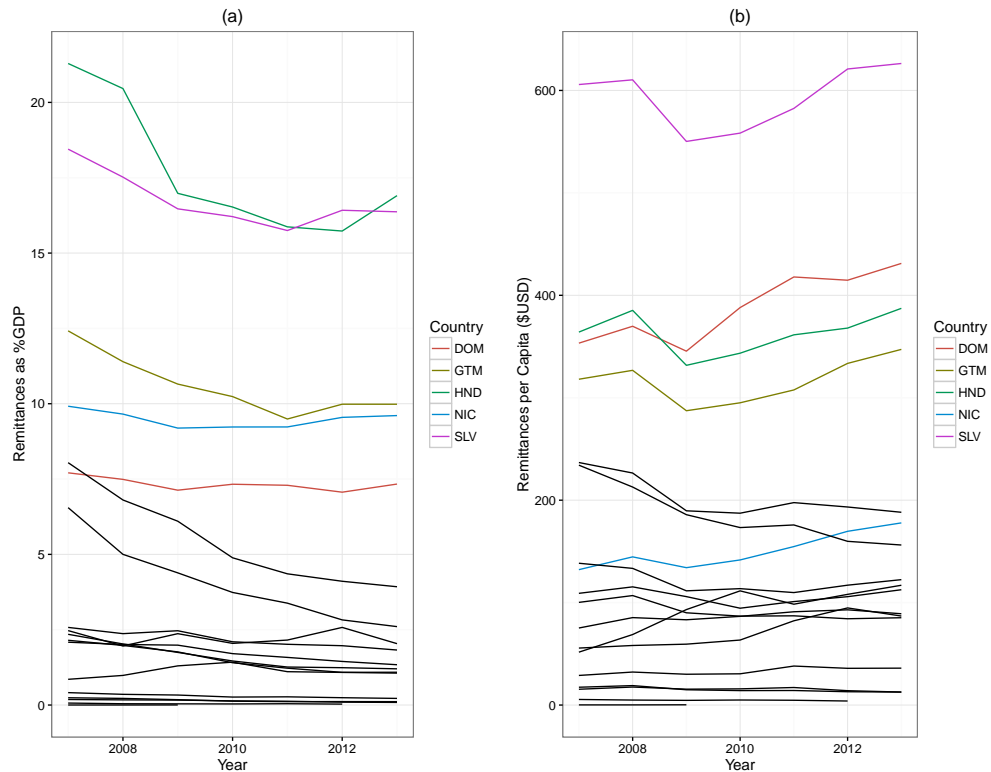
Source: Pooled LAPOP data (2008, 2010, 2012)

Note: Percent of total respondents across three survey waves

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<sup>5</sup>Ecuador 2007-2008 and Mexico 2007-2008 rank higher than Nicaragua. Nicaragua's smaller remittance per capita is likely due to the many migrants who send remittances from Costa Rica. In terms of Nicaragua, remittances make up 9.5% of the GDP, which is higher than Ecuador and Mexico.

Figure 2.2: Remittances in Latin America (2007-2013)



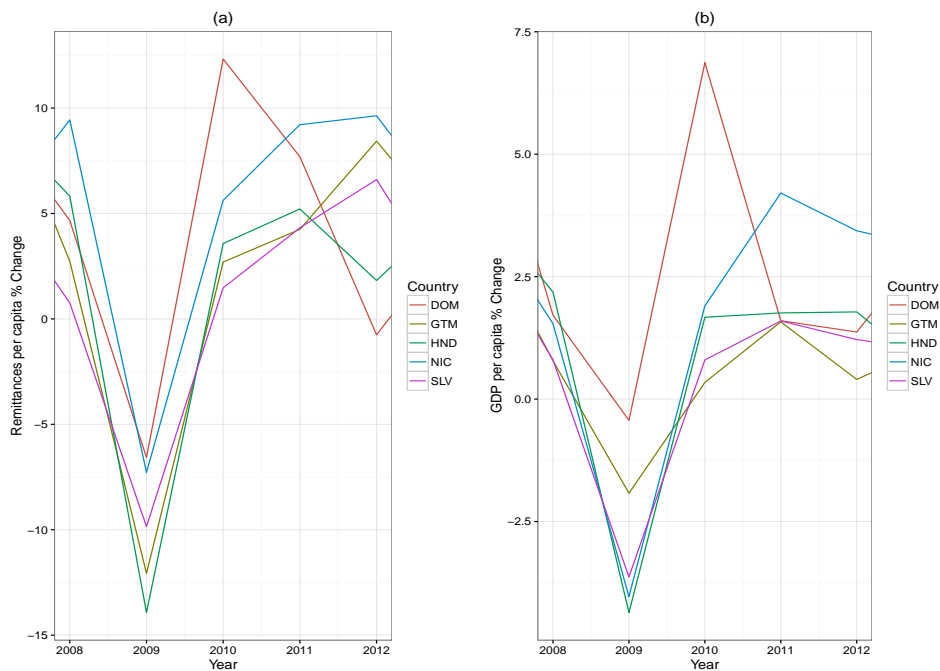
Source: World Bank.

Note: Black lines represent each of the other Latin American countries.

The global financial crisis did not hit unemployment levels as hard in these countries as it did in the United States at that time. Table 2.1 shows that unemployment, as a share of the total labor force, increased by less than two percent. The Dominican Republic has the highest rate of unemployment but has stayed at between 14 and 15 percent through the global financial crisis. El Salvador had the largest increase in unemployment during the crisis but recovered by 2013. Guatemala and Honduras have the lowest unemployment rates, which are largely due to its large agrarian sectors and rural populations (Lehoucq, 2012). Despite the drop in GDP per capita and remittances during the economic crisis, unemployment figures seem to have been more stable during this period.

These five countries vary in terms of their level of inequality and the change in inequality since 2000. Table 2.2 presents the Gini coefficients and the percentage

Figure 2.3: Remittances and GDP Growth (2008-2012)



Source: World Bank

Note: Y-axis measures 1-year percent changes

change since 2000 in the region. Honduras and Guatemala have the highest levels of inequality among the countries selected. El Salvador, the Dominican Republic and Nicaragua are on the bottom half of inequality in Latin America with only three countries having lower gini scores. When looking at percent change in the Gini coefficient since 2000, El Salvador experienced a 10% drop in inequality, but the other countries in the study saw very small increases in inequality since 2000.

The distribution of remittances within countries tends to be concentrated in specific levels of income and may not have an effect on reducing inequality. Acosta et al. (2008) find that remittances either have no effect or leads to a small increase on inequality because remittance inflows are concentrated in the middle and upper deciles in the income distribution. Migration tends to be positively selective as those from higher income groups can afford the costs of migration. Consequently, the gains from remittances can increase the gap between middle income groups and the poor. According to Acosta et al. (2008), only Mexico, El

Salvador, Nicaragua and Paraguay show an equalizing effect from remittances, which is largely credited to emigration from poorer income groups in society. Acevedo and Cabrera (2014) show that remittances had a strong equalizing effect in El Salvador because of emigrants coming from poorer households in addition to the poor economic performance in the economy since 2000.

The countries I study are often considered to have weak state capacity, which contrasts to many studies on preferences for redistribution. The scholarly work on preferences for redistribution looks at voters in the United States and Western Europe. The literature has expanded to developing countries but they tend to be those with a strong industrial base such as Argentina and Brazil.<sup>6</sup> The Central American states do not have the capacity to enact taxes on industries or on exporters so they often depend on consumption taxes (Schneider, 2012). Table 2.3 shows taxes on general consumption as a share of total taxation. The selected countries are just above the Latin American average in regards to the weight of consumption tax to total tax. The value-added tax, an important source of income, has been between 12 -16% for the five selected countries (ECLAC 2013). Due to political interests, the Central American states have not been able to pass tax reform to gain revenue from property or income. Tax revenue from income and property have averaged to less than 5% across Central America (Schneider, 2012, 96).

Table 2.1: Total Unemployment as a Share of Total Labor Force

| Country                   | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|
| Dominican Republic        | 15.70 | 14.20 | 14.90 | 12.40 | 14.70 | 14.70 | 15.00 |
| El Salvador               | 6.30  | 5.90  | 7.30  | 7.00  | 6.60  | 6.10  | 5.90  |
| Guatemala                 | 2.50  | 2.80  | 3.20  | 3.70  | 4.10  | 2.90  | 3.00  |
| Honduras                  | 2.90  | 3.10  | 3.30  | 4.80  | 4.40  | 4.00  | 3.90  |
| Nicaragua                 | 5.00  | 6.20  | 7.00  | 8.00  | 7.80  | 7.10  | 5.30  |
| Latin America (as region) | 6.69  | 6.24  | 7.31  | 7.09  | 6.48  | 6.03  | 6.12  |

Source: World Bank

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<sup>6</sup>See Mares and Carnes (2009).



Table 2.2: Inequality in Latin America (2000-2008)

| Country            | Average | Percent Change |
|--------------------|---------|----------------|
| Argentina          | 49.73   | -8.89          |
| Bolivia            | 58.76   | -7.31          |
| Brazil             | 56.82   | -7.64          |
| Chile              | 53.51   | -5.91          |
| Colombia           | 57.03   | 3.05           |
| Costa Rica         | 48.43   | 6.28           |
| Dominican Republic | 50.80   | -4.35          |
| Ecuador            | 53.89   | -10.35         |
| El Salvador        | 49.33   | -10.31         |
| Guatemala          | 55.09   | 0.30           |
| Honduras           | 56.24   | 0.91           |
| Mexico             | 51.17   | -6.19          |
| Nicaragua          | 50.97   | 1.41           |
| Panama             | 54.91   | -7.15          |
| Paraguay           | 55.29   | -7.21          |
| Peru               | 50.56   | -3.33          |
| Uruguay            | 45.34   | 1.67           |
| Venezuela          | 44.96   | -6.57          |

Source: UNU-WIDER (2011)

Note: Bolivia (2007), Guatemala (2006), and Nicaragua (2005) use more recent year.

Table 2.3: General Consumption Tax Revenue as Share of Total Taxation

| Country               | 2000 | 2005 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-----------------------|------|------|------|------|------|------|------|------|
| El Salvador           | 45.1 | 46.3 | 45.1 | 42.2 | 44.3 | 44.3 | 43.8 | 41.8 |
| Guatemala             | 37.9 | 39.6 | 42.3 | 39.9 | 41.2 | 41.4 | 41.5 | 39.8 |
| Honduras              | 31.5 | 30.7 | 33.2 | 30.5 | 31.0 | 33.6 | 31.4 | 29.9 |
| Nicaragua             | 34.8 | 32.9 | 32.5 | 30.7 | 30.8 | 31.3 | 31.5 | 31.3 |
| Dominican Republic    | 21.1 | 27.6 | 31.5 | 31.7 | 33.6 | 32.8 | 29.7 | 31.9 |
| Latin America Average | 30.4 | 30.5 | 30.9 | 30.3 | 31.6 | 31.4 | 31.1 | 31.2 |

Source: OECD (2016)

## 2.5 Data & Methods

I will use the Americas Barometer survey data from the Latin American Public Opinion Project (LAPOP). LAPOP is one of the few surveys that ask about opinions on democracy, political institutions and government behavior in each Latin American country. For the selected countries I chose, I selected survey waves from 2008, 2010 and 2012. The 2008 survey was conducted before March, several months before the economic crash in the United States. The respondents' answers in 2008 can be seen as attitudes and opinions held before the financial crisis. The 2010 survey took place when countries had just experienced the sharp drop in remittances in 2009. The 2012 is perceived as a "recovery" period where remittances began to return to pre-crisis levels.

The dependent variable measures citizen attitudes on state engagement to reduce inequality. The question specifically asks respondents whether they agree or disagree with the statement: "The [country] government should implement strong policies to reduce income inequality between the rich and the poor. What extent do you agree or disagree with this statement." Respondents were asked to use a 7-point scale. I recoded the respond to be binary where those who answered with a 6 or 7 were coded as strongly agreeing with the statement. I bifurcated the variable because the distribution of the responses is right-skewed with more than 60% of the responses being either six or seven. The distribution less than six shows little variation. Thus, the distribution reveals that respondents either strongly agree with redistribution or not.

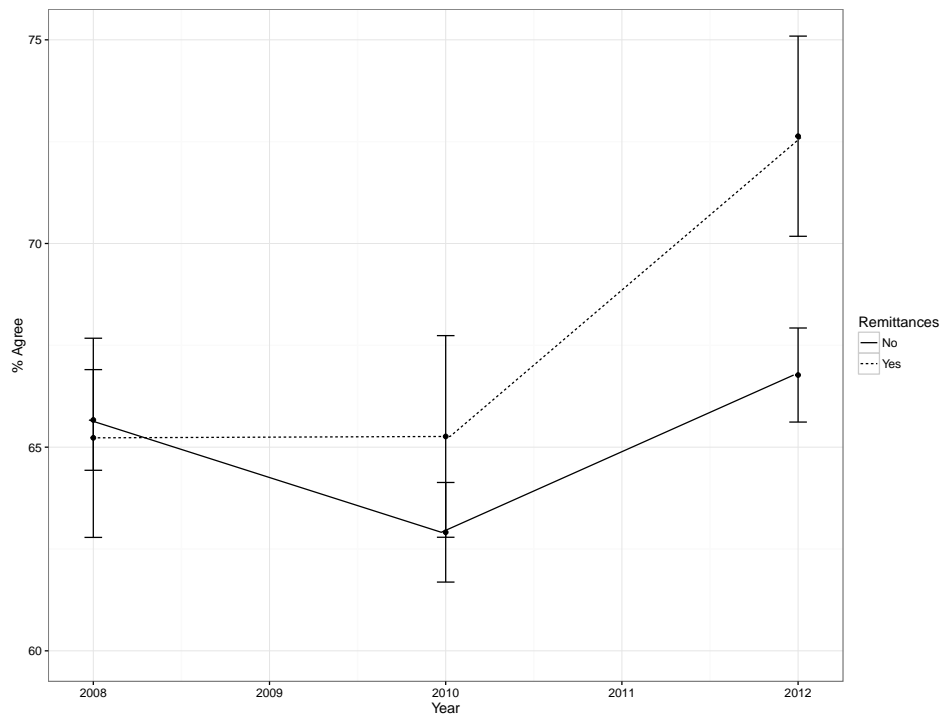
The main explanatory variable asks whether the respondent or someone in the household receives remittances. The response is binary. The advantage of using LAPOP's survey over other sources, such as Latinobarometer, is that the remittance question is asked in every survey wave in every country.<sup>7</sup> Even though

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<sup>7</sup>Latinobarometer only asks about remittances in 2009.

it is not a panel survey, I can examine attitudinal changes of remittance recipients over time. Pooling survey respondents from the five selected countries, Figure 2.4 shows how preferences for redistribution change over time between remittance recipients and non-recipients. Prior to the financial crisis, there are no differences between remittance recipients and non-recipients. Figure 2.4 is a raw visual on the changes in attitudes for remittance receivers after experiencing a decline in income through transfers from family members abroad. We can see that the following the crisis and as the economies recover after 2009, remittance recipients begin to diverge from non-recipients significantly approving government involvement in reducing inequality.

Figure 2.4: Preferences for Redistribution (2008-2012)



Note: Sample mean estimates with 95% confidence intervals.

Remittance recipients are not representative of the general population in some aspects. Table 2.4 reports the determinants of receiving remittances in the data

using logistical regressions with survey fixed effects.<sup>8</sup> Remittance recipients tend to be either young or very old, which reflects the age profile of migrants who tend to be of prime working age. These migrants are therefore sending money back to their children, parents, and other dependents. Middle-income households tend to receive remittances at a higher rate than poor households, which may not be able to bear the costs of migration. Affluent households, on the other hand, do not have incentives to migrate.

Remittance recipients tend to have higher education than the rest of the population, but at a decreasing rate, which means they are likelier to have a secondary education than a university one. Households with a larger number of children tend to receive more remittances than those without. Model 2 in Table 2.4 includes the variable on whether the household member lives in the United States.<sup>9</sup> That variable has the strongest effect on receiving remittances and weakens the effects on the other important control variables. That indicates that remittances are largely coming from the United States.

The control variables for the analysis will include socio-demographic variables along with political attitudes and economic perceptions. The socio-demographic variables included in the analysis are age, gender, income, education, and living in an urban area. These variables can not only influence attitudes towards redistribution, but are also correlated with receiving remittances. Income is measured in deciles from 0 to 10 and are self-reported. Education is measured in years of education.

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<sup>8</sup>Results are consistent after running logistical regressions by country.

<sup>9</sup>This question was not asked in 2012, which decreases the number of observations.

Table 2.4: Determinants of Remittances

|                        | <i>DV: Receive remittances = 1</i> |                      |
|------------------------|------------------------------------|----------------------|
|                        | (1)                                | (2)                  |
| Constant               | -1.636***<br>(0.184)               | -1.937***<br>(0.231) |
| Age                    | -0.074***<br>(0.007)               | -0.061***<br>(0.009) |
| Age <sup>2</sup>       | 0.001***<br>(0.0001)               | 0.001***<br>(0.0001) |
| Male                   | -0.0004<br>(0.040)                 | -0.081<br>(0.050)    |
| Urban                  | 0.077*<br>(0.044)                  | -0.021<br>(0.056)    |
| Income                 | 0.295***<br>(0.033)                | 0.184***<br>(0.040)  |
| Income <sup>2</sup>    | -0.017***<br>(0.003)               | -0.012***<br>(0.004) |
| Education              | 0.105***<br>(0.016)                | 0.083***<br>(0.021)  |
| Education <sup>2</sup> | -0.004***<br>(0.001)               | -0.004***<br>(0.001) |
| Number of Children     | 0.045***<br>(0.011)                | 0.049***<br>(0.014)  |
| Ideology               | 0.006<br>(0.007)                   | 0.015*<br>(0.009)    |
| Family in U.S.         |                                    | 2.454***<br>(0.052)  |
| Observations           | 17,255                             | 13,541               |
| Log Likelihood         | -8,176                             | -5,267               |
| AIC                    | 16,402                             | 10,581               |

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

Note: Binary logistic models with survey fixed-effects.

Political perceptions and economic circumstances can also affect preferences for redistribution. Thus, I include whether the respondent is currently employed or not. Unemployed respondents may prefer redistribution as opposed to those who are currently employed. Ideology is measured on a 10-point scale where 10 is right and 0 is left. The more left-wing a respondent, the more we expect the respondent to favor redistribution. Corruption perception measures whether a respondent feels that the country is corrupt or not. Executive approval is based on a 7-point scale, controlling for partisan attitudes to the government. I include two variables to control for a respondent's personal economic situation. I add a variable on whether the respondent feels that their economic situation is bad or not at the moment of the survey. The second variable is retrospective asking whether the economic situation has gotten worse from two years ago. I expect a respondent feeling worse about his economic situation will favor more redistribution. Finally, I include a victimization variable that measures whether the respondent or someone in their household has been a victim of crime. Crime victimization can influence how one feels towards their home government and inequality. Crime is a major issue for these countries and governments have responded using social policies in attempts to stem the problem (Booth, Wade and Walker, 2014; UNDP, 2009*b*, 2013). Crime victimization has been shown to negatively affect one's approval of the incumbent government (Hiskey, Montalvo and Orcés, 2014; Bateson, 2012).

I will estimate the effects of remittances on attitudes to redistribution using a logistical regression with survey effects. I pool the data together and the survey effects will control for time-invariant characteristics in each country-year of the data. I also use a random-effects model and a random-slope model to control for possible within-survey correlations. To capture the effect of remittances on redistribution over time, I incorporate interactions with the year of the survey. Given Figure 2.4, we should expect a positive interaction between remittances and year. Since LAPOP data is not a panel survey, I cannot infer directly that

remittance recipients respond to crisis. I provide regressions by year subsets to see if the effect of remittances on redistribution differs over time.

## 2.6 Results

### 2.6.1 Main Results

#### Pooled Results

Table 2.5 presents the main results showing remittances having a positive interaction with the year of the survey after the economic recession. Column 1 presents the pooled, non-interaction model and it shows that remittances do not have a general effect on preferences for redistribution across the time period of the sample (2008-2012). Column 2 incorporates the remittance-year interaction. The remittance coefficient can be interpreted as the effect for receiving remittances in 2008. The interactions present the difference in the log-odds from the baseline 2008 remittance coefficient. The 2010 interaction is positively significant at the 90% confidence level and the 2012 interaction is significant at 95%. This can indicate the widening gap between remittance recipients and non-recipients during and after the recession.

To better understand the logistic regression results, Table 2.6 and Figure 2.5 report the odds-ratio and 95% confidence interval for each coefficients from Table 2.5, Column 2. The interaction model in Column 2 shows the differences in the relationship between remittances and redistribution by year. The interaction results, which includes country-year fixed effects, are consistent with the mixed-effects logistic results in Columns 3 and 4.<sup>10</sup> Remittances in 2008 have an odds-ratio of 0.89 meaning remittance recipients are 11 percent less likely to

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<sup>10</sup>According to log likelihood and the AIC, there is no advantage in using the mixed-effects models over the fixed effects model. The smaller the AIC, the better the model.

support redistribution than non-recipients. This effect is significant at the 90% confidence level. This rejection of redistribution supports the findings in Doyle (2015), who used Latinobarometer from 2009. By 2012, remittance recipients are 34% more likely to support redistribution than non-recipients, an effect that is significant at the 95% confidence level. The results support the divergence between receivers and non-receivers in Figure 2.4 as the former seems to be responding the the global economic downturns of 2009.

Columns 3 and 4 use mixed-effects models to account for within country correlations. Column 3 uses random-intercepts for each country-year to account within-country correlations. The random intercept model in Column 3 yields similar results for the remittance-year interactions as the fixed effect model in Column 2. Column 4 incorporates random slope for remittances and random intercepts by country for the possibility that remittances has a different effect by country. The results in Column 4 yield a weaker result for the 2010 interaction. The coefficient for the 2010 loses significance and the odds-ratio declines by 7%. The weaker results may stem from the random slope for remittances. Figure 2.7 shows the random slopes for remittances by country. Remittances has a negative and significant effect in Guatemala and Honduras. In Figure 2.6, Guatemala and Honduras are the only countries with negative country effects. These two countries have lower favorability for government redistribution relative to the other three countries in the sample. Furthermore, as Figure 2.7 suggests, receiving remittances decreases the odds of supporting redistribution in Guatemala and Honduras. They may be unsurprising to Central America scholars as these countries tend to be more conservative than their neighbors (Mahoney, 2001; Booth, Wade and Walker, 2014)

Other variables are shown to influence support for government policies to reduce inequality. Women are 15% less likely than men to support redistribution. Income has a non-linear effect on redistribution where middle incomes are likely



to support government's involvement to reduce inequality but this effect withers as one moves to the highest deciles of the distribution. Education has a small and positive effect on favoring redistribution. Having more children in the household also increases favorability to redistribution.

Political attitudes and economic perceptions are significantly correlated with preferences for redistribution. Those who believe their country is corrupt have 12% higher odds to favor redistribution. Higher presidential approval is correlated positively with support for redistribution. Those who believe they are in a bad economic situation are likely to support redistribution but the retrospective measure for economic situation yields a negative result.<sup>11</sup> The result for the personal retrospective economic evaluation could be subject to collinearity with other variables. Finally, there is the curious result for ideology. A one-point increase in ideology increases the odds-ratio of supporting redistribution by 3%. One explanation for this is that the five countries in this study have weak left-wing parties, with the exception of El Salvador and Nicaragua, and many parties engage in clientelism (Karl, 1995).

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<sup>11</sup>I previously used sociotropic variables (evaluation of the country's economy) but those variables consistently yield null results.

Table 2.5: Regression Results: Remittances and Support for Government Policies to Reduce Inequality

| <i>DV: Support government policies to reduce inequality</i> |                      |                      |                      |                      |
|---|----------------------|----------------------|----------------------|----------------------|
|   | (1)                  | (2)                  | (3)                  | (4)                  |
| Constant  | 0.698***<br>(0.183)  | 0.725***<br>(0.183)  | 0.028<br>(0.288)     | 0.021<br>(0.263)     |
| Remittances   | 0.039<br>(0.044)     | -0.118<br>(0.076)    | -0.117<br>(0.076)    | -0.099<br>(0.079)    |
| 2010  |                      | -0.814***<br>(0.104) | -0.149<br>(0.348)    | -0.139***<br>(0.048) |
| 2012  |                      | -0.373***<br>(0.112) | 0.115<br>(0.348)     | 0.124**<br>(0.050)   |
| Remittances × 2010  |                      | 0.190*<br>(0.104)    | 0.190*<br>(0.104)    | 0.125<br>(0.102)     |
| Remittances × 2012  |                      | 0.293***<br>(0.112)  | 0.294***<br>(0.112)  | 0.294***<br>(0.111)  |
| Female  | -0.084**<br>(0.038)  | -0.084**<br>(0.038)  | -0.085**<br>(0.038)  | -0.073*<br>(0.038)   |
| Age   | -0.005<br>(0.006)    | -0.005<br>(0.006)    | -0.005<br>(0.006)    | -0.006<br>(0.006)    |
| Age-square  | 0.00005<br>(0.0001)  | 0.00005<br>(0.0001)  | 0.00005<br>(0.0001)  | 0.0001<br>(0.0001)   |
| Income  | 0.062**<br>(0.027)   | 0.061**<br>(0.027)   | 0.060**<br>(0.027)   | 0.060**<br>(0.027)   |
| Income-square   | -0.008***<br>(0.003) | -0.008***<br>(0.003) | -0.008***<br>(0.003) | -0.009***<br>(0.003) |
| Education   | 0.021***<br>(0.005)  | 0.021***<br>(0.005)  | 0.021***<br>(0.005)  | 0.021***<br>(0.005)  |

|                          |                      |                      |                      |                     |
|--------------------------|----------------------|----------------------|----------------------|---------------------|
| Urban                    | -0.018<br>(0.039)    | -0.018<br>(0.039)    | -0.016<br>(0.039)    | 0.005<br>(0.038)    |
| Ideology                 | 0.019***<br>(0.006)  | 0.019***<br>(0.006)  | 0.019***<br>(0.006)  | 0.021***<br>(0.006) |
| Corruption Perception    | 0.189***<br>(0.041)  | 0.190***<br>(0.041)  | 0.189***<br>(0.041)  | 0.181***<br>(0.041) |
| Executive Approval       | 0.043**<br>(0.019)   | 0.043**<br>(0.019)   | 0.044**<br>(0.019)   | 0.044**<br>(0.018)  |
| Employed                 | 0.038<br>(0.040)     | 0.038<br>(0.040)     | 0.038<br>(0.040)     | 0.069*<br>(0.040)   |
| Bad Economic Situation   | 0.216***<br>(0.042)  | 0.216***<br>(0.042)  | 0.216***<br>(0.042)  | 0.190***<br>(0.042) |
| Worse Economic Situation | -0.104***<br>(0.040) | -0.104***<br>(0.040) | -0.103***<br>(0.040) | -0.094**<br>(0.039) |
| Children                 | 0.030***<br>(0.010)  | 0.030***<br>(0.010)  | 0.030***<br>(0.010)  | 0.027***<br>(0.010) |
| Victim                   | 0.089*<br>(0.046)    | 0.089*<br>(0.046)    | 0.089*<br>(0.046)    | 0.095**<br>(0.045)  |
| Observations             | 15,833               | 15,833               | 15,833               | 15,833              |
| Log Likelihood           | -9,630               | -9,627               | -9,666               | -9,723              |
| AIC                      | 19,323               | 19,320               | 19,375               | 19,494              |

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Columns 1-2 use a binary logistic model with survey fixed-effects (country-year).

Column 3 uses random intercept for survey effects (country-year).

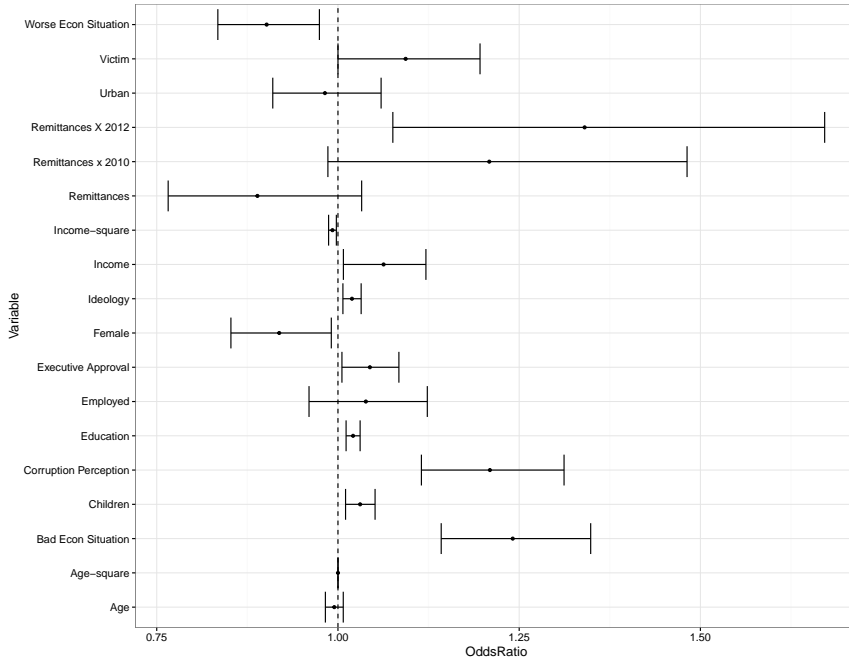
Column 4 uses random slope for remittances and random intercept for country.

Table 2.6: Odds Ratio Estimates

| Variable                  | Odds Ratio | 2.5% | 97.5% |
|---------------------------|------------|------|-------|
| Constant                  | 2.06       | 1.44 | 2.96  |
| Remittances               | 0.89       | 0.77 | 1.03  |
| 2010                      | 0.44       | 0.36 | 0.54  |
| 2012                      | 0.69       | 0.55 | 0.86  |
| Remittances $\times$ 2010 | 1.21       | 0.99 | 1.48  |
| Remittances $\times$ 2012 | 1.34       | 1.08 | 1.67  |
| Female                    | 0.92       | 0.85 | 0.99  |
| Age                       | 0.99       | 0.98 | 1.01  |
| Age-square                | 1.00       | 1.00 | 1.00  |
| Income                    | 1.06       | 1.01 | 1.12  |
| Income-square             | 0.99       | 0.99 | 1.00  |
| Education                 | 1.02       | 1.01 | 1.03  |
| Urban                     | 0.98       | 0.91 | 1.06  |
| Ideology                  | 1.02       | 1.01 | 1.03  |
| Corruption Perception     | 1.21       | 1.12 | 1.31  |
| Executive Approval        | 1.04       | 1.01 | 1.08  |
| Employed                  | 1.04       | 0.96 | 1.12  |
| Bad Econ Situation        | 1.24       | 1.14 | 1.35  |
| Worse Econ Situation      | 0.90       | 0.83 | 0.97  |
| Children                  | 1.03       | 1.01 | 1.05  |
| Victim                    | 1.09       | 1.00 | 1.20  |

Note: Estimates are from Table 2.5, Column 2

Figure 2.5: Odds Ratios with 95% Confidence Intervals



Note: Estimates from Table 2.5, Column 2

Figure 2.6: Random Country Intercepts

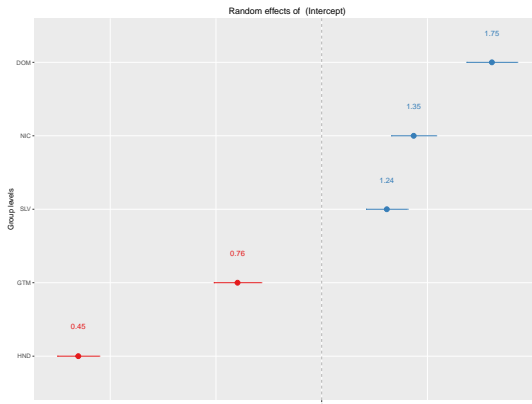
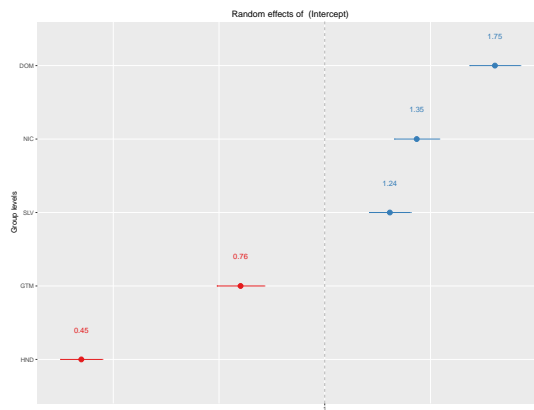


Figure 2.7: Random Slopes for Remittances by Country



Note: Estimates from Table 2.5, Column 4

### 2.6.1.1 Year Subsets

The interaction results should be interpreted with caution because the LAPOP data is not a panel survey. Those remittance recipients may not be the same individuals surveyed in the following waves. To assure that remittances have different effects on redistribution in each survey year, I ran the model from Table 2.5, Column 1 for each year with country-fixed effects. Table 2.7 and Figure 2.8 present the odds-ratio from the subset regressions. The results are weaker but they still suggests a widening gap between remittance recipients and non-recipients on attitudes regarding government redistribution. The economic recession and recovery has led to a 30% swing among remittance recipients supporting government policies to reduce inequality.

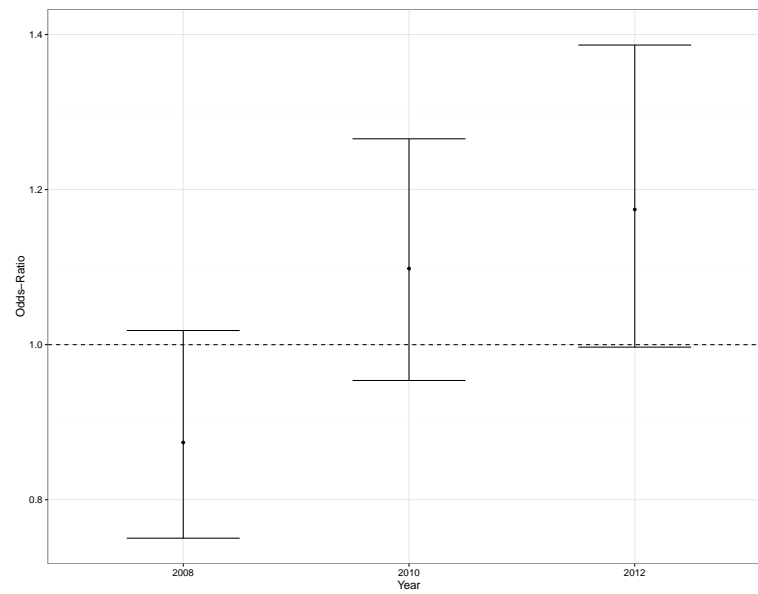
Both the pooled and survey year results show a divergence between remittance recipients and non-recipients. In addition, the results suggest that remittance recipients change their stance on government redistribution relative to the general population. Although the results for 2008 are not statistically significant, the higher likelihood of rejecting government redistribution among remittance-recipients supports established theories and recent empirical studies in the literature. However, that negative effect ceases during and after the financial crisis when remittances decline and recover. What changed among remittance recipients during and after the crisis? The results suggests a learning process among recipients where the experience of the remittance decline altered their preferences to favor redistribution. The following sections tests the proposed mechanisms discussed earlier.

Table 2.7: Odds-Ratios for Remittances by Year

| Year | Odds Ratio | 2.5% | 97.5% |
|------|------------|------|-------|
| 2008 | 0.87       | 0.75 | 1.02  |
| 2010 | 1.10       | 0.95 | 1.27  |
| 2012 | 1.17       | 1.00 | 1.39  |

Note: Full results in the appendix.

Figure 2.8: Odds Ratios: 95% Confidence Intervals



Note: Estimates from Table 2.7 with 95% confidence intervals

## 2.6.2 Income Distribution, Remittances & Redistribution

The household income relative to the country's income distribution may lead remittance recipients to favor government redistribution. Remittances move household incomes positively along the income distribution, making them higher than they otherwise would be without remittances. The drop in remittances from the recession may have pulled household income negatively along the distribution. This movement along the income distribution can shape one's attitudes toward redistribution. Losing income from remittances decreases the total household income, which may lead individuals to respond positively to government policies to reduce inequality. The returns from social transfers and redistribution can make up for the loss in income from remittances.

In order to test the inequality channel, I created a measure of distance to the mean income of the country. To create the income distance measure, I calculated the mean income (in deciles) for each country-year. I then calculated the difference between each respondent's household income to the mean. A household with a distance of zero is one with the mean income, positive numbers mean they are wealthier than the mean and negative numbers represent those poorer than the mean. Even though I am relying on self-reported income from the survey, I am confident that the measure will provide a good proxy to measure how close (or far) a respondent is to the mean national income.<sup>12</sup>

During times of crisis, remittance recipients may move down in deciles to their place in the distribution without the international transfers. Remittance recipients tend to have positive distance from the mean income but it has varied over time. Figure 2.9 shows remittance recipients have greater income than the rest of the population in each survey year. Following the decline in remittances

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<sup>12</sup>One worry is that the national mean changes over time, especially during economic crisis. What is important for my analysis is comparing remittance receivers and non-receivers and their respective distance to the national mean in a given year.



in 2009, remittance recipients saw their income distance to the mean decrease. Table 2.8 shows the mean and median income distance for remittance recipients and it shows a decrease from 2008 to 2010. While the mean distance declined by 0.1 deciles, the median income dropped by nearly 90%. Even though the median income distance increased in 2012, it did not fully recover. Given that remittance recipients suffered a significant negative decline in income distance, did that influence and change their attitudes towards government redistribution?

Distance from the mean income is a strong predictor on whether someone supports government policies to reduce inequality. One advantage for using this variable is that it varies over time and it is a viable substitute for the year interaction in order to find a general effect. Table 2.9 presents the results adding income distance to the models used previously.<sup>13</sup> One decile away from the mean income is associated with a 20% decline in the odds to support redistribution, controlling for other factors. The result is consistent across different specifications with the exception of model 4, which uses a subset of only remittance recipients. Income distance does not have an effect on remittance recipients. The interaction result in Column 2 is significant and suggests that remittance recipients are less likely to support redistribution given its income distance, but Figure 2.10 shows that the difference is not significant. In other words, the interaction effect is statistically significant, but very small. The results support Lupu and Pontusson (2011) where inequality is an important variable in understanding preferences for redistribution but remittance recipients do not differ from the rest of the population in this regard.

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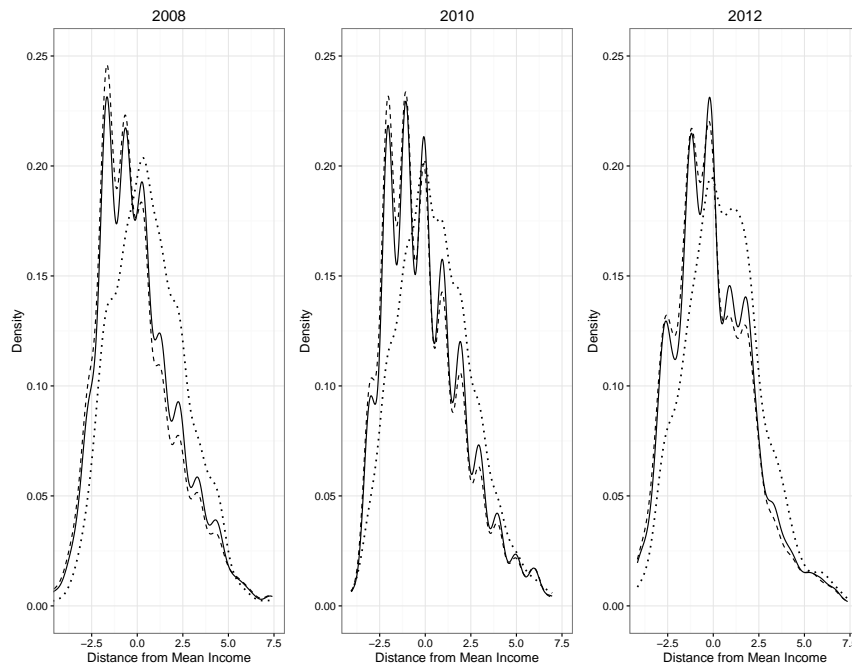
<sup>13</sup>I used an alternative measure of income distance where I used the mean decile for the non-remittance population for each country-year. The results are consistent.

Table 2.8: Income Distance by Year:  
Remittance Recipients

| Year   | 2008 | 2010 | 2012 |
|--------|------|------|------|
| Mean   | 0.65 | 0.55 | 0.58 |
| Median | 0.41 | 0.05 | 0.37 |

Note: Income distance is measured in terms of deciles.  
in terms of deciles.

Figure 2.9: Income Distance Densities by Year



Note: Solid lines account for all data; dotted lines for remittance recipients; dashed lines for non-recipients. Mean income distance centered at zero.

Table 2.9: Regression Results: Inequality and Remittances on Redistribution

| <i>DV: Support government policies to reduce inequality</i> |                      |                      |                      |                   |
|---|----------------------|----------------------|----------------------|-------------------|
|   | (1)                  | (2)                  | (3)                  | (4)               |
| Constant  | -0.760*<br>(0.407)   | -0.737*<br>(0.407)   | -1.139**<br>(0.457)  | 0.863<br>(0.914)  |
| Income Distance   | -0.231***<br>(0.073) | -0.219***<br>(0.073) | -0.257***<br>(0.082) | -0.137<br>(0.166) |
| Remittances   | 0.042<br>(0.047)     | 0.077<br>(0.049)     |                      |                   |
| Income Distance $\times$ Remittances                        |                      | -0.063***<br>(0.023) |                      |                   |
| Observations  | 14,130               | 14,130               | 11,272               | 2,858             |
| Log Likelihood  | -8,595               | -8,591               | -6,892               | -1,676            |
| AIC   | 17,251               | 17,245               | 13,843               | 3,411             |

*Notes:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All columns use binary logit models. Column 1 uses the pooled data.

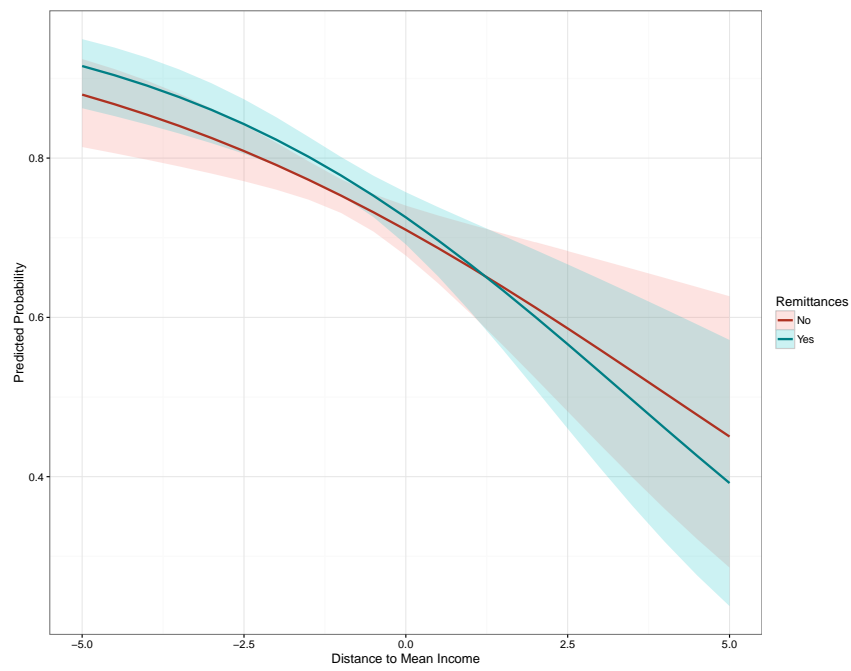
Column 2 is the interaction model with the pooled data.

Column 3 is based on the non-receiving subset

Column 4 is based on the remittance-receiving subset.

All models include control variables from the main model.

Figure 2.10: Predicted Probabilities: Remittances, Income Distance and Redistribution



Note: Shaded regions represent 95% confidence intervals  
Estimates from Table 2.9, Column 2

### 2.6.3 Remittances, Employment & Redistribution

Whether remittances are the sole source of income or supplemental to other income can explain the change in preferences for redistribution. I hypothesize that the negative shock to remittances has a greater effect for households where remittances are the sole source of income versus households where remittances represent supplemental income. Those who are more dependent on remittances leave themselves open to greater risk from economic situations abroad.

I proxy for remittance dependence by creating a categorical variable classifying respondents in terms of employment and receiving remittances. I assume that employment makes one less dependent on remittances and sees it as supplemental income. One who receives remittances and is unemployed is likely to be very dependent on the transfers sent from abroad.<sup>14</sup> The questions on remittances and employment status produces four categories: employed and no remittances; remittances and not employed; remittances and employed; and neither. Table 2.10 shows the breakdown by country with row percentages for each category. Employed and no remittances is the largest category in each country. Employed and non-employment remittance recipients both make up similar shares of each country sample, with the exception of Guatemala.

Did the drop in economic security in 2010 affect attitudes for redistribution among remittance recipients? Figure 2.11 suggests that remittance recipients without employment have the greatest increase in support for redistribution since 2008. Employed recipients did not see an increase in support for government policies to reduce inequalities until 2012. The two categories representing non-receiving respondents remained lower than remittance-recipients in 2012.

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<sup>14</sup>The amount of remittances relative to income or dependence on remittances would be ideal variables for this mechanism, but such questions were not asked in the LAPOP surveys. Dependence is not asked in 2012. Amounts are not asked at all.

Table 2.10: Employment-Remittance Status by Country

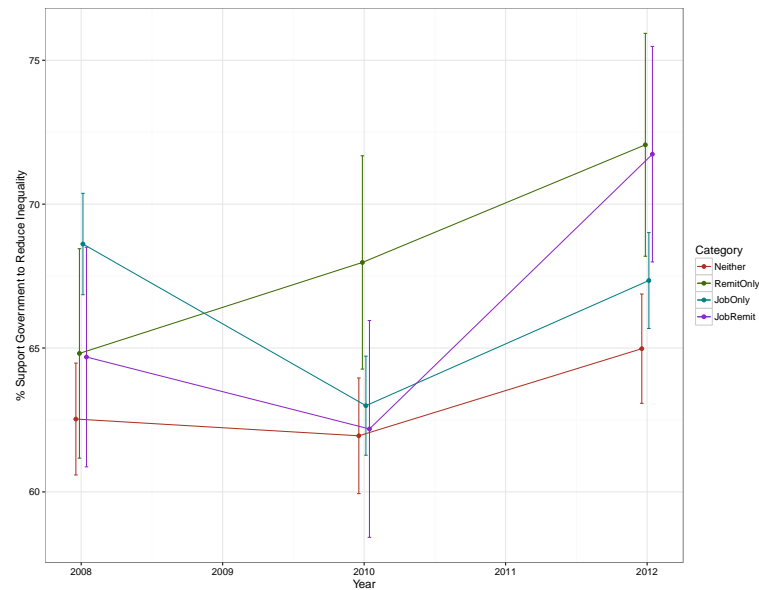
| Country            | Neither | Remittances Only | Employed Only | Employed & Remittances |
|--------------------|---------|------------------|---------------|------------------------|
| Dominican Republic | 36.75   | 10.24            | 41.80         | 11.20                  |
| El Salvador        | 36.54   | 12.72            | 39.29         | 11.45                  |
| Guatemala          | 32.99   | 3.76             | 55.66         | 7.59                   |
| Honduras           | 41.06   | 9.03             | 42.86         | 7.05                   |
| Nicaragua          | 37.14   | 10.16            | 44.18         | 8.52                   |
| All Countries      | 36.98   | 9.16             | 44.76         | 9.10                   |

Note: Values are calculated as row percentages.

All countries pool the samples from the five countries.

Source: LAPOP (2008, 2010, 2012)

Figure 2.11: Remittances, Employment and Redistribution



Note: Mean estimates with 95% confidence intervals.

The regression results in Table 2.11 show that non-employed remittance recipients were most affected by the US economic recession. The job-remittance categories yield null results in 2008 when remittances were at their peak and before the recession. In 2010 and 2012, the odds for non-employed remittance recipients were 30% higher to favor redistribution.<sup>15</sup> With remittances being the more important source of income, the economic shock from abroad exposed the household to greater economic risk. Remittances are no longer seen as stable and households may favor redistribution to insure against a possible future decline in the U.S. economy. This supports the learning hypothesis as the results suggest a persistent change in preferences (Margalit, 2013). On the other hand, remittance recipients who are employed are not statistically different from non-recipients. When remittances are supplemental to other income, the household has greater diversity against risk. The decline in remittances does not affect the household economic situation as it does for those where remittances are the sole source of income.

The categories that include employment did not yield statistically significant results. One reason why there are no significant results has to do with the scope of the variable. Employment does not specify type of employment or wage amount. So those in the employment categories can include those who are underpaid or even part-time employees.<sup>16</sup> The heterogeneity that the variable could contain may explain the null results. It is plausible that different types of employment can affect how one rates government redistribution.

Dependency on remittances and the experience from the global financial crisis best explains the change in preferences for government redistribution among remit-

---

<sup>15</sup>Using predicted probabilities where I set numerical variables to their means and binary variables to zero, the probability that a remittance-only respondent approves of government redistribution is 0.06 higher than the baseline group (no remittances, non-employed) in 2010 and 2012.

<sup>16</sup>The surveys do not ask about job loss for each country or each year.

tance recipients. Those who rely on remittances as the sole source of income were exposed to additional economic risk when the United States recession decreased remittance inflows. What was once a stable source of income to cover local economic risk became vulnerable to the economic fortunes of migrants abroad. Given this additional exposure to risk, these remittance recipients began to favor government redistribution as an additional economic insurance. When remittances are supplemental to other sources of income, the economic recession in the United States did not affect preferences to redistribution. Remittance recipients with other sources of income could bear the brunt of a negative shock to a migrant's economic situation, so the drop in these international transfers will not hurt them as much.

Table 2.11: Regression Results: Remittances, Employment and Redistribution

| <i>DV: Support government policies to reduce inequality</i> |                    |                    |                    |
|---|--------------------|--------------------|--------------------|
| Year Subset   | 2008               | 2010               | 2012               |
|   | (1)                | (2)                | (3)                |
| Constant  | 1.020**<br>(0.404) | 0.065<br>(0.357)   | 0.329<br>(0.391)   |
| Remittances Only  | -0.049<br>(0.116)  | 0.278**<br>(0.112) | 0.287**<br>(0.133) |
| Job Only  | 0.181**<br>(0.087) | 0.043<br>(0.076)   | 0.063<br>(0.082)   |
| Job+Remittances   | -0.039<br>(0.125)  | -0.044<br>(0.112)  | 0.151<br>(0.129)   |
| Observations  | 4,532              | 4,995              | 4,603              |
| Log Likelihood  | -2,623             | -3,205             | -2,715             |
| AIC   | 5,291              | 6,453              | 5,475              |

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
All models include control variables from the main model.



## 2.7 Conclusion

The financial crisis of 2008/2009 offered an opportunity to study the political consequences of the sudden decline of remittances and its eventual recovery. Remittances were previously thought to be both stable and resilient but the economic recession in the United States exposed many households who relied on remittances to additional economic risk that may have been unexpected. Households in Latin America, particularly those in Central America and the Caribbean, found themselves with less disposable income. Recent research argues that remittance recipients will reject government redistribution because they no longer rely on the state. However, a sudden drop in remittance income implies that recipients could revert back to prior preferences for redistribution.

This paper finds that remittance recipients become more likely to support government redistribution following the economic crisis. Prior to the crash, the results provided weak support for that remittance recipients would reject government redistribution. As remittance levels recovered after 2010, remittance recipients became more favorable to government redistribution than the rest of the population. Those who rely on remittances as their sole source of income were more sensitive to the economic crisis as the exposure to risk was far greater than for those who receive remittances as supplemental income.

The external increase in income from remittances place households in a better economic situation than they otherwise would be. With a sudden decrease in that income, households will seek additional avenues for income and insurance against risk. Governments in countries such as those in this study may find themselves with higher demand for goods and services in times of economic crisis in remittance-sending countries. Thus, their fiscal pressures will be affected by another country's circumstances. Remittances are just as important as trade and capital flows in understanding the political and economic development in devel-

oping countries (Pritchett, 2006). While remittances may be seen as increasing a household's economic autonomy, the global financial crisis revealed the transnational links that households, and countries at large, have in a globalized economy.

## **2.8 Appendix**

Table 2.12: Full Results: Year-Subset Regression Results

| <i>DV: Support government policies to reduce inequality</i> |                     |                      |                      |
|---|---------------------|----------------------|----------------------|
| Year Subset   | 2008                | 2010                 | 2012                 |
|   | (1)                 | (2)                  | (3)                  |
| Constant  | 0.924***<br>(0.313) | 0.277<br>(0.275)     | 0.592**<br>(0.291)   |
| Remittances   | -0.135*<br>(0.078)  | 0.094<br>(0.072)     | 0.161*<br>(0.084)    |
| Female  | -0.111<br>(0.072)   | -0.072<br>(0.062)    | -0.055<br>(0.068)    |
| Age   | -0.010<br>(0.012)   | -0.002<br>(0.011)    | -0.002<br>(0.011)    |
| Age-square  | 0.0001<br>(0.0001)  | -0.00001<br>(0.0001) | 0.0001<br>(0.0001)   |
| Income  | 0.001<br>(0.051)    | 0.001<br>(0.047)     | 0.190***<br>(0.047)  |
| Income-square   | -0.004<br>(0.005)   | -0.005<br>(0.005)    | -0.015***<br>(0.005) |
| Education   | 0.027***<br>(0.009) | 0.018**<br>(0.008)   | 0.018**<br>(0.008)   |
| Urban   | 0.109<br>(0.071)    | 0.109*<br>(0.063)    | -0.285***<br>(0.069) |
| Ideology  | 0.019<br>(0.012)    | 0.009<br>(0.011)     | 0.037***<br>(0.010)  |
| Corruption Perception                                       | 0.406***<br>(0.080) | 0.121*<br>(0.066)    | 0.102<br>(0.073)     |
| Executive Approval  | -0.027<br>(0.036)   | 0.139***<br>(0.031)  | -0.017<br>(0.035)    |

|                          |                             |                     |                     |
|--------------------------|-----------------------------|---------------------|---------------------|
| Employed                 | 0.146**<br>(0.074)          | -0.028<br>(0.065)   | -0.001<br>(0.071)   |
| Bad Economic Situation   | 0.163**<br>(0.077)          | 0.244***<br>(0.068) | 0.206***<br>(0.079) |
| Worse Economic Situation | -0.170**<br>(0.075)         | -0.082<br>(0.062)   | -0.080<br>(0.073)   |
| Children                 | 0.054***<br>(0.019)         | 0.031*<br>(0.017)   | 0.003<br>(0.017)    |
| Victim                   | 0.289***<br>(0.088)         | 0.008<br>(0.072)    | 0.012<br>(0.081)    |
| Observations             | 5,000                       | 5,583               | 5,250               |
| Log Likelihood           | -2,911.532                  | -3,589.631          | -3,076.609          |
| Akaike Inf. Crit.        | 5,865.063                   | 7,221.262           | 6,195.218           |
| <i>Note:</i>             | *p<0.1; **p<0.05; ***p<0.01 |                     |                     |

Table 2.13: Subset Sample to Working Age Adults (18-65)

| <i>DV: Support government policies to reduce inequality</i> |                      |                      |                     |                      |
|---|----------------------|----------------------|---------------------|----------------------|
|   | (1)                  | (2)                  | (3)                 | (4)                  |
| Constant  | 0.546**<br>(0.232)   | 0.571**<br>(0.233)   | -0.113<br>(0.319)   | -0.141<br>(0.297)    |
| Remittances   | 0.042<br>(0.047)     | -0.104<br>(0.081)    | -0.103<br>(0.081)   | -0.086<br>(0.088)    |
| 2010  |                      | -0.755***<br>(0.111) | -0.160<br>(0.351)   | -0.135***<br>(0.051) |
| 2012  |                      | -0.432***<br>(0.119) | 0.085<br>(0.351)    | 0.100*<br>(0.052)    |
| Female  | -0.083**<br>(0.041)  | -0.083**<br>(0.041)  | -0.083**<br>(0.041) | -0.071*<br>(0.041)   |
| Age   | 0.002<br>(0.011)     | 0.002<br>(0.011)     | 0.002<br>(0.010)    | 0.002<br>(0.010)     |
| Age-square  | -0.0001<br>(0.0001)  | -0.0001<br>(0.0001)  | -0.0001<br>(0.0001) | -0.0001<br>(0.0001)  |
| Income  | 0.060**<br>(0.029)   | 0.060**<br>(0.029)   | 0.059**<br>(0.029)  | 0.054*<br>(0.029)    |
| Income-square   | -0.008***<br>(0.003) | -0.008***<br>(0.003) | -0.007**<br>(0.003) | -0.008***<br>(0.003) |
| Education   | 0.021***<br>(0.005)  | 0.021***<br>(0.005)  | 0.021***<br>(0.005) | 0.021***<br>(0.005)  |
| Urban   | -0.019<br>(0.041)    | -0.018<br>(0.041)    | -0.016<br>(0.041)   | 0.004<br>(0.041)     |
| Ideology  | 0.019***<br>(0.007)  | 0.019***<br>(0.007)  | 0.019***<br>(0.007) | 0.021***<br>(0.007)  |
| Corruption Perception                                       | 0.199***<br>(0.044)  | 0.201***<br>(0.044)  | 0.200***<br>(0.044) | 0.192***<br>(0.044)  |

|                      |                     |                     |                     |                     |
|----------------------|---------------------|---------------------|---------------------|---------------------|
| Executive Approval   | 0.053***<br>(0.020) | 0.053***<br>(0.020) | 0.054***<br>(0.020) | 0.056***<br>(0.019) |
| Employed             | 0.042<br>(0.043)    | 0.041<br>(0.043)    | 0.041<br>(0.043)    | 0.071*<br>(0.042)   |
| Bad Econ Situation   | 0.220***<br>(0.045) | 0.220***<br>(0.045) | 0.220***<br>(0.045) | 0.193***<br>(0.045) |
| Worse Econ Situation | -0.085**<br>(0.042) | -0.084**<br>(0.042) | -0.084**<br>(0.042) | -0.073*<br>(0.042)  |
| Childen              | 0.039***<br>(0.012) | 0.039***<br>(0.012) | 0.039***<br>(0.012) | 0.034***<br>(0.012) |
| Victim               | 0.082*<br>(0.048)   | 0.083*<br>(0.048)   | 0.082*<br>(0.048)   | 0.091*<br>(0.047)   |
| Observations         | 14,130              | 14,130              | 14,130              | 14,130              |
| Log Likelihood       | -8,594.513          | -8,591.354          | -8,629.462          | -8,680.151          |
| Akaike Inf. Crit.    | 17,251.030          | 17,248.710          | 17,302.920          | 17,408.300          |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Columns 1-2 use binary logistic model

Column 3 uses random intercept for survey-effects

Column 4 uses random slope for remittances and random intercept for country.

Table 2.14: Year-Subsets for Working Age Sample

| <i>DV: Support government policies to reduce inequality</i> |                     |                     |                      |
|---|---------------------|---------------------|----------------------|
| Year Subset   | 2008                | 2010                | 2012                 |
|   | (1)                 | (2)                 | (3)                  |
| Constant  | 1.039**<br>(0.404)  | 0.098<br>(0.356)    | 0.340<br>(0.391)     |
| Remittances   | -0.134<br>(0.083)   | 0.080<br>(0.076)    | 0.179**<br>(0.090)   |
| Female  | -0.112<br>(0.076)   | -0.085<br>(0.066)   | -0.025<br>(0.073)    |
| Age   | -0.021<br>(0.020)   | 0.007<br>(0.018)    | 0.008<br>(0.020)     |
| Age-square  | 0.0002<br>(0.0003)  | -0.0001<br>(0.0002) | -0.0001<br>(0.0003)  |
| Income  | 0.009<br>(0.055)    | -0.010<br>(0.050)   | 0.195***<br>(0.050)  |
| Income-square   | -0.005<br>(0.005)   | -0.004<br>(0.005)   | -0.015***<br>(0.005) |
| Education   | 0.027***<br>(0.009) | 0.021**<br>(0.009)  | 0.016*<br>(0.009)    |
| Urban   | 0.083<br>(0.075)    | 0.120*<br>(0.067)   | -0.278***<br>(0.073) |
| Ideology  | 0.020<br>(0.013)    | 0.011<br>(0.012)    | 0.034***<br>(0.011)  |
| Corruption Perception                                       | 0.414***<br>(0.085) | 0.131*<br>(0.070)   | 0.114<br>(0.077)     |

|                      |                     |                     |                     |
|----------------------|---------------------|---------------------|---------------------|
| Executive Approval   | -0.023<br>(0.038)   | 0.140***<br>(0.033) | 0.008<br>(0.037)    |
| Employed             | 0.142*<br>(0.079)   | -0.033<br>(0.069)   | 0.028<br>(0.076)    |
| Bad Econ Situation   | 0.162**<br>(0.082)  | 0.245***<br>(0.072) | 0.225***<br>(0.084) |
| Worse Econ Situation | -0.153*<br>(0.079)  | -0.032<br>(0.066)   | -0.098<br>(0.077)   |
| Children             | 0.072***<br>(0.022) | 0.037*<br>(0.020)   | 0.005<br>(0.020)    |
| Victim               | 0.303***<br>(0.092) | -0.003<br>(0.075)   | -0.013<br>(0.085)   |
| Observations         | 4,532               | 4,995               | 4,603               |
| Log Likelihood       | -2,624.028          | -3,207.543          | -2,715.947          |
| Akaike Inf. Crit.    | 5,290.056           | 6,457.086           | 5,473.893           |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01



Table 2.15: Summary Statistics: Full Sample

|                          | N     | Mean  | SD   | Min   | Median | Max  |
|--------------------------|-------|-------|------|-------|--------|------|
| Redistribution           | 22225 | 5.72  | 1.65 | 1     | 6      | 7    |
| Redistribution (Binary)  | 22225 | 0.66  | 0.48 | 0     | 1      | 1    |
| Remittances              | 23134 | 0.18  | 0.39 | 0     | 0      | 1    |
| Female                   | 23134 | 0.51  | 0.50 | 0     | 1      | 1    |
| Age                      | 23075 | 38.22 | 16   | 16    | 35     | 101  |
| Income                   | 20745 | 3.79  | 2.32 | 0     | 3      | 10   |
| Education                | 23026 | 7.62  | 4.79 | 0     | 7      | 18   |
| Urban                    | 23134 | 0.57  | 0.50 | 0     | 1      | 1    |
| Ideology                 | 19034 | 5.77  | 2.87 | 1     | 5      | 10   |
| Corruption Perception    | 21571 | 0.77  | 0.42 | 0     | 1      | 1    |
| Executive Approval       | 22519 | 3.22  | 0.99 | 1     | 3      | 5    |
| Employed                 | 23070 | 0.51  | 0.50 | 0     | 1      | 1    |
| Bad Economic Situation   | 23026 | 0.34  | 0.47 | 0     | 0      | 1    |
| Worse Economic Situation | 22912 | 0.40  | 0.49 | 0     | 0      | 1    |
| Children                 | 23093 | 2.54  | 2.51 | 0     | 2      | 25   |
| Victim                   | 23073 | 0.18  | 0.38 | 0     | 0      | 1    |
| Income Distance          | 20745 | 0     | 2.13 | -5.72 | -0.14  | 7.43 |
| Neither                  | 23070 | 0.39  | 0.49 | 0     | 0      | 1    |
| Remittance Only          | 23070 | 0.10  | 0.30 | 0     | 0      | 1    |
| Employed Only            | 23070 | 0.42  | 0.49 | 0     | 0      | 1    |
| Remittances+Employed     | 23070 | 0.09  | 0.28 | 0     | 0      | 1    |

Table 2.16: Summary Statistics (Working-Age Subset)

| Variables                | N     | Mean  | SD    | Min   | Median | Max  |
|--------------------------|-------|-------|-------|-------|--------|------|
| Redistribution           | 19443 | 5.71  | 1.65  | 1     | 6      | 7    |
| Redistribution (Binary)  | 19443 | 0.65  | 0.48  | 0     | 1      | 1    |
| Remittances              | 20173 | 0.18  | 0.39  | 0     | 0      | 1    |
| Female                   | 20173 | 0.51  | 0.50  | 0     | 1      | 1    |
| Age                      | 20173 | 34.73 | 12.06 | 18    | 33     | 60   |
| Income                   | 18230 | 3.86  | 2.32  | 0     | 4      | 10   |
| Education                | 20089 | 8.03  | 4.70  | 0     | 8      | 18   |
| Urban                    | 20173 | 0.56  | 0.50  | 0     | 1      | 1    |
| Ideology                 | 16738 | 5.73  | 2.84  | 1     | 5      | 10   |
| Corruption Perception    | 18913 | 0.77  | 0.42  | 0     | 1      | 1    |
| Executive Approval       | 19649 | 3.21  | 0.99  | 1     | 3      | 5    |
| Employed                 | 20126 | 0.54  | 0.50  | 0     | 1      | 1    |
| Bad Economic Situation   | 20078 | 0.33  | 0.47  | 0     | 0      | 1    |
| Worse Economic Situation | 19995 | 0.39  | 0.49  | 0     | 0      | 1    |
| Children                 | 20138 | 2.28  | 2.22  | 0     | 2      | 21   |
| Victim                   | 20125 | 0.19  | 0.39  | 0     | 0      | 1    |
| Income Distance          | 18230 | 0.07  | 2.12  | -5.72 | -0.13  | 7.43 |
| Neither                  | 20126 | 0.37  | 0.48  | 0     | 0      | 1    |
| Remittance Only          | 20126 | 0.09  | 0.29  | 0     | 0      | 1    |
| Employed Only            | 20126 | 0.45  | 0.50  | 0     | 0      | 1    |
| Remittances+Employed     | 20126 | 0.09  | 0.29  | 0     | 0      | 1    |

Table 2.17: Variable Descriptions from LAPOP Surveys

| Variable                 | Code    | Question   |
|--------------------------|---------|--|
| Redistribution           | ros4    | The <i>country</i> government should implement strong policies to reduce income inequality between the rich and the poor. To what extent do you agree or disagree with this statement?   |
| Remittances              | q10a    | Do you or someone else living in your household receive remittances, that is, economic assistance from abroad?   |
| Female                   | q1      | Sex  |
| Age                      | q2      | Age  |
| Income                   | q10     | Into which of the following income ranges does the total MONTHLY income of this household fit, including remittances from abroad and the income from all the working adults and children?  |
| Income (2012)            | q10new  | Into which of the following income ranges does the total MONTHLY income of this household fit, including remittances from abroad and the income from all the working adults and children?  |
| Education                | edu     | How many years of schooling of you completed?  |
| Urban                    | ur      | Urban or Rural area?   |
| Ideology                 | l1      | On this card there is a 1-10 scale that goes from liberal to conservative. According to the meaning that the terms "liberals" and "conservatives" have for you, and thinking of your own political leanings, where would you place yourself on this scale? |
| Corruption Perception    | exc7    | Taking into account your own experience or what you have heard, corruption among public officials is...  |
| Executive Approval       | m1      | Speaking in general of the current administration, how would you rate the job performance of President/  |
| Employed                 | ocup4a  | How do you mainly spend your time? Are you currently...  |
| Bad Economic Situation   | idio1   | How would you describe your overall economic situation? Would you say that it is very good, good, neither good nor bad, bad or very bad?   |
| Worse Economic Situation | idio2   | Do you think that your economic situation is better than, the same as, or worse than it was 12 months ago?   |
| Children                 | q12     | Do you have children? How many children do you have?   |
| Victim (2008)            | vict08  | Have you been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months?   |
| Victim                   | vic1ext | Have you been a victim of robbery, burglary, assault, fraud, blackmail, extortion, violent threats or any other type of crime in the past 12 months?   |

## CHAPTER 3

# Remittances, Regime Type & Government Spending

### 3.1 Introduction

Remittances have risen over the past three decades and surpassed foreign aid as a major source of income for developing countries<sup>1</sup>. Studies on the political consequences of remittances have burgeoned over the past decade with a debate driving the research: are remittances a curse or a blessing? Do remittances improve economic development and strengthen democratic accountability? Or do remittances distort the economy and lead to more corruption? These questions have been studied at the individual, household and country level. As migration continues to increase globally, remittances becomes an increasingly important research subject in international political economy.

The rise in migration and remittances has coincided with the third wave of democratization. Yet, many remittance-receiving countries can be characterized as weak democracies or mild autocracies. The major theories in the curse versus blessing debate argue that remittances influence government public spending. Both theories agree that the increased income from remittances will change the preferences of the recipients. The disagreement centers on whether citizens will engage or disengage with the state. This reaction from remittances will produce

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<sup>1</sup>Developing countries in this paper are those not in Western Europe, United States, Canada, Australia, New Zealand.

a set of incentives for the state, conditional on the political regime. Democracies may behave differently than autocracies in budget-making decisions as they observe their citizens receiving remittances.

This paper will focus on the government response to remittance inflows. In particular, it will examine whether remittances influence public expenditures in public education, public health and social protection. The data analysis will look at country-level variables over time to take advantage of the temporal and cross-sectional variation in remittances and public spending across developing countries. As remittances flow into developing countries, governments will anticipate recipients to alter their political behavior, which can range to increased engagement or disengagement. Will remittances lead governments to increase public spending on health and education, or will governments choose to spend less on their citizens?

I will take into account that many developing countries that receive significant amounts of remittances are neither strong autocracies or strong democracies. I show that these intermediate make up a large portion of remittance inflows. These are countries where governments are weak. They may be sensitive to the effect of remittances on budgetary decisions due to citizen demands or may be too weak to respond to remittances in general.

I find that the relationship between remittances and public spending is conditional on regime type. Remittances have a positive relationship with public health spending under autocracies but higher remittances lead to lower spending in health and social protection. Democratic regimes report weak or null results for relationships between remittances and spending. Education is positively associated with remittances in intermediate regimes but that is not the case for health spending or social protection. The differences in the relationships between remittances and the spending variables may be due to how migration changes the demographic composition of the country or the changes in demand for government services.

The paper is structured as follows: The following section lays out the debate regarding the political consequences of remittances comparing the two major theories on the topic. I examine why democracies and autocracies exhibit contrasting relationships between remittances and government spending. The next section presents my argument for why remittances lead to increases or decreases on public spending conditional on regime type. In addition, I discuss the role of intermediate regimes: those that are neither strong democracies or strong autocracies. I then present the methodology and results. The final section elaborates on the results using Mexico as a case study.

## **3.2 Literature Review**

Remittances are income received from migrants working abroad. Remittance senders are migrants who were members of the household in the recipient country that left to seek an improved source of income. As global migration increased over the last 40 years, particularly from the developing countries to developed ones, many countries have seen rising inflows of remittances. Remittances have surpassed foreign aid and rivals foreign direct investment as a major source of revenue for developing countries (Ratha, Mohapatra and Silwal, 2011). The top 20 remittance-receivers include a diversity of countries such as Honduras, Bangladesh, and Senegal. These remittances come largely from developed OECD countries such as the United States, France, and Germany, but also from oil-exporting states such as Saudi Arabia and Kuwait.

The following literature review will address the debate regarding the political consequences of remittances. The theories and hypotheses regarding remittances and politics have roots in modernization theory, resource curse arguments, and Hirschmann's exit/voice mechanisms. The blessing arguments are largely influenced by modernization theory—as remittances continue to increase household

incomes, so do the demands for greater democracy and economic development (Przeworski et al., 2000; Boix and Stokes, 2003). On the other side, remittances are akin to natural resource windfall, which can influence governments to be more autocratic (Ross, 2001). These contrasting theories diverge due to underlying assumptions on how remittances influence the recipient's relationship with state actors. They lay out how remittances can change incentives for citizens and government actors with implicit assumptions on regime, which will be discussed in greater detail in this section.

### **3.2.1 Substitution Effect**

The blessing and curse arguments view remittances as a mechanism of voice or exit. Drawing from Hirschman (1970), remittances are mainly conceptualized as a form of political exit. Receiving the cash transfers from abroad will allow recipients to rely less on government for assistance and goods. Furthermore, the economic safety net from remittances leads to political disengagement among recipients (Doyle, 2015; Wright, Meseguer and Escriba, 2012; Adida and Girod, 2011). Burgess (2012) argues that remittances can activate voice through decreasing the costs of political participation. Remittance senders and receivers can form interest groups to lobby for specific community projects to local officials and support political parties.

Both sides of the remittances debate agree that receiving income from abroad will sever the patronage ties between the citizen and state; however disagreement arises about the consequences of that divorce. Pessimists argue that remittance income will allow citizens to enter the private market for goods instead of relying on the state. Remittance recipients will then fail to sanction corrupt government behavior since it does not materially affect them. Optimists argue that remittances decrease the costs of political participation and can threaten incumbents by voicing support for opposition.

The substitution effect is a crucial component to both arguments but neither side is clear as to what remittance recipients are substituting. There is an expectation that remittance recipients will enter the private market to substitute for government goods but this assumes that the private market is sufficient enough to provide the goods and resources that citizens seek. For example, Adida and Girod (2011) show that Mexican remittance recipients are more likely to have improved water and sanitation than non-recipients, which shows that remittances help citizens bypass the state for improved health infrastructure. On the other hand, Duquette-Rury (2014) shows that remittance recipients can collectively seek to partner financially with local government for improved infrastructure.

It is plausible that remittance recipients cannot access the private market or that the private market is insufficient to allow for improved economic outcomes. Remittance recipients may engage with the state but no longer in a patron-client relationship. Duquette-Rury (2014) and Iskander (2010) present well-documented field work on how remittance recipients engage with the state to push for infrastructure improvements. Several studies show that remittance recipients are more likely to participate in local civic organizations, which supports the argument that remittances will decrease the costs of participation. While the patron-client relationship is diminished by from remittances, recipients could become partners with local governments as a means to an end. Remittance recipients can lobby for improved services and goods from the government without being held as clients.

### **3.2.2 Remittances as a Blessing**

Rising income from remittances is the major component for the blessing argument. There are four related reasons as to how remittances might activate and develop voice for recipients. First, remittances can lower the costs of political participation. With remittances going to basic necessities, the household will then have a surplus of income that it did not have before. This surplus can be directed



to satisfy other needs. For example, the surplus provided by remittances can allow households to pay for health and educational needs among other necessities. Consequently, remittances decrease the costs of political participation such as voting, attending civic community meetings and using government bureaucracy. According to the proponents of the blessing argument, additional income from remittances will allow household members to acquire, or at least develop, *voice* to demand more accountability and goods from the state.

Remittance recipients may join local political groups and participating in local politics. Common examples are Mexico's Hometown Associations (HTA) where remittances are sent collectively to the recipient country, and are used for a variety of local projects such as infrastructure (Orozco and Lapointe, 2004; Duquette-Rury, 2014). In addition, remittances can allow citizens to bear the costs to engage politically whether that be in civic groups or voting in elections. Pérez-Armendáriz and Crow (2010) show that remittance recipients are more likely to engage in civic groups and town meetings. Thus, remittances will engage citizens to participate politically but not necessarily engage with the state. While there are weak associations between remittances and voting, there is stronger evidence that remittance recipients are more likely to participate informally in politics such as joining community groups or conversing more about politics (Goodman and Hiskey, 2008; Bravo, 2008; Pérez-Armendáriz and Crow, 2010).

Second, remittances can decrease dependency on government goods, thus weakening clientelistic relationships. Under a patron-client relationship with the state, the citizen relies on local state officials for goods in exchange for political support. As remittances increases the disposable income for the household, the benefits of those goods are diminished. Furthermore, the migrant who is sending the remittances becomes the chief provider for the household, which undermines local officials. In this case, remittances provides an *exit* from the patron-client relationship with the state, but have consequences on potentially enhancing *voice* for the

recipients.

Third, it is more costly to buy political support from remittance recipients than from non-recipients. If local political officials wish to cater to constituents for political support, then the price for support will be higher among remittance recipients. To complicate matters, local political officials may be concerned for constituents supporting another party after providing them any type of good (Stokes, 2005; Nichter, 2008). Also, there is a threat that remittance recipients may support opposition groups to the incumbent government.

Lastly, remittances can bring with them norms and political attitudes from the sending country. Remittances represent the process that began with a household member migrating away from the home country (*exit*) and ties between family members help develop *voice*. The migrant shares experiences under a democratic country and diffuse democratic norms back home (Pérez-Armendáriz and Crow, 2010). However, these line of argument assumes that remittances are coming from democracies but they can also be sent from autocratic countries such as those in the Middle East (Ahmed, 2012).<sup>2</sup>

The democratic blessing arguments attempt to show that the inflow of remittances will lead to greater accountability, demand for goods and decline in the support for incumbent parties. Remittance recipients can afford the costs of political participation and engage with the state through civic groups or voting. Furthermore, having become politically empowered by the rise in incomes, citizens can demand more from the state beyond basic goods. If local officials do not respond, then recipients can bypass the state and use their resources to acquire public/private goods (Adida and Girod, 2011). Finally, remittance recipients can mobilize and support opposition groups if they are dissatisfied with the local incumbents. Pfutze (2012), Tyburski (2012), and Escribà-Folch, Meseguer

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<sup>2</sup>The largest source of remittances are the United States and the oil-producing countries in the Middle East. See Ratha, Mohapatra and Silwal (2011).

and Wright (2015) show that higher inflows of remittances are associated with incumbents losing power. Due to the high price of support and disintegration of clientelism, remittance recipients have the resources and potential for political change.

### 3.2.3 Remittances as a Curse

The curse arguments claim that remittances will divorce citizens from the state and allow the latter to divert resources to stay in power and become more corrupt. The inflow of remittances will lead to two important consequences within a country. First, remittances will generate a substitution effect where citizens will opt out of government services for an alternative private source. Second, the increase in remittances will lead to a larger revenue base for governments, allowing them to spend it on patronage and their own private consumption.

The inflows of remittances from abroad provide a form of *exit* for the citizens. Similar to the blessing argument, the relationship between recipient and the state will change with the inflows of funds from abroad. The curse argument diverges from the blessing argument in that citizens will only exit. Remittance recipients will not practice any *voice* against the state. Citizens are expected to opt out from government services, and use remittances to support themselves economically independent of the state.

Unlike oil and mineral wealth, the inflow of remittances go directly to citizens and not the state. The substitution effect will allow the state to divert resources away from public and welfare goods due to remittance recipients opting out. The state will then divert those funds to patronage spending to maintain power. Furthermore, the substitution effect will incentivize the state to increase its private consumption thus becoming more corrupt.

Resource curse arguments motivate the detrimental effects of remittances in

a developing country. These arguments reflect the experiences of countries dependent on oil and mineral wealth, where government revenue largely comes from these natural resources rather than from taxes paid by constituents. Therefore, the state will be less accountable to their populations since they are not reliant on tax revenue. Governments can then use these funds on patronage to maintain political support to stay in power as well as other channels that can prevent challenges to their power (Ross, 2001). Patronage spending and corruption are common features in states that depend on natural resources for revenue.

An important assumption that is made implicitly and explicitly in the curse arguments is the autocratic nature of the state. There is no mention of any accountability mechanisms for remittance recipients. The formal models by Abdih et al. (2011) and Ahmed (2012) present the state as the main political actor that decides how to allocate the budget, given that the remittance recipients will opt out. Ahmed (2012) attempts to reconcile the autocratic nature by the state by showing that given high levels of remittances, the more autocratic countries will be more corrupt. Nevertheless, the autocratic regime implies that there is no use for *voice* among the population so remittances provide only the form of *exit*.

A recent paper argues that government spending declines with remittances because recipients will favor parties who will cut taxes and spending. Doyle (2015) argues that remittances decreases government redistribution through the change in party preferences among remittance recipients. He looks at a cross-section of Latin American countries to show that remittances increase support for right-wing parties. He argues that the substitution effect will lead to a rejection of redistribution, and consequently, rejects leftist parties. However, the paper does not address whether voters are more likely to vote or not. Goodman and Hiskey (2008) and Bravo (2008) show that remittance recipients are less likely to vote because they will have less at stake in local elections. Furthermore, remittance recipients make up 5% of the population, which calls into doubt their potential to

swing election results.

### 3.2.4 Empirical Review

Just as theories disagree on the effect remittances have on politics, the empirical work on the subject also yields mixed results. The curse arguments are largely based on cross-country data using institutional measures. The works proposing the democratizing effects of remittances often rely on surveys and electoral data. While both camps offer significant findings, the analyses themselves are often limited due to a variety of issues.

Data quality is a major disadvantage when studying remittances. Most studies use country-level measures of remittance inflows provided by the World Bank's World Development Indicators. Most studies use the World Bank's country-level measures of remittances inflows. This data is provided by recipient country governments as estimates of the transfers entering the country. With remittances measured as private transfers from citizens abroad, the inflows could be underestimated as many may choose informal channels to remit. This could bias remittances downwards but longitudinally could bias it upwards. The rise in remittances that we have been seeing over the past decades can be due to improvement in data collection and increase use of official channels to send funds from abroad (Singer, 2010).

Missingness is another problem for remittances data. Many countries do not report or estimate remittances inflows. Other developing countries enter the remittances data more recently thus decreasing the time-series coverage. Thus, there can be missing remittance data both across and within countries. This adds to the difficulty in running regression analyses using remittances since the missing data reduces the leverage in attempting to estimate the effect remittances have on a dependent variable both across and within subjects. Furthermore, many

countries that receive remittance data may not be in the sample due to other missing variables.<sup>3</sup> Thus, missingness leads to concerns about bias in the sample. For example, the poorest countries in the world tend to have missing data on remittances. While it is plausible that they are receiving very low amounts of remittances as migration theories would argue, it is still a systematic bias that missing values on remittances tend to come from countries with low levels of economic development. Also, war-ravaged countries tend to have no data on remittances as they do on other indicators.

The empirical research supporting the curse argument focuses on institutional measures of corruption or autocratic regime stability. Due to the temporal limitations in data on institutional quality, Abdih et al. (2011) use cross-sectional data to show that remittances decrease institutional quality through corruption, weak regulatory systems, and rule of law. They find that higher remittances are associated with higher levels of corruption and weak rule of law. Ahmed (2012) uses longitudinal data across countries to argue that remittances sustains autocratic regimes and decrease government subsidies and transfers. While both papers use different dependent variables, they arrive at similar conclusions that remittances are detrimental to institutions.

Endogeneity is a major problem in studying remittances and many papers, including two discussed above, employ instrumental variables in attempts to estimate causal effects. Emigration necessarily precedes remittances, so a number of authors instrument for remittances to avoid the selection bias from prior emigration flows. Emigrants are not representative of the home population (Niimi and Özden, 2008; Naudé, 2010). It is possible that those who emigrated and exited the country to flee an underperforming government are the ones sending

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<sup>3</sup>From my own analysis for this paper, I find that the distribution of the key dependent variables are not significantly different between cases that report remittances to cases that do not. However, it is a major concern in the field because it is plausible that missingness can bias the sample.

remittances to help decrease the household's dependency on the government. It is not remittances breaking the patron-client relationship rather than the act of migration.

Both Abdih et al. (2011) and Ahmed (2012) use geographic variables to account for this potential endogeneity. Geography is a popular instrumental variable for much of the empirical research in remittances.<sup>4</sup> Length of the home country's coast and distance to the destination country are the instrumental variables used by Abdih et al. (2011) and Ahmed (2012), respectively.<sup>5</sup> They argue that these geographic variables can only affect political outcomes through remittances. For example, coastal area has a strong relationship with remittances and can only affect government spending through remittances. Larger coastal areas imply that the costs of migrating are lower, and that will be associated with more emigration, and consequently, more remittances later.

However, it is unclear whether instrumental variables remedy the endogeneity problem. Geography is not necessarily a major factor for migration and remittances. For example, many high emigration countries and major remittance receiving countries have shorter coasts. Longer coastlines may not correlate well with high remittances. For example, many remittance-dependent countries are quite small. Countries such as Guatemala, El Salvador and Bangladesh have small coastlines but are among the major remittance receiving countries. It is possible that the IV estimation does not pick up the effect of remittances for the most relevant cases. Overall, there is a tradeoff between scope and precision.

Instrumental variable approaches can also limit the scope of the data sample being used. In Ahmed (2012), he instruments for remittances using oil prices and distance to Mecca. The distance to Mecca accounts for the distance from

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<sup>4</sup>Clark, Hatton and Williamson (2007); McKenzie and Rapoport (2007); Abdih et al. (2011); Ahmed (2012)

<sup>5</sup>Ahmed (2012) also adds oil prices for temporal variation in his IV estimation

home countries to the gulf states, which is a major migrant destination. Oil prices account for the economic performance of the destination country. Thus, the treatment group is confined to predominantly Muslim countries of North Africa, Middle East and South Asia. The results showing that remittances strengthen autocracies ultimately relies on remittances coming out of the Gulf States. These Gulf States, which are also autocracies, have large migrant populations but the destination of remittances are not as diverse as it is for Europe and North America (Ratha, Mohapatra and Silwal, 2011). Remittances from the Gulf States largely flow to other autocratic countries and weak democracies. An implication from Ahmed (2012) is that the source of remittances may matter.

Research supporting the blessing argument largely draws on case studies in recently democratized countries. Many of the democratizing effects of remittances are based on cases where remittances come from a democratic country (Burgess, 2012). Mexico is a common case study due to its long history of migration and recent democratization. The rise of migration and remittances is often coupled with the weakening of the *Partido Revolucionario Institucional* (PRI). Remittances are seen to influence recipients' beliefs about politics and the home regime. Remittances are found to have hurt the PRI vote share in local elections because the income effect of remittances weaken the party's clientelistic hold on the population (Diaz-Cayeros, Magaloni and Weingast, 2003; Pfutze, 2012; Tyburski, 2012). Remittance recipients will find the costs of supporting political opposition to be lower since the additional income makes them less reliant on the incumbent for economic support.

On the ground, remittances have some democratizing effects on individuals and communities. Surveys are commonly used to investigate the political consequences of remittances. Goodman and Hiskey (2008) and Pérez-Armendáriz and Crow (2010) find that remittances are associated with a decrease in formal political behavior such as voting. However, remittance recipients are more likely to join



civic groups and discuss politics. Using survey data from Africa, Dionne, Inman and Montinola (2014) find that remittance recipients are more likely to engage in protest but also are less likely to vote. Remittances recipients are more likely to support democracy but there is little evidence that they will engage in the political system formally. Yet, when remittances are sent collectively and managed by hometown associations, there will be close engagement with local institutions to improve public works (Iskander, 2010; Burgess, 2012; Duquette-Rury, 2014; Chauvet et al., 2015). Remittances produce local political engagement that was absent prior to migration.

### **3.2.5 Regime Type and Remittances**

The competing scholarly work on the political consequences of remittances does not discuss with depth the importance of political context. The political regimes that remittances are entering have consequences for how the recipients and the state change their behavior. The point of departure is the substitution effect. Recipients have the option of seeking private alternatives to state goods *or* can make demands for more or higher quality goods from the state. Politically, this can be akin to abstaining from the political sphere or exploring alternatives to local incumbents.

Pessimists argue that the substitution effect from remittances will lead recipients to completely disengage with the state. Consequently, the state will respond by increasing its own consumption with patronage and corruption. What is unclear is whether the substitution effect leads to exit because recipients choose to disengage with the state or because they do not have the option to engage with the state to improve their welfare. The curse arguments imply that remittances are cursed under polities that are not democratic.

Autocratic regimes limit the capacity for voice, which makes exit a better op-

tion for remittance recipients. The costs of practicing voice in autocratic regimes is high. Remittances can decrease the costs of political participation, but such costs would still remain high in an autocratic context. Furthermore, the risk of repression is much higher. If there is a private market for goods, then we should expect the substitution effect to increase the likelihood of exit. With the increase of income, citizens may no longer feel empathy for the local government and may choose to be economically autonomous.

The optimistic arguments on remittances discuss the democratizing effects from the increased income. The substitution effect is not one where the recipient is choosing an alternative to the political sphere. For the optimists, the increased income from remittances will lower the costs of political participation. Recipients will exit from the patron-client relationship, but there is the possibility of a different kind of a relationship.

Democracies have channels for citizens to engage with the state and hold officials accountable. The costs of political participation is relatively lower in democracies than in autocracies and remittances will further assist in decreasing those costs. Also, political participation is manifested in different forms such as voting, meeting with local officials, and joining civic groups. The substitution effect in the local democracy will not necessarily lead to an exit. While remittance recipients do have the option of substituting government goods and services with the private market, it is also reasonable that recipients demand more from government. Demands could range from an improvement in quality of those services or an increasing quantity of government goods.

At the local level, officials will have adequate information about how remittances affect their locality economically and politically, thus allowing governments to behave in a way that responds to voters. Local officials will prefer to benefit from remittances than to do nothing. For example, if local government officials ignore the demands of remittance recipients, then that could allow opposition

parties an opportunity to grab support from a group of voters with newfound resources. Local government officials may also seek to tap into extracting remittance income as rents. Remittances can stimulate the local economy and state officials can benefit from increased revenues. Thus, incumbents have an incentive to engage with remittance recipients themselves.

However, many recipient countries occupy an intermediate space between democracy and autocracy. The curse and blessing theories on remittances assume that recipient countries are fully functioning autocracies or democracies. Many developing countries have experienced democratization over the past thirty years. Figure 3.1 shows the changes in the distribution of political regimes in the developing world. In the 1980s, the majority of developing countries were considered autocratic. As recent as 2010, nearly half of the developing countries were classified as democracies with less than 20% being autocratic. At least one-quarter of developing countries in 2010 were in the intermediate range where they are classified as either semi-democratic or semi-autocratic.

While a large amount of remittances flow into democracies, a significant portion are sent to the intermediate regimes. Figure 3.2 presents a stacked chart of remittance inflows over time in developing countries. Remittances have rapidly increased since the 1990s with democracies seeing the highest growth. Figure 3.3 shows the proportion of global remittances that flow in each of the three regime categories. The pattern is similar to Figure 3.1. Over time, remittances are flowing more into democracies than autocracies, but a significant portion flow into those intermediate regimes.

What will the substitution effect from remittances look like in these intermediate regimes? Will remittances enhance voice or exit? Also, how will states respond? Remittances can still provide households with resources to pursue alternative options to government goods. The increased income can weaken clientelistic ties. However, the democratic channels to exercise voice may not be sufficient

for remittance recipients to make demands on the state. The low-quality democratic institutions does not necessarily mean that exit is the best option. It is in weak democracies where remittances have led to improvement in demands for accountable government Burgess (2012). The intermediate regimes can also be soft autocracies where remittances will not necessarily lead to exit. Remittances can cultivate voice with the few channels where citizens can engage with local state officials. It is unclear how citizens and the state will respond with inflows of remittances.

The state recognizes that remittances are valuable in that the additional income stimulates local economies with potential to extract rents. Remittances can also free up revenue from public spending or targeted spending. In the intermediate regimes, how will the state react to the inflow of remittances? Will recipient governments assume that recipients will opt out of public services or should they be concerned about being undermined?

Figure 3.1: Proportion of Regime Types Across Developing Countries

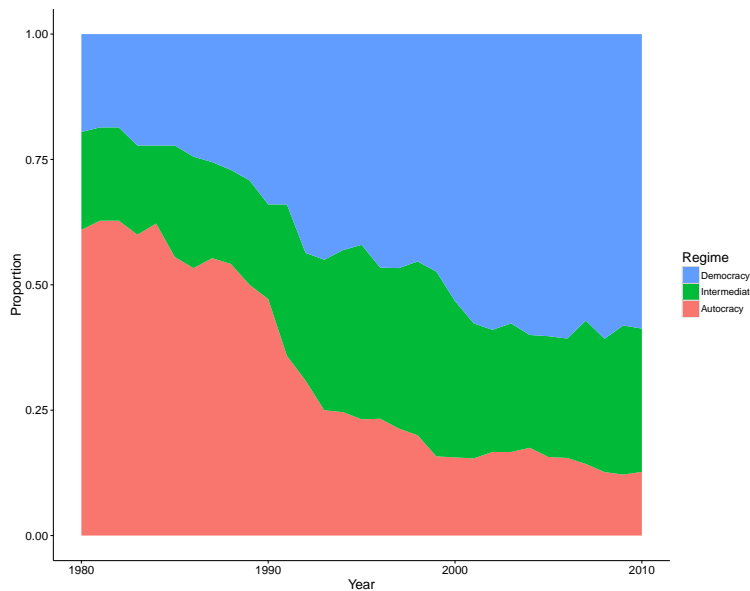


Figure 3.2: Global Share Remittances By Regime Types (1980-2010)

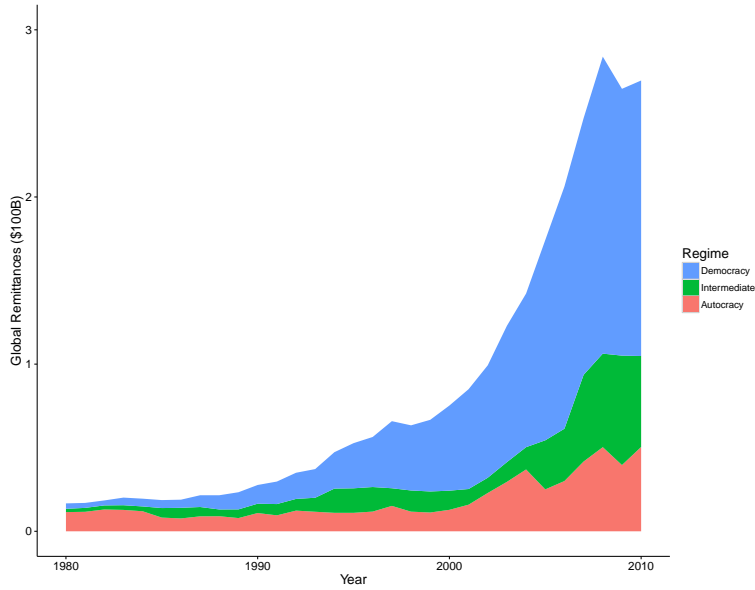
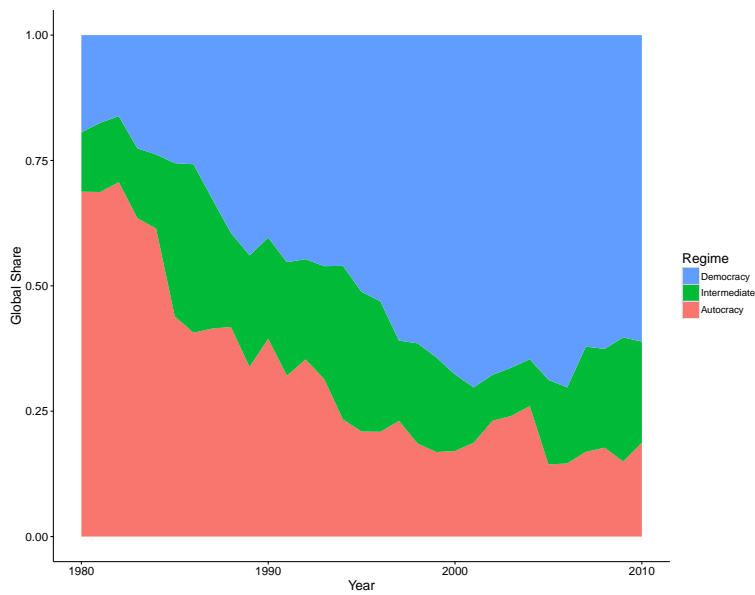


Figure 3.3: Global Share of Remittances by Regime Type (1980-2010)



### **3.3 Remittances and Government Spending Across Regime Type**

This paper will bridge the opposing theories on remittances and politics. I will test and compare the effect of remittances on government spending both across and within countries of different regime types. Previous papers tend to control for political contexts such as corruption and rule of law but there is no comparison across regime types. The outcome of interest will be government spending on education, health and social protection. Spending variables can be collected across different types of regimes and over time. Conditional on the regime type, will an increase in remittances lead to an increase in government spending in these sectors? If they are positively correlated, that would it supports the idea that remittances influence governments to spend on citizens who have a higher possibility of supporting opposition. However, citizens practicing voice cannot be easily observed. If remittances lead to decreases in spending, then that illustrates how governments divert resources away from citizens, assuming they are substituting government goods for private alternatives.

Remittance inflows will be the explanatory variable and I will assume that remittances flow directly to the individual. Governments do not tax remittances directly and have some knowledge about the amount of remittances entering the country. The increased income from remittances will allow households to cover basic necessities and give them the options to pursue private alternatives. Also, the marginal utility of state-provided goods, whether targeted or public, will be reduced after receiving remittances (Escribà-Folch, Meseguer and Wright, 2015). However, it is not a given that remittance recipients will opt out from their relationship with the state. Remittance recipients will have the choice to exercise voice or exit vis-à-vis the state.

Remittances will interact with the recipient country's political regime in their

effect on government spending. There are three types of regimes in this analysis: autocratic, intermediate, and democratic. Autocratic regimes are those where the state suppresses or restricts political competition, and the ruling power has very few constraints. Democratic regimes are characterized as those where citizens can express preferences to leaders and where competitive elections are common. The intermediate regimes are those that contain some elements of both democratic and autocratic regimes. They may have democratic institutions but in practice that may not lead to citizens exercising voice. There could be nominally democratic institutions accompanied by autocratic behavior from government leaders and officials.

In an autocratic regime, an increase in remittances should decrease government spending. Assuming that remittances will generate pressures to exit, citizens will not be capable to express grievances to the state. Remittance recipients will disengage with the state and pursue alternative options to government goods and services. Consequently, revenues should be freed up for governments to divert them to more patronage goods. Furthermore, autocratic governments will decrease spending on their citizens.

Under democratic regimes, increasing remittances should lead to increases in government spending. The increased income from remittances will decrease the cost of political participation. Recipients will have a choice between utilizing exit or voice. An increase in remittances can lead recipients to engage with the state demanding more goods and/or higher quality services. Governments, concerned with potential opposition support from remittance recipients, may spend to avoid stronger electoral opposition.

The expected effect of remittances on government spending in intermediate regimes is unclear. These intermediate regimes have room for voice but can be constrained. The costs of political participation are higher than they would be in a democracy, but the pressures to exit may not be as great as they would be in under

an autocratic regime. Remittances will decrease the costs of political participation, but will remittance recipients engage with the state? As long as there is a channel to express preferences and grievances, then we should expect government spending to respond positively to increases in remittances. Governments will prefer to avoid any opposition groups gaining more support, especially from remittance recipients who rely on economic support from abroad. However, the constraints to voice may be so high that exit is the better option.

### 3.4 Data & Methods

The dataset contains country-level data for 95 developing countries spanning 1980 to 2010.<sup>6</sup> The dependent variables on government spending are from the Statistics of Public Expenditure for Economic Development (SPEED) at the International Food Policy Research Institute (IFPRI). The independent variables used in the regression analysis are from the World Bank's World Development Indicators, the Polity IV Project and other sources.

The public expenditure data from IFPRI (2013) provides a comprehensive data set on government spending in multiple sectors. The data contains information on total public expenditures, education, health and social protection among others. This paper will use total public expenditures, public health, public education and social protection spending as dependent variables. The definition for each of these sectors are based in the IMF's Government Finance Statistics Manual 2001 (IMF 2001). Social protection spending is in the form of social benefits given from the government to assist households from circumstances that adversely affect its income (IMF 2001: 18). Total expenditure incorporates many sectors such as education, health, social protection, infrastructure and defense. IFPRI uses a

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<sup>6</sup>Developing countries are those that are not high-income OECD countries in Western Europe, United States, Canada, Australia and New Zealand. Countries with populations under 1 million are excluded.



combination of sources to compile the data set mainly relying on the Government Financial Statistics Yearbook by the IMF and specific reports from national statistical offices. To expand the data coverage, IFPRI utilizes interpolation techniques to impute missing data (IFPRI 2013).

These spending variables are in per capita terms for comparability and will be logged for the regression analysis due to skewness. Table 3.1 presents the summary statistics for the government spending variables in per capita terms as well as the log transformations of the corresponding variables. Figure 3.4 shows the distribution of log-transformed variables accounting for the skewness of the original measures. Public education spending is partially higher than public health spending in the sample but the latter has larger variation. Social protection has multiple modes and has the widest variation of the three.

Table 3.1: Summary Statistics: Government Expenditures

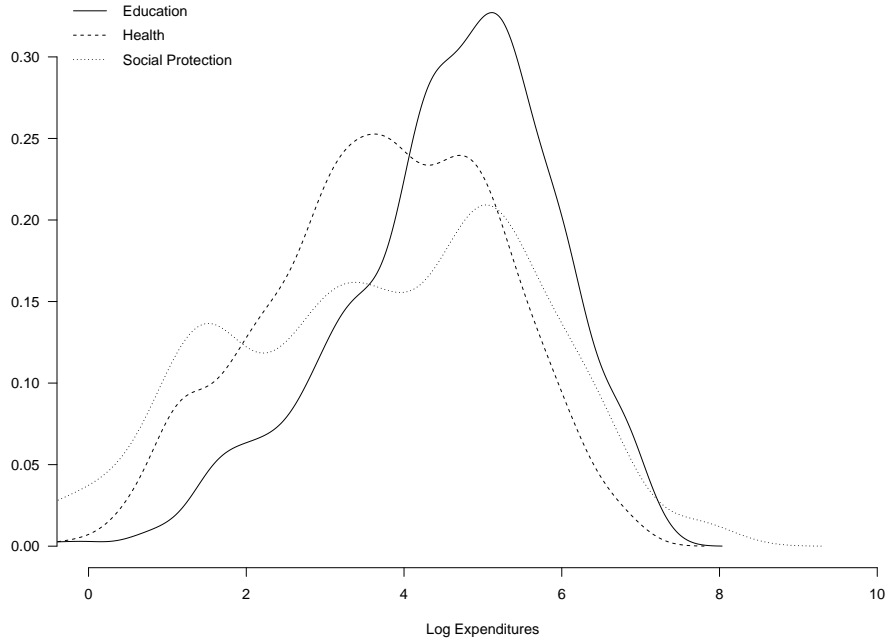
|                   | N    | Mean   | SD     | Min   | Median | Max     |
|-------------------|------|--------|--------|-------|--------|---------|
| <hr/>             |      |        |        |       |        |         |
| Per Capita        |      |        |        |       |        |         |
| Health            | 1576 | 98.30  | 140.71 | 0.12  | 44.53  | 990.98  |
| Education         | 1621 | 190.76 | 224.27 | 0.50  | 114.26 | 1404.94 |
| Social Protection | 1596 | 167.23 | 340.96 | 0.00  | 45.19  | 3184.62 |
| <hr/>             |      |        |        |       |        |         |
| Log               |      |        |        |       |        |         |
| Health            | 1576 | 3.71   | 1.46   | -2.12 | 3.80   | 6.90    |
| Education         | 1621 | 4.56   | 1.33   | -0.69 | 4.74   | 7.25    |
| Social            | 1596 | 3.65   | 2.00   | -2.30 | 3.81   | 8.07    |

Note: Values in US dollars.

Source: IFPRI (2013).

The key variable of interest is the total inflow of remittances per capita for each country-year from the World Development Indicators. As noted above, common problems in cross-national remittances data among developing countries are the potential for significant measurement error and missingness. One reason for the lack of data is the difficulty in tracking remittances. The World Bank's remittance data does not capture international transfers through unofficial channels, which

Figure 3.4: Government Expenditures by Sector



Note:

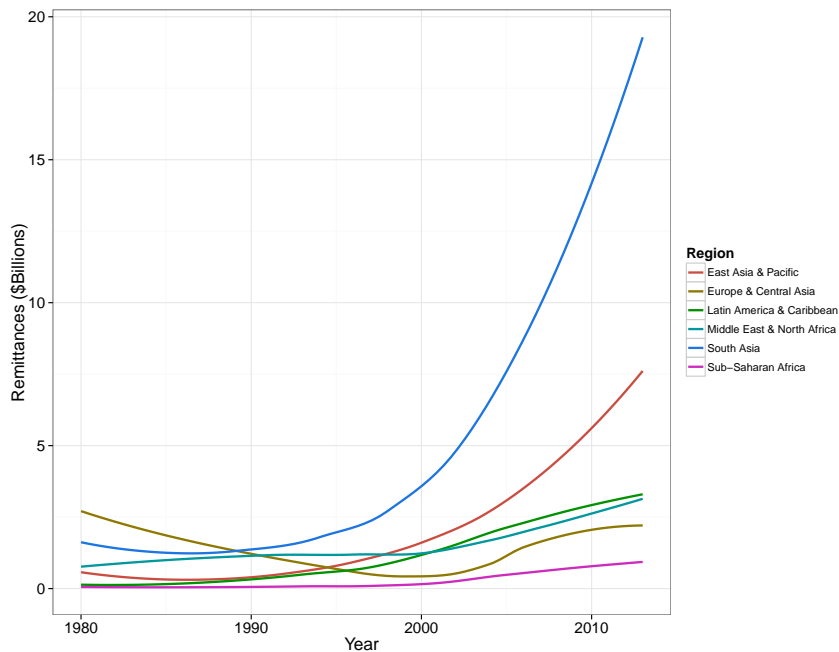
Densities of log spending by sector.

make up a large proportion of remittance flows. The volume of remittances to the developing world have been rising rapidly over the last twenty years but a major part of this increase could be due to shifts from unofficial to official transfers (Singer, 2010, 314). The development of financial institutions and expansion of banking in poor countries could account for a portion of this increase (Giuliano and Ruiz-Arranz, 2009). Nonetheless, the World Bank data are the best available for a country-level panel analysis of remittances. They provide the best measure to compare remittances inflows across time and between countries. Acosta et al. (2012) find that country-level estimates of remittances using these data correlate well with household survey estimates of remittance inflows despite discrepancies between the measures. Any issues with World Bank data should be fairly constant across countries and regime type.

Remittances have increased over the past three decades with some regions

experiencing more rapid growth in inflows. Figure 3.5 displays the time trends for remittances per capita by region. Latin America began to see major increases in remittances in the 1990s and continued into the turn of the century. North Africa and the Middle East region, along with Europe and Central Asia, saw major increases in remittances after 2000. Sub-Saharan Africa and South Asia has seen major increases in remittances in the past two decades, but remains lower than other regions in per capita terms. While China and India are the largest recipients in remittances in absolute terms, smaller but major migrant-sending countries like El Salvador and Jamaica have the highest remittance inflows in per capita terms in 2010. Since 1990, the top 10 countries with the largest increases in remittances per capita include countries in Latin America (El Salvador, Mexico, Guatemala), Sub-Saharan Africa (Senegal, Nigeria) and the Middle East and North Africa (Jordan, Tunisia, Morocco) (Ratha, Mohapatra and Silwal, 2011). Due to the skewness of the distributions, remittances per capita will be logged in the regression analysis.

Figure 3.5: Remittances per Capita by Region



Source: World Bank.

Note: Uses World Bank's classification of regions  
Appendix shows plot that excludes South Asia.

Polity scores will be used to proxy for regime type.<sup>7</sup> The first set of regression models will use polity as a continuous variable. I recoded the Polity scores into non-negative integers where higher numbers translate to stronger democracies.<sup>8</sup> In the models with interaction effects between regime type and remittances, I condense polity into three categories. Polity scores less than 7 are categorized as autocratic, and scores of 17 or higher as democratic. Using a categorical variable allows for easier interpretations of the interaction results and allows us to distinguish the role regime plays in the relationship between remittances and government spending. Scores between 7 and 1 are categorized as intermediate regimes, which are those that are semi-autocratic and semi-democratic. This leaves the sample with 577 autocratic country-years, 873 democratic country-years and 510 country-years of the intermediate type.

Table 3.2 shows the mean values of remittances and the dependent variables by regime. We see that democratic regimes receive the most remittances on average and also have the highest spending in each of the three categories. While autocracies receive the lowest amount of remittances on average, they spend less than democracies but more than intermediate regimes.

Table 3.2: Mean Public Expenditures by Regime Type

|              | Remittances | Health | Education | Social Protection |
|--------------|-------------|--------|-----------|-------------------|
| Autocracy    | 31.66       | 66.45  | 160.10    | 77.97             |
| Intermediate | 52.03       | 56.20  | 153.76    | 83.97             |
| Democracy    | 86.29       | 148.61 | 254.32    | 287.03            |

Note: Values in US dollars.

Source: IFPRI (2013).

The regression models will incorporate control variables that could influence government spending as well as remittance inflows. Many of the economic control

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<sup>7</sup>Polity scores measures how democratic (and autocratic) a country is. Scores are based on evaluations on electoral competitiveness and openness, and constraints on executive authority.

<sup>8</sup>The recoded Polity scale goes from 1 (very autocratic) to 21 (very democratic). The original scale goes from -10 to +10.

variables are from the World Development Indicators. Total population and urban population are taken from the United Nations Population Division. Tax revenue is included to account for state capacity to collect and redistribute resources.<sup>9</sup> I control for government institutional quality by including corruption control from the World Governance Indicators (Kaufman2010, World Bank 2015). Oil export value is from Ross (2013) to capture the effect of rentier states.<sup>10</sup> Regime durability is included in the analysis to account for how consolidated a regime is. I assume that stable regimes tend to be more capable of distributing public goods.

Table 3.3: Summary Statistics: Explanatory and Control Variables

|                            | N    | Mean  | SD     | Min    | Median | Max     |
|----------------------------|------|-------|--------|--------|--------|---------|
| Remittances per Capita     | 1976 | 58.74 | 124.77 | 0      | 16     | 1715.35 |
| Log Remittances per Capita | 1976 | 2.48  | 2.18   | -6.31  | 2.77   | 7.45    |
| Polity                     | 1960 | 12.66 | 6.64   | 1      | 15     | 21      |
| Corruption Control         | 881  | -0.41 | 0.57   | -1.73  | -0.47  | 1.55    |
| Log GDP per Capita         | 1928 | 7.25  | 1.09   | 4.74   | 7.25   | 10.10   |
| Log Population             | 1976 | 2.69  | 1.50   | -0.02  | 2.53   | 7.19    |
| Trade (% GDP)              | 1942 | 69.86 | 37.52  | 0.31   | 62.29  | 220.41  |
| Aid (% GDP)                | 1897 | 4.94  | 6.81   | -0.66  | 1.96   | 94.91   |
| FDI (% GDP)                | 1929 | 2.71  | 4.26   | -28.62 | 1.53   | 50.97   |
| Urban Population (%)       | 1976 | 44.73 | 20.62  | 8.22   | 44.49  | 94.21   |
| Log Oil Export Value       | 1453 | 6.91  | 0.12   | 5.82   | 6.91   | 8.40    |
| Tax Revenue (% GDP)        | 903  | 15.39 | 7.49   | 0.91   | 14.43  | 61.02   |
| Regime Years               | 1960 | 16.44 | 16.43  | 0      | 11     | 91      |

I will use an OLS regression model with country-fixed effects and time fixed-effects to estimate the relationship between remittances and government spending along with the interaction between remittances and regime type. The country fixed-effects will control for time-invariant characteristics for each country in the sample. All the independent variables are lagged by one year to account for reverse causation. I account for time using time fixed-effects.<sup>11</sup> As a robustness

<sup>9</sup>Tax revenue as a share of GDP reduces the sample because the data series begins in 1990.

<sup>10</sup>I added 1000 to the original value before logging. Thus, a value of 3 means that a country has a net oil export value of zero.

<sup>11</sup>Results are consistent when using a linear time trend.

check, clustered standard errors at the country level are used and reported in the appendix. Due to the imbalance in the data, the standard errors almost triple in size compared to non-clustered estimates, and yields null results for nearly all the explanatory variables.

To account for potential endogeneity, I also use an instrumental variable approach. As noted above, Remittances could be endogenous to government spending because it is possible that low levels of government spending can motivate emigration, which can lead to rising remittances later. I will use a two-stage least squares method using geographic instruments. Similar to Abdih et al. (2011), I will use coastal area of a country defined as the ratio of the area within 100 kilometers from a sea or an ocean to the total area of the country to instrument for remittances. Even though geography is time-invariant, I argue that it is still a viable instrument for remittances since the rankings of remittances per capita across countries rarely changes.

## **3.5 Results**

### **3.5.1 Baseline Results**

Table 3.4 presents the baseline results for remittances and government spending without any interactions. Remittances are not shown to have any relationship with government spending across the difference sectors. The covariates in the model yield significant results. On average, democracies will spend 1.2% and 3% more on education and health than autocracies, respectively. Unlike remittances, the other covariates yield consistent results across sectors. Greater corruption control is associated with greater spending. GDP per capita has positive effects across education, health and social protection. In particular, a 10% increase in GDP per capita leads to nearly a 10% increase in education and health spending. Urban population negatively affects spending in each of the three sectors. Tax

revenue as a share of GDP is positively associated with education but not with the other sectors.

Table 3.4: Baseline Results

|                            | Education            |                     | Health               |                     | Social Protection    |                      |
|----------------------------|----------------------|---------------------|----------------------|---------------------|----------------------|----------------------|
|                            | (1)                  | (2)                 | (3)                  | (4)                 | (5)                  | (6)                  |
| Constant                   | -4.240***<br>(1.492) | -3.012*<br>(1.758)  | -3.299*<br>(1.770)   | -2.941<br>(2.765)   | -6.742**<br>(2.886)  | -7.445*<br>(4.026)   |
| Log Remittances per Capita | 0.010<br>(0.014)     | 0.028*<br>(0.015)   | 0.0005<br>(0.016)    | -0.016<br>(0.024)   | -0.042<br>(0.026)    | -0.028<br>(0.035)    |
| Democracy                  | 0.121*<br>(0.071)    | 0.130**<br>(0.060)  | 0.304***<br>(0.087)  | 0.408***<br>(0.095) | 0.094<br>(0.137)     | 0.181<br>(0.136)     |
| Intermediate               | -0.034<br>(0.067)    | 0.027<br>(0.057)    | 0.065<br>(0.084)     | 0.087<br>(0.093)    | 0.019<br>(0.130)     | -0.116<br>(0.130)    |
| Corruption Control         | 0.076<br>(0.057)     | 0.153**<br>(0.059)  | 0.300***<br>(0.068)  | 0.511***<br>(0.093) | 0.024<br>(0.110)     | 0.298**<br>(0.135)   |
| Log GDP per Capita         | 1.325***<br>(0.156)  | 1.040***<br>(0.172) | 1.338***<br>(0.185)  | 1.248***<br>(0.270) | 2.134***<br>(0.301)  | 2.152***<br>(0.395)  |
| Trade                      | 0.002*<br>(0.001)    | 0.0005<br>(0.001)   | 0.003*<br>(0.001)    | 0.0002<br>(0.002)   | 0.009***<br>(0.002)  | 0.008***<br>(0.003)  |
| Foreign Aid                | -0.004<br>(0.004)    | 0.004<br>(0.004)    | -0.002<br>(0.005)    | -0.002<br>(0.006)   | -0.004<br>(0.009)    | -0.005<br>(0.008)    |
| FDI                        | -0.005<br>(0.004)    | -0.001<br>(0.004)   | -0.003<br>(0.005)    | -0.001<br>(0.007)   | 0.021**<br>(0.008)   | 0.048***<br>(0.010)  |
| Urban Population           | -0.017*<br>(0.009)   | -0.016<br>(0.011)   | -0.033***<br>(0.011) | -0.031*<br>(0.017)  | -0.053***<br>(0.017) | -0.066***<br>(0.025) |
| Oil Export Value (Log)     | -0.143<br>(0.120)    | -0.094<br>(0.113)   | -0.182<br>(0.143)    | -0.131<br>(0.177)   | -0.359<br>(0.233)    | -0.187<br>(0.256)    |
| Regime Years               | 0.003<br>(0.002)     | 0.002<br>(0.002)    | 0.001<br>(0.003)     | -0.001<br>(0.003)   | -0.021***<br>(0.005) | -0.023***<br>(0.005) |
| Tax Revenue                |                      | 0.014***<br>(0.005) |                      | 0.011<br>(0.008)    |                      | -0.012<br>(0.011)    |
| Observations               | 653                  | 451                 | 650                  | 450                 | 650                  | 448                  |
| R <sup>2</sup>             | 0.959                | 0.979               | 0.950                | 0.958               | 0.943                | 0.960                |

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country and time fixed-effects



### 3.5.2 Interaction Effects

Higher remittances are associated with higher education spending but the relationships with health and social protection spending is conditional on regime type. Remittances positively affect education spending in autocracies while the relationship is weak in intermediate and democratic regimes. Columns 1 and 2 in Table 3.5 and Figure 3.6 present the results for education as the dependent variable. Even though there is a positive and statistically significant effect for remittances in autocracies, the substantive increase in education is small as a 10% increase in remittances yield an increase of 0.1% in education spending. Figure 3.6 shows a rising slope under autocracies whereas the other regimes are flat. However, the increase along the range of remittances is a 1.5% increase log-units of education spending per capita. Autocracies that receive large volumes of remittances are likely to spend more on education than those autocracies that receive very little.

I find that remittances has a negative relationship with public health spending, especially in autocracies. Columns 3 and 4 in Table 3.5 shows that the interaction effects with regime also have significant effects on health. Remittances have a strong negative effect on health spending in autocracies where a 10% increase in remittance inflows leads to a 3% decline in spending in that sector. The interactions with intermediate and democratic regimes are positive and statistically significant. Figure 3.7 shows that the positive interactions weakens the negative effect from autocracies. Remittances seem to have a neutral effect in democratic regimes and a slightly negative effect in intermediate regimes.

Social protection as a dependent variable yields similar results as health spending. According to Column 6, Table 3.5, a 10% increase in remittances will lead to a 3% decline in social protection spending in autocratic countries. The positive interactions for intermediate and democratic regimes suggests a weakening of the

effect. Figure 3.8 shows that remittances have a smaller and negative effect in intermediate and democratic regimes than in autocratic regimes.

These results show that remittances affects different sectors of government spending in different ways. The interactions with regime suggests the influence that income from abroad can have on government spending. The negative relationship between remittances and spending on health and social protection in autocracies may underscore a substitution effect. Recipients in autocracies choose to opt out from government goods, thus freeing up resources for the state. The findings support the curse arguments for autocracies but not for democracies or intermediate regimes.

The effect of remittances on education spending contrasts with the other sectors in autocracies. Demographic reasons may explain the positive relationship between remittances and education in autocracies. Migrants tend to be of prime working age and remittances are often used for education expenses. At the same time, governments may be incentivized to spend more on education to accumulate human capital for greater economic gains in the future (Batista, Lacuesta and Vicente, 2012). Governments may meet the demands of recipients to facilitate education expenses and investment for them. Increasing education can perhaps lead exporting a higher skilled labor force. High-skill emigrants have been shown to create new sources of foreign-direct investment and develop transnational business links with the home country (Leblang, 2010).

There is a milder effect of remittances on health and social protection spending in democracies. It could be the case there is decreasing demand for health and social protection, but democratic governments may not be diverting resources away from those sectors as much. The relationship between remittances and spending may be small due to a ceiling effect, as democracies spend more on their citizens than autocracies do on average.

When examining the intermediate regimes, there is some support for the idea

that remittances can be a curse when governments are not fully democratic. Intermediate regimes may suffer from weak government services and poor accountability. The negative association between remittances and public health spending may underscore a substitution effect. Remittance recipients are perhaps likely to seek private health options if government services are deemed insufficient or non-responsive. As for social protection, it is probably the case that remittances eases the stress for governments to provide social protection.

The results support other work that finds increasing exposure to globalization, trade openness and capital flows will lead to a decline in spending in autocratic regimes (Rudra and Haggard, 2005; Rudra, 2002; Kaufman and Segura-Ubiergo, 2001). Remittances are just as relevant as trade and foreign-direct investment as forces of globalization that influence government spending. However, the effects of remittances are not as direct since these transfers are private and not directly taxed. Nevertheless, the results suggest that greater emigration and remittances has consequences on fiscal policies.

Table 3.5: Remittances and Regime Type Interaction Results

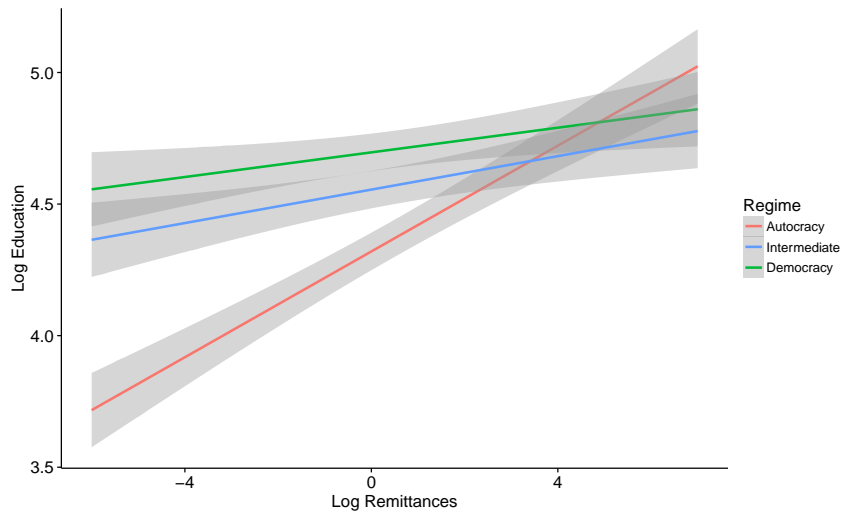
|                          | <i>Dependent variable:</i> |                    |                      |                      |                      |                      |
|--------------------------|----------------------------|--------------------|----------------------|----------------------|----------------------|----------------------|
|                          | Education                  |                    | Health               |                      | Social Protection    |                      |
|                          | (1)                        | (2)                | (3)                  | (4)                  | (5)                  | (6)                  |
| Constant                 | -4.240***<br>(1.494)       | -3.091*<br>(1.759) | -2.993*<br>(1.733)   | -2.717<br>(2.670)    | -6.486**<br>(2.868)  | -7.225*<br>(3.986)   |
| Log Remittances          | 0.038<br>(0.049)           | 0.100**<br>(0.047) | -0.286***<br>(0.062) | -0.362***<br>(0.075) | -0.315***<br>(0.093) | -0.346***<br>(0.106) |
| Intermediate             | 0.089<br>(0.156)           | 0.235<br>(0.155)   | -0.745***<br>(0.211) | -0.816***<br>(0.261) | -0.759**<br>(0.299)  | -0.989***<br>(0.350) |
| Democracy                | 0.183<br>(0.163)           | 0.377**<br>(0.164) | -0.676***<br>(0.213) | -0.888***<br>(0.263) | -0.758**<br>(0.314)  | -0.931**<br>(0.370)  |
| Remittances×Intermediate | -0.043<br>(0.049)          | -0.069<br>(0.048)  | 0.262***<br>(0.063)  | 0.289***<br>(0.078)  | 0.269***<br>(0.094)  | 0.288***<br>(0.107)  |
| Remittances×Democracy    | -0.024<br>(0.048)          | -0.077<br>(0.047)  | 0.307***<br>(0.062)  | 0.388***<br>(0.075)  | 0.283***<br>(0.093)  | 0.344***<br>(0.107)  |
| Observations             | 653                        | 451                | 650                  | 450                  | 650                  | 448                  |
| R <sup>2</sup>           | 0.959                      | 0.980              | 0.952                | 0.961                | 0.943                | 0.961                |

*Note:* \* p<0.1; \*\* p<0.05; \*\*\* p<0.01

All models include country and time fixed-effects

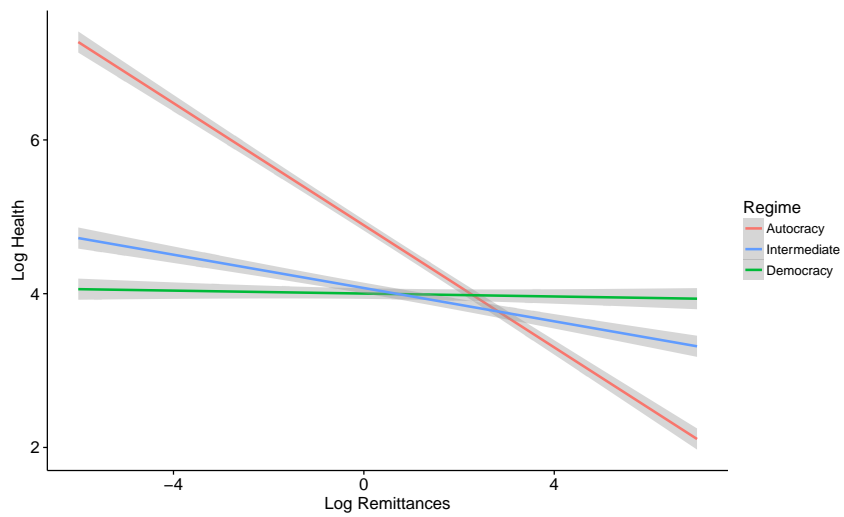
Full results reported in the appendix

Figure 3.6: Remittances and Predicted Education Spending



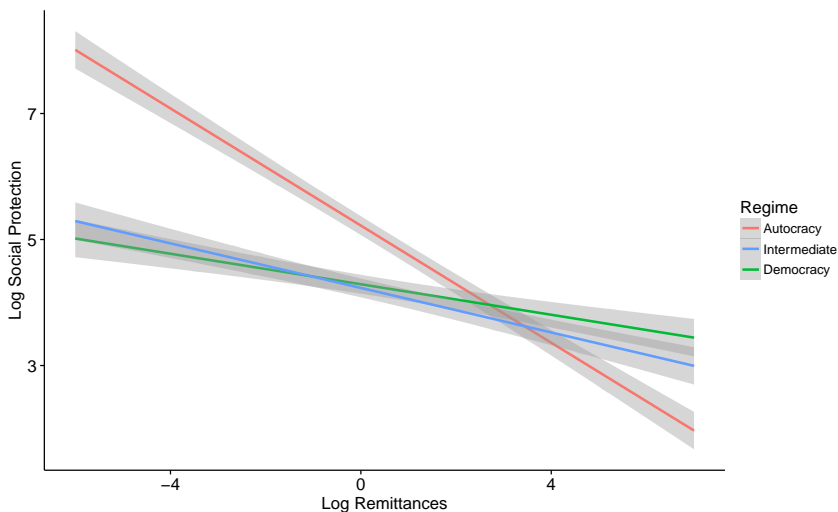
Note: Shaded regions represent 95% confidence intervals

Figure 3.7: Remittances and Predicted Health Spending



Note: Shaded regions represent 95% confidence intervals

Figure 3.8: Remittances and Predicted Social Protection Spending



Note: Shaded regions represent 95% confidence intervals

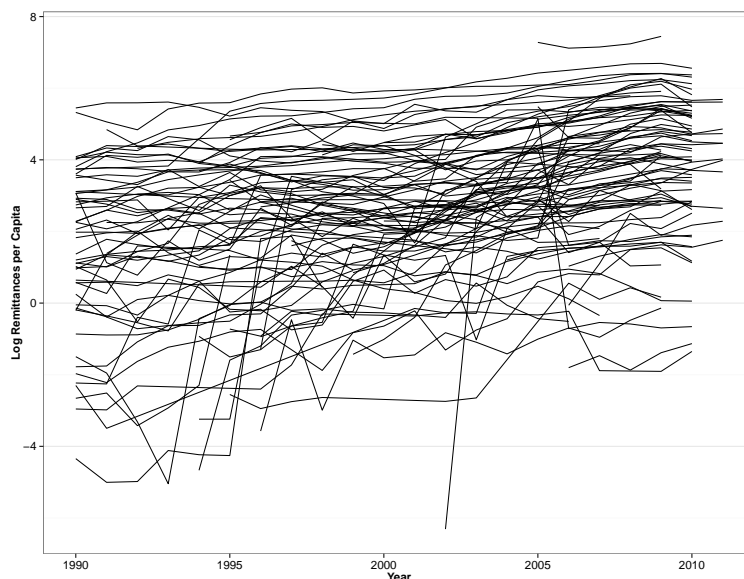
### 3.5.3 Instrumental Variable Analysis

I use an instrumental variable approach as a robustness check for the correlations seen in the previous section. I use coastal area as a geographic instrument for remittances. Coastal area measures the share of land within 100 kilometers of ice-free sea or ocean, excluding rivers (CID 2001). I follow the example from Abdih et al. (2011) where they use coastal area to instrument for remittances. When instrumenting remittances with geography, the effect of remittances on government spending should be interpreted as the local average treatment effect (Angrist and Pischke, 2008). The coefficients in the two-stage least squares regression are measuring the effect of remittances, whose level is influenced by coastal area, on the spending variables. This will narrow the scope of the analysis in an attempt to remedy endogeneity.

One concern for using geography as an instrument in this analysis is the time-invariant nature of the variable. Coastal area does not vary over time so including it as an instrument in a longitudinal analysis is akin to adding a fixed-effect. Ideally, one would like an instrument that has temporal variation. Using geography

may still be suitable in this longitudinal framework since those countries receiving the largest inflows of remittances tend to remain the highest receiving countries through the time period of the sample. Figure 3.9 presents a profile plot of log remittances by country since 1990. There are similar growth trends across nearly all the countries and very few countries with sudden changes in the log-unit of remittances. In other words, the ranking of countries receiving remittances per capita (in log units) does not change all that much in the profile plot in Figure 3.9.

Figure 3.9: Profile Plot: Log Remittances per Capita



Note: Each line represents one country in the sample.

I use a two-stage least squares regression using the same control variables as the previous models but with minor changes to the models. The two-stage least squares regression was not possible with the inclusion of country or time fixed-effects. As the next best option, I incorporate region fixed-effects and a linear time trend. The covariates in the first-stage regressions are included in the second-stage regressions to avoid bias in the estimates (Angrist and Pischke, 2008, 188-190) .

Table 3.6 shows the first-stage regression results in the first column and the second-stage results for each spending variable in columns 2-4. Coastline has a strong and positive relationship with remittances. The Wald Test comparing

models with and without coastline returns an F-statistic of 20, a strong signal that coastline is a good instrument. After instrumenting for remittances, the two-stage least squares regression yields negative results for all three spending categories. The decrease in spending from remittances is strongest in health and social protection where they decline by at least 5% for a 10% increase in the instrumented remittance inflows. The instrumental variable analysis produces a strong negative association between remittances and education spending. Ahmed (2012) argues that changes in the remittance coefficients in two-stage least squares can be attributed to measurement error. The change in the result may also do with the predicted values for remittances from the first-stage.



Table 3.6: Two-Stage Least Squares Regression Results

|                            | First Stage          |                      | Second Stage         |                      |
|----------------------------|----------------------|----------------------|----------------------|----------------------|
|                            | Remittances          | Education            | Health               | Social Protection    |
|                            | (1)                  | (2)                  | (3)                  | (4)                  |
| Constant                   | 6.656**<br>(2.720)   | 2.667<br>(1.720)     | 2.447<br>(2.230)     | 4.752<br>(3.008)     |
| Coastline                  | 1.275***<br>(0.243)  |                      |                      |                      |
| Log Remittances per Capita |                      | -0.385***<br>(0.119) | -0.571***<br>(0.154) | -0.566***<br>(0.185) |
| Democracy                  | 0.831***<br>(0.218)  | 0.611***<br>(0.181)  | 0.858***<br>(0.235)  | 0.743**<br>(0.307)   |
| Intermediate               | 0.315<br>(0.215)     | 0.268**<br>(0.136)   | 0.603***<br>(0.177)  | 0.657***<br>(0.234)  |
| Corruption Control         | -0.657***<br>(0.144) | 0.095<br>(0.140)     | 0.059<br>(0.183)     | 0.112<br>(0.233)     |
| Log GDP per Capita         | 0.250*<br>(0.134)    | 0.765***<br>(0.102)  | 1.124***<br>(0.133)  | 0.957***<br>(0.174)  |
| Trade                      | 0.010***<br>(0.002)  | 0.013***<br>(0.002)  | 0.013***<br>(0.003)  | 0.006*<br>(0.003)    |
| Foreign Aid                | -0.012<br>(0.013)    | -0.007<br>(0.008)    | 0.008<br>(0.010)     | -0.033**<br>(0.014)  |
| FDI                        | 0.032*<br>(0.017)    | -0.009<br>(0.013)    | 0.029*<br>(0.017)    | 0.088***<br>(0.023)  |
| Urban Pop.                 | -0.025***<br>(0.006) | -0.026***<br>(0.005) | -0.029***<br>(0.006) | -0.034***<br>(0.008) |
| Oil Export Value (Log)     | -1.637***<br>(0.413) | -0.769**<br>(0.314)  | -1.359***<br>(0.407) | -1.399***<br>(0.533) |
| Regime Years               | -0.003<br>(0.004)    | 0.005*<br>(0.003)    | -0.0003<br>(0.004)   | 0.005<br>(0.005)     |
| Tax Revenue                | 0.033***<br>(0.011)  | 0.019***<br>(0.007)  | 0.016*<br>(0.009)    | -0.009<br>(0.012)    |
| Observations               | 548                  | 451                  | 450                  | 448                  |
| R <sup>2</sup>             | 0.465                | 0.804                | 0.800                | 0.699                |

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Models include quadratic time trend and region fixed-effects

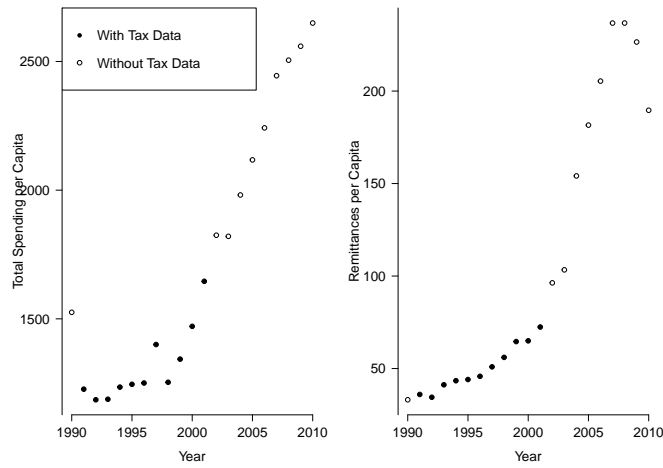
### 3.5.4 Limits of the Analysis

Despite some evidence for the role of remittances and regime type in explaining public spending, the analysis in the previous section is limited. The missing data reduces the number of observations for each country. Adding relevant control variables such as tax revenue reduces the N in the regression. This leads to a reduction in observations for important countries that have witnessed dramatic changes in polity and remittances. Figure 3.10 show the observations that are omitted in the regressions for Mexico, which is one of biggest recipients of remittances in absolute terms. The full regression model will only include observations between 1990 and 2001. The observations after 2001 will be omitted. After that year, Mexico was considered more democratic and sees larger increases in remittances. The leverage from the longitudinal and cross-country data is diminished with the reduced number of observations.

The small changes in polity and log remittances per capita within and across countries also limit the analysis. As show in Figure 3.11, there are few cases where polity increases or decreases. Polity thus acts more as a fixed-effect so the results perhaps indicate the changes in spending across countries rather than polities. A similar pattern is seen with remittances. In Figure 3.9, we see that countries that are high-receiving remittances may remain high and those who are low-receiving remain low-receiving in the time period. While logging the variable is necessary due to the skewness of the remittance per capita variable, the growth in remittances seems small within countries even though many countries received dramatic increases in remittance inflows.

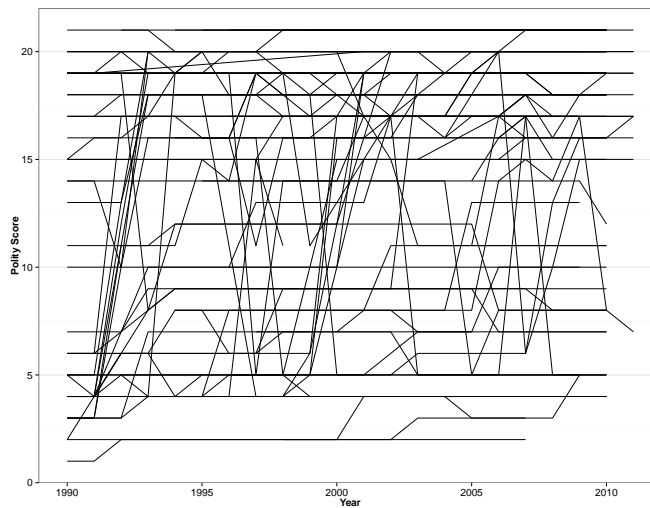
Finally, the regression analysis does not fully address the endogeneity issue. Even though the independent variables are lagged, it does not resolve the prior migration as a confounder. Countries that are already high-remittance receivers are those with prior migration outflows and established diasporas. The changes

Figure 3.10: Missing Data: Mexico



Source: World Bank

Figure 3.11: Profile Plot: Polity Scores



Source: Polity IV.

Note: Each line represents one country in the sample.

in remittance flows such as sharp increases or decreases could be a function of political conditions at home or abroad. For example, poor government behavior could influence migration and remittances, which could then influence government spending.

Despite the limitations, the relationships found between remittances and gov-

ernment spending yield consistent results through different model specifications. Remittances are found to have a negative effect with health and social protection spending in general. That negative relationship is strongest in autocratic regimes and mild in intermediate and democratic regimes. It was also robust to the instrumental variable method. Education yields mixed results through different specification. In the pooled regressions remittances has a positive relationship with education but it is negative under the two-stage least squares regression. It is unclear as to why that is the case. Nevertheless, the analysis provides some evidence that remittances may influence spending in health and social protection, conditional on regime type.

### **3.6 Mexico Case Study**

Given the limitations of the quantitative analysis, I turn now to a case study that illustrates the main finding at a subnational level. Mexico is a major migrant-sending country with 11.9 million nationals living abroad. The US-Mexican migration corridor is the largest in the world with ten percent of the Mexican population living across the border to the north (Ratha, Mohapatra and Silwal, 2011, 6). Mexico is also the third largest recipient of remittances in absolute terms with \$22.6 billion in 2010. Figure 3.13 shows the increase in remittances per capita in Mexico. Notably there is higher growth following 2001. Mexican states vary in terms of remittances inflows. Michoacán and Zacatecas, traditional migrant-sending states in central Mexico, 10% and 12% of households receive remittances, respectively (INEGI 2008). Southern states such as Oaxaca and Chiapas receive fewer remittances but have seen high growth due to high levels of migration since the 1990s.

Since the early 1990s, Mexican politics have become more open and competitive. Prior to the 1990s, the Institutional Revolutionary Party (PRI) dominated

Mexican politics for six decades. The country was not considered fully autocratic or democratic up to this period. The Mexican political system is often described as a party-dominant or electoral authoritarian regime (Magaloni, 2006; Greene, 2007). While elections were still held, the PRI dominated the political landscape of the country. The 1990s saw two rival parties accumulating electoral victories in the local, state and national level. Figure 3.12 shows the decline in PRI governors ruling in Mexico's 31 states. At the same time, the country began a process of fiscal and administrative decentralization. States became responsible for spending on education, health and social insurance while municipalities are responsible for public good provisions such as electricity and water (Rodríguez, 1997). By 2000, the PRI had lost the presidency to the National Action Party (PAN). The increasing electoral competitiveness in Mexico was seen as a democratic opening in the country. For example, Mexico's polity score was zero or less prior to 1990, classifying it as a non-democracy. By 2000, Mexico was classified as a democracy with score of six and then eight after 2002 making it a democracy.

Figure 3.12: Decline of PRI Governors

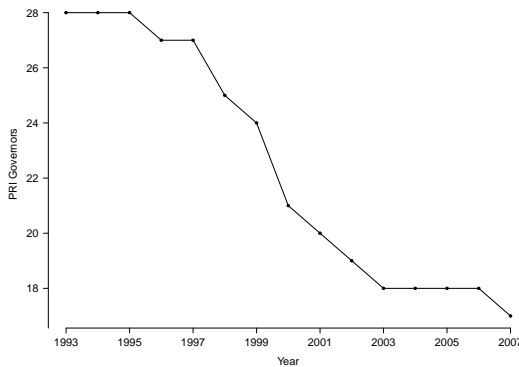
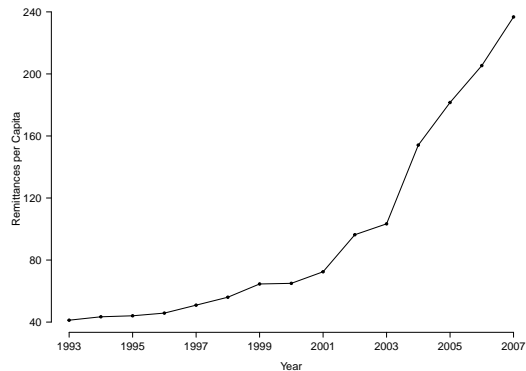
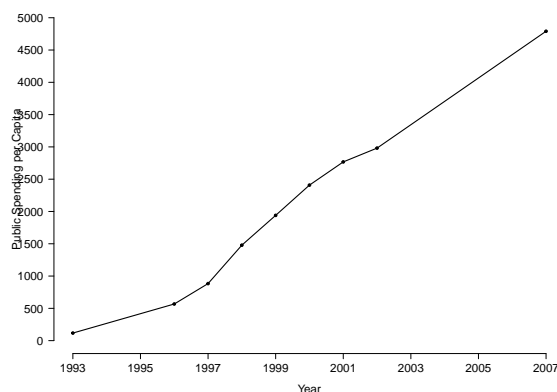


Figure 3.13: Remittance Inflows per Capita



As the country received more remittances and became more open politically, public spending also increased. Figure 3.14 shows the increase in public spending per capita in the late 1990s and early 2000s (INEGI 2015). The funds in Figure 3.14 are a total of federal funds used for infrastructure, basic education, and

Figure 3.14: Public Spending Per Capita



Source: INEGI (2008).

health services among other public goods.<sup>12</sup> Although many of the data points are missing after 2003, it is reasonable to assume a linear increase in public spending per capita in Mexico.

Mexico offers to be a good case because of the subnational variation among the three variables of interests. As discussed earlier, the blessing arguments about the political consequences from remittances are largely developed from the Mexican experience. The general arguments are based on the increasing electoral competitiveness in the political context of the country. However, it is important to note that political competition is not uniform across Mexico's states and municipalities. The southern states are known to be PRI strongholds, whereas the northern states see more political competition due to the historical presence of PAN (Greene, 2007; Magaloni, 2006). In addition, migration and remittances vary across regions in Mexico where the central and southern states tend to be a major source of emigrants.

Using subnational data, we can explore the role remittances play in public spending conditional on electoral competitiveness. Electoral competition serves

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<sup>12</sup><http://www3.inegi.org.mx/sistemas/Glosario/paginas/Contenido.aspx?ClvGlo=finanzas&nombre=005&c=10971&s=est>

as a proxy for democratization in this case study. Using data from Mexico's National Institute of Statistics and Geography (INEGI), I gathered data on public spending and the number of households with a family member abroad to proxy for remittances. Remittance data was not collected until the last 2005. Household data corresponds with the years given for public spending data.<sup>13</sup> As for electoral competition, I distinguished states as PRI strongholds or competitive based on previous gubernatorial elections. States where the PRI won at least 55% of the vote are considered strongholds, otherwise the state is considered electorally competitive.

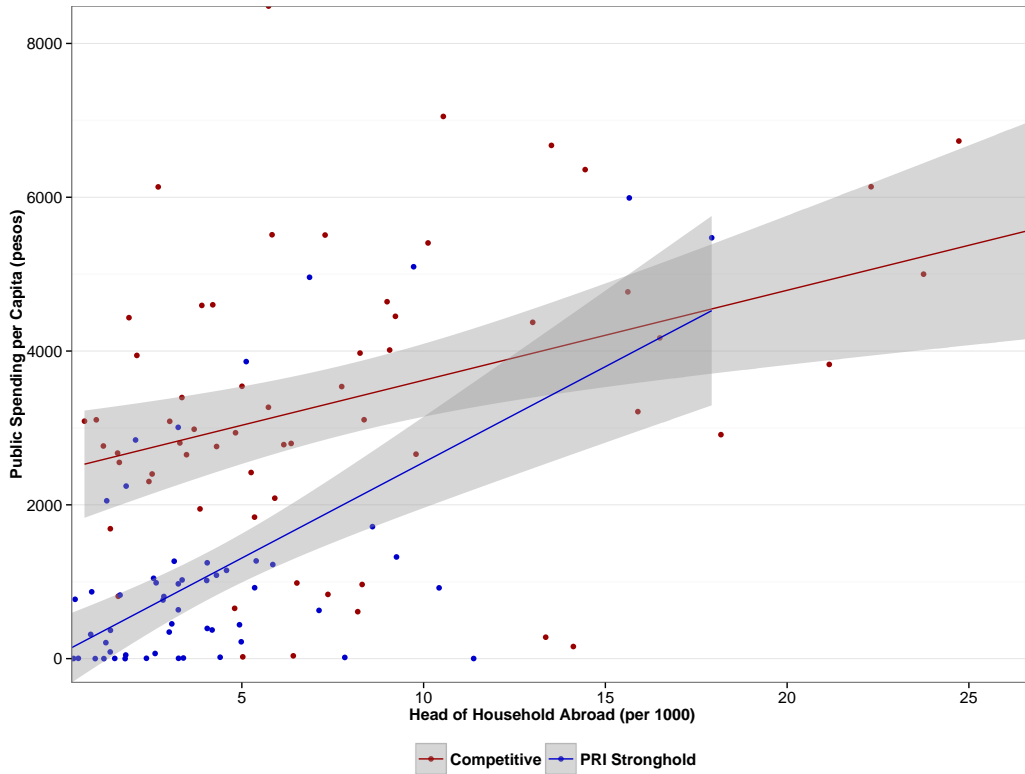
The subnational analysis shows that remittances are associated with higher public spending in both competitive and non-competitive states. Figure 3.15 shows that competitive states spend more on public goods than PRI strongholds on average over the pooled sample of data. Both political contexts yield positive relationships but the PRI strongholds exhibit a stronger effect. The competitive states show a steady increase in spending as more households have a member abroad. This implies that remittances may enhance voice with demand for public goods growing with increased income from abroad. In addition, increased competition may push incumbents to spend more to avoid losing the support from remittance recipients. These results are similar to those in Table 3.5.

PRI strongholds can be interpreted as less democratic states or less open states. For the PRI strongholds, we would expect a decrease in public spending as more remittances enter the state given the curse arguments. Yet, Figure 3.15 shows a sharper increase in public spending along households with the head abroad. What can explain this relationship that runs contrary to the regression analysis in the previous analysis? One factor could be that Mexico was never considered an autocratic country. From the 1980s to the late 1990s, Mexico was considered

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<sup>13</sup>Adida and Girod (2011) use head of household data as a proxy for remittances. They report that remittances is highly correlated with head of household who is abroad.

Figure 3.15: Remittances, Elections and Public spending in Mexico



Note: PRI strongholds classified as states where PRI won at least 55% of the vote.

a intermediate regime according to polity. After 2000, Mexico is classified as a democracy. This means that there are some channels for remittance recipients to engage with local officials.

Furthermore, there are some levels of political competition. The option of supporting another party other than PRI always existed. The larger effect in PRI strongholds could illustrate how remittances lower the costs of political participation and potentially defecting from the PRI. As Magaloni (2006) argues, higher income decreases the costs of defecting. Remittance recipients will be immune from PRI's punishment if they choose to support others. Moreover, PRI will respond to the rising remittances by shifting its spending preferences from targeted goods to public goods (Magaloni, Diaz-Cayeros and Estévez, 2007). In turn, the PRI can maintain political support by anticipating the changes in preferences that



remittances can produce on the household and voters.

The subnational analysis across Mexican states provides a window of an intermediate regime going through democratic transition and fiscal decentralization. Given the cross-country analysis earlier in the paper, we would expect those states with low electoral competitiveness to have less spending with higher remittances. The *curse* arguments are not supported by the findings from Mexican states. Given Mexico's status as an intermediate regime, increasing electoral competition makes the states behave more like democracies.

### **3.7 Conclusion**

The political consequences of remittances is still an open question. Using the voice/exit framework, remittances can activate either mechanism and change the relationship between citizen and state. Remittances can influence citizens to be more political engaged or be disconnected from local politics. Incumbent state officials can feel threatened from remittances or see them as an opportunity to increase their hold on power. The contrasting theories are largely influenced by the political regime in the local context. If there are channels for citizens to engage with the state, then we should expect remittances to have a democratizing effect. Under autocratic regimes where no such channels exists, the costs of political participation may be too high for remittance recipients to engage. Therefore, remittances will lead to political disengagement, making local incumbents less accountable to the population.

This paper looks at government spending behavior as a response to remittance inflows, conditional on regime. I argue that the regime in place sets different incentives for the state as remittance inflows increase. I find remittances to be influential in public health spending. Remittances lead to a decline in public health spending in autocracies and have a small positive effect in intermediate and

democratic regimes. These results confirm both the blessing and curse arguments but further underscores the role of regime type.

The single-case study on Mexico complements the regression analysis, which is limited. Due to the missingness of the data and the nature of the variables of interest. Political regimes do not change often and the variation in remittances is largely from across nations rather than within. Mexico presents itself as a case that became democratic over time and is a major remittance-receiving country. Using subnational data, I find the public spending on infrastructure and other public goods increase along with remittances in both electorally competitive and non-competitive states. However, the relationship is stronger across non-competitive states where the PRI has a electoral stronghold. The increase spending in non-competitive states may show that as long as there's a channel for remittance recipients to engage with the state, the local officials will be concerned about remittance recipients shifting support to the opposition. Furthermore, political competition increases, those in non-competitive states may preempt challenges by spending more.

This paper presents suggestive evidence that remittances impact government spending. Missing data and endogeneity prevent me from making a stronger case to confirm the theories discussed. An ideal scenario would be to obtain longitudinal subnational data to track the changes in local politics, migration patterns, remittance inflows and public spending on specific sectors. Data on remittances at subnational levels are not readily available. Furthermore, accounting for migration is dependent on household surveys, but the exact time of migration may not be recorded. As for public spending, there is a major effort for countries to release spending data.

Regime transitions presents an opportunity to study the role of remittances in politics. The type of autocracy and democracy can also yield insights into how remittances influence local politics. Wright, Meseguer and Escriba (2012) analyzes

how remittances affect different types of autocratic regime. Kapur (2010) shows how remittances have affected politics in India, which is an older democracy than those in Latin America and Sub-Saharan Africa.

Despite the empirical difficulties, remittances remain a growing topic of study. We have only experienced rises in remittances and one opportunity is to study the political consequences of *declining* remittances, especially in those countries that are dependent on these funds economically such as Honduras, Morocco, and Philippines. The great recession of 2008 saw a decline in remittances globally but it was only a hiccup as remittances recovered quickly (Sirkeci, Cohen and Ratha, 2012). As migration slows, we should expect remittances to decline years (or decades) later. Once again, Mexico presents such a case where emigration has declined to its lowest levels in decades. Will remittances follow? What about places that should anticipate sudden inflows of remittances? Syria has seen a rapid flight out of the country as refugees flee to neighboring countries and Europe. How can a sudden increase in remittances affect reconstruction there?

The biggest challenge in studying remittances and politics will be identification strategies. Remittances are married to migration and divorcing them in an empirical analysis is difficult. Migration is selective and that implies that receiving remittances is selective as well. Yang et al. (2015) attempts uses a field-experiment to study the role of remittances in savings behavior. While the sample of subjects and treatments are randomized, the priors may not be. It is a challenge to identify remittances as a causal factor independent from migration.

This paper seeks brings together two opposing arguments on the political economy of remittances. I show that remittances may not have a general effect on government spending and I provide evidence that regime type matters. Given the diversity of countries migrants come from, it is important to understand how remittances affect countries differently. Furthermore, remittance receivers make spending decisions based on the political and economic contexts. Given the ris-

ing importance of remittances in local economies, those decisions can also affect non-receivers as well. Government responses to remittances will not only affect remittance recipients, but also those who do not receive them.

### 3.8 Appendix

Figure 3.16: Remittances per Capita Over Time by Region

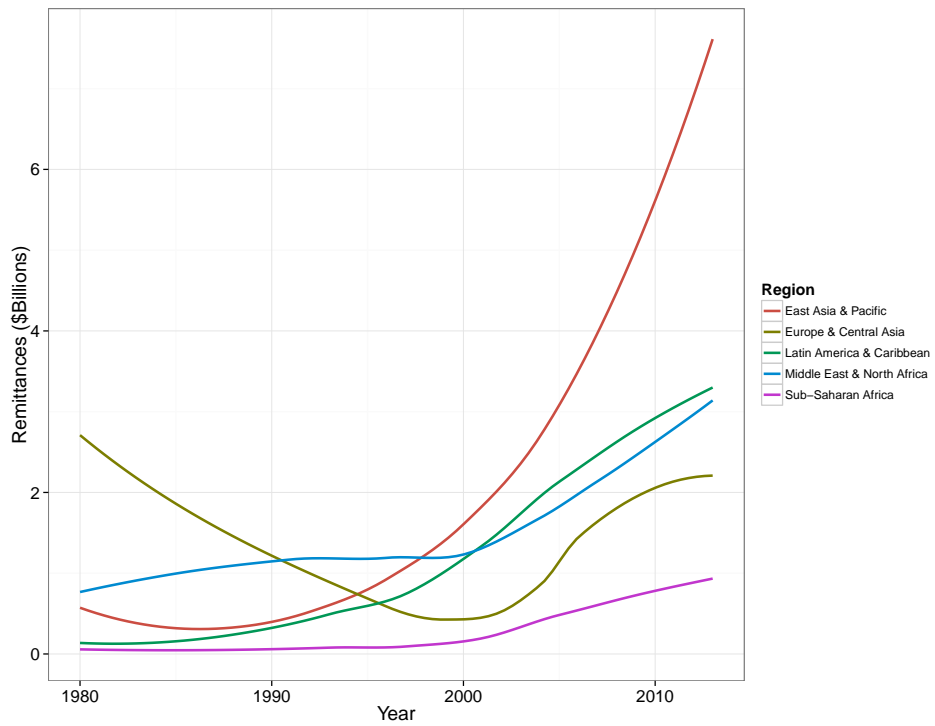


Table 3.7: Full Interaction Results

|                            | Education            |                     | Health               |                      | Social Protection    |                      |
|----------------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
|                            | (1)                  | (2)                 | (3)                  | (4)                  | (5)                  | (6)                  |
| Constant                   | -4.240***<br>(1.494) | -3.091*<br>(1.759)  | -2.993*<br>(1.733)   | -2.717<br>(2.670)    | -6.486**<br>(2.868)  | -7.225*<br>(3.986)   |
| Log Remittances per Capita | 0.038<br>(0.049)     | 0.100**<br>(0.047)  | -0.286***<br>(0.062) | -0.362***<br>(0.075) | -0.315***<br>(0.093) | -0.346***<br>(0.106) |
| Intermediate               | 0.089<br>(0.156)     | 0.235<br>(0.155)    | -0.745***<br>(0.211) | -0.816***<br>(0.261) | -0.759**<br>(0.299)  | -0.989***<br>(0.350) |
| Democracy                  | 0.183<br>(0.163)     | 0.377**<br>(0.164)  | -0.676***<br>(0.213) | -0.888***<br>(0.263) | -0.758**<br>(0.314)  | -0.931**<br>(0.370)  |
| Remittances×Intermediate   | -0.043<br>(0.049)    | -0.069<br>(0.048)   | 0.262***<br>(0.063)  | 0.289***<br>(0.078)  | 0.269***<br>(0.094)  | 0.288***<br>(0.107)  |
| Remittances×Democracy      | -0.024<br>(0.048)    | -0.077<br>(0.047)   | 0.307***<br>(0.062)  | 0.388***<br>(0.075)  | 0.283***<br>(0.093)  | 0.344***<br>(0.107)  |
| Corruption Control         | 0.076<br>(0.058)     | 0.165***<br>(0.061) | 0.245***<br>(0.067)  | 0.425***<br>(0.092)  | -0.013<br>(0.110)    | 0.236*<br>(0.137)    |
| Log GDP per Capita         | 1.326***<br>(0.156)  | 1.036***<br>(0.172) | 1.368***<br>(0.181)  | 1.294***<br>(0.261)  | 2.152***<br>(0.300)  | 2.186***<br>(0.391)  |
| Trade                      | 0.002**<br>(0.001)   | 0.0004<br>(0.001)   | 0.003**<br>(0.001)   | 0.001<br>(0.002)     | 0.009***<br>(0.002)  | 0.008***<br>(0.003)  |
| Foreign Aid                | -0.003<br>(0.004)    | 0.003<br>(0.004)    | -0.00003<br>(0.005)  | -0.0001<br>(0.006)   | -0.004<br>(0.008)    | -0.004<br>(0.008)    |
| FDI                        | -0.005<br>(0.004)    | -0.001<br>(0.004)   | -0.004<br>(0.005)    | -0.003<br>(0.006)    | 0.020**<br>(0.008)   | 0.046***<br>(0.009)  |
| Urban Population           | -0.019**<br>(0.009)  | -0.019*<br>(0.011)  | -0.022**<br>(0.011)  | -0.015<br>(0.017)    | -0.041**<br>(0.018)  | -0.050**<br>(0.025)  |
| Oil Export Value (Log)     | -0.143<br>(0.121)    | -0.087<br>(0.113)   | -0.211<br>(0.140)    | -0.161<br>(0.171)    | -0.384*<br>(0.231)   | -0.217<br>(0.254)    |
| Regime Years               | 0.003<br>(0.002)     | 0.002<br>(0.002)    | 0.002<br>(0.003)     | -0.0004<br>(0.003)   | -0.019***<br>(0.005) | -0.022***<br>(0.005) |
| Tax Revenue                |                      | 0.014***<br>(0.005) |                      | 0.007<br>(0.007)     |                      | -0.016<br>(0.011)    |
| Observations               | 653                  | 451                 | 650                  | 450                  | 650                  | 448                  |
| R <sup>2</sup>             | 0.959                | 0.980               | 0.952                | 0.961                | 0.943                | 0.961                |

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country and time fixed-effects

Table 3.8: Baseline Results with Polity as Numerical Variable

|                            | Education            |                     | Health               |                     | Social Protection    |                      |
|----------------------------|----------------------|---------------------|----------------------|---------------------|----------------------|----------------------|
|                            | (1)                  | (2)                 | (3)                  | (4)                 | (5)                  | (6)                  |
| Constant                   | -4.648***<br>(1.499) | -2.953*<br>(1.783)  | -4.016**<br>(1.777)  | -3.939<br>(2.815)   | -6.859**<br>(2.881)  | -8.168**<br>(4.087)  |
| Log Remittances per Capita | 0.011<br>(0.014)     | 0.026*<br>(0.015)   | 0.002<br>(0.016)     | -0.019<br>(0.025)   | -0.042<br>(0.026)    | -0.032<br>(0.035)    |
| Polity                     | 0.008<br>(0.006)     | 0.005<br>(0.005)    | 0.025***<br>(0.007)  | 0.030***<br>(0.007) | 0.005<br>(0.011)     | 0.012<br>(0.010)     |
| Corruption Control         | 0.087<br>(0.057)     | 0.162***<br>(0.060) | 0.312***<br>(0.068)  | 0.535***<br>(0.094) | 0.030<br>(0.110)     | 0.318**<br>(0.136)   |
| Log GDP per Capita         | 1.373***<br>(0.155)  | 1.039***<br>(0.174) | 1.410***<br>(0.184)  | 1.341***<br>(0.275) | 2.148***<br>(0.299)  | 2.218***<br>(0.400)  |
| Trade                      | 0.002*<br>(0.001)    | 0.0004<br>(0.001)   | 0.002*<br>(0.001)    | -0.0001<br>(0.002)  | 0.009***<br>(0.002)  | 0.008***<br>(0.003)  |
| Foreign Aid                | -0.003<br>(0.004)    | 0.004<br>(0.004)    | -0.0004<br>(0.005)   | 0.0002<br>(0.006)   | -0.003<br>(0.008)    | -0.003<br>(0.009)    |
| FDI                        | -0.005<br>(0.004)    | -0.001<br>(0.004)   | -0.003<br>(0.005)    | -0.002<br>(0.007)   | 0.021**<br>(0.008)   | 0.047***<br>(0.010)  |
| Urban Population           | -0.017*<br>(0.009)   | -0.016<br>(0.011)   | -0.033***<br>(0.011) | -0.028<br>(0.017)   | -0.053***<br>(0.017) | -0.064**<br>(0.025)  |
| Oil Export Value (Log)     | -0.146<br>(0.121)    | -0.098<br>(0.113)   | -0.190<br>(0.144)    | -0.133<br>(0.179)   | -0.360<br>(0.233)    | -0.189<br>(0.258)    |
| Regime Years               | 0.004<br>(0.002)     | 0.001<br>(0.002)    | 0.001<br>(0.003)     | -0.002<br>(0.003)   | -0.021***<br>(0.005) | -0.023***<br>(0.005) |
| Tax Revenue                |                      | 0.015***<br>(0.005) |                      | 0.014*<br>(0.008)   |                      | -0.009<br>(0.011)    |
| Observations               | 653                  | 451                 | 650                  | 450                 | 650                  | 448                  |
| R <sup>2</sup>             | 0.959                | 0.979               | 0.949                | 0.957               | 0.942                | 0.960                |

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country and time fixed-effects

Table 3.9: Interaction Results with Polity as Numerical Variable

|                            | Education            |                     | Health               |                      | Social Protection    |                      |
|----------------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
|                            | (1)                  | (2)                 | (3)                  | (4)                  | (5)                  | (6)                  |
| Constant                   | -4.506***<br>(1.504) | -3.021*<br>(1.784)  | -3.224*<br>(1.736)   | -3.345<br>(2.703)    | -6.310**<br>(2.878)  | -7.892*<br>(4.058)   |
| Log Remittances per Capita | -0.038<br>(0.046)    | 0.068<br>(0.044)    | -0.279***<br>(0.053) | -0.372***<br>(0.067) | -0.241***<br>(0.087) | -0.271***<br>(0.100) |
| Polity                     | -0.001<br>(0.010)    | 0.013<br>(0.009)    | -0.026**<br>(0.011)  | -0.035***<br>(0.014) | -0.031*<br>(0.018)   | -0.033<br>(0.020)    |
| Remittances×Polity         | 0.003<br>(0.002)     | -0.002<br>(0.002)   | 0.016***<br>(0.003)  | 0.020***<br>(0.004)  | 0.011**<br>(0.005)   | 0.014**<br>(0.005)   |
| Corruption Control         | 0.078<br>(0.058)     | 0.175***<br>(0.061) | 0.259***<br>(0.067)  | 0.430***<br>(0.092)  | -0.008<br>(0.111)    | 0.245*<br>(0.138)    |
| Log GDP per Capita         | 1.384***<br>(0.156)  | 1.027***<br>(0.174) | 1.477***<br>(0.180)  | 1.438***<br>(0.264)  | 2.198***<br>(0.299)  | 2.299***<br>(0.398)  |
| Trade                      | 0.002*<br>(0.001)    | 0.0002<br>(0.001)   | 0.003**<br>(0.001)   | 0.001<br>(0.002)     | 0.010***<br>(0.002)  | 0.009***<br>(0.003)  |
| Foreign Aid                | -0.003<br>(0.004)    | 0.004<br>(0.004)    | 0.00003<br>(0.005)   | -0.0005<br>(0.006)   | -0.003<br>(0.008)    | -0.004<br>(0.008)    |
| FDI                        | -0.005<br>(0.004)    | -0.001<br>(0.004)   | -0.003<br>(0.005)    | -0.003<br>(0.006)    | 0.022***<br>(0.008)  | 0.046***<br>(0.010)  |
| Urban Population           | -0.018**<br>(0.009)  | -0.016<br>(0.011)   | -0.036***<br>(0.010) | -0.030*<br>(0.017)   | -0.055***<br>(0.017) | -0.065***<br>(0.025) |
| Oil Export Value (Log)     | -0.156<br>(0.121)    | -0.093<br>(0.113)   | -0.249*<br>(0.140)   | -0.174<br>(0.172)    | -0.401*<br>(0.232)   | -0.216<br>(0.256)    |
| Regime Years               | 0.003<br>(0.002)     | 0.002<br>(0.002)    | -0.001<br>(0.003)    | -0.004<br>(0.003)    | -0.022***<br>(0.005) | -0.024***<br>(0.005) |
| Tax Revenue                |                      | 0.015***<br>(0.005) |                      | 0.011<br>(0.007)     |                      | -0.011<br>(0.011)    |
| Observations               | 653                  | 451                 | 650                  | 450                  | 650                  | 448                  |
| R <sup>2</sup>             | 0.959                | 0.979               | 0.952                | 0.960                | 0.943                | 0.960                |

Note:

All models include country and time fixed-effects

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 3.10: Country Year Observations in the Sample

|    | Country   | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|----|-----------|------|--------|--------------|---------------------------|--------------------|
| 1  | Albania   | 1998 | 16     | Intermediate | 95.39                     | x                  |
| 2  | Albania   | 2000 | 16     | Intermediate | 130.98                    |                    |
| 3  | Albania   | 2002 | 16     | Intermediate | 228.22                    |                    |
| 4  | Albania   | 2003 | 18     | Democracy    | 240.40                    | x                  |
| 5  | Albania   | 2004 | 18     | Democracy    | 292.96                    | x                  |
| 6  | Albania   | 2005 | 18     | Democracy    | 385.02                    | x                  |
| 7  | Albania   | 2006 | 20     | Democracy    | 430.95                    |                    |
| 8  | Albania   | 2007 | 20     | Democracy    | 458.04                    |                    |
| 9  | Albania   | 2008 | 20     | Democracy    | 499.18                    |                    |
| 10 | Albania   | 2009 | 20     | Democracy    | 513.31                    |                    |
| 11 | Albania   | 2010 | 20     | Democracy    | 457.12                    |                    |
| 12 | Algeria   | 1998 | 8      | Intermediate | 34.93                     |                    |
| 13 | Algeria   | 2000 | 8      | Intermediate | 25.26                     |                    |
| 14 | Algeria   | 2002 | 8      | Intermediate | 20.84                     |                    |
| 15 | Algeria   | 2003 | 8      | Intermediate | 32.85                     |                    |
| 16 | Algeria   | 2004 | 8      | Intermediate | 53.02                     |                    |
| 17 | Algeria   | 2005 | 13     | Intermediate | 73.52                     |                    |
| 18 | Algeria   | 2006 | 13     | Intermediate | 5.01                      |                    |
| 19 | Algeria   | 2007 | 13     | Intermediate | 5.48                      | x                  |
| 20 | Algeria   | 2008 | 13     | Intermediate | 2.82                      | x                  |
| 21 | Algeria   | 2009 | 13     | Intermediate | 2.90                      | x                  |
| 22 | Argentina | 1998 | 18     | Democracy    | 1.84                      |                    |
| 23 | Argentina | 2000 | 19     | Democracy    | 1.76                      |                    |
| 24 | Argentina | 2002 | 19     | Democracy    | 5.09                      |                    |
| 25 | Argentina | 2003 | 19     | Democracy    | 5.49                      | x                  |
| 26 | Argentina | 2004 | 19     | Democracy    | 7.20                      | x                  |
| 27 | Argentina | 2005 | 19     | Democracy    | 8.14                      | x                  |
| 28 | Argentina | 2006 | 19     | Democracy    | 11.18                     |                    |
| 29 | Argentina | 2007 | 19     | Democracy    | 13.88                     |                    |

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Table 3.10 – *Continued from previous page*

|    | Country    | Year | Polity | Regime    | Remittances<br>per Capita | Tax<br>Observation |
|----|------------|------|--------|-----------|---------------------------|--------------------|
| 30 | Azerbaijan | 2008 | 4      | Autocracy | 147.73                    |                    |
| 31 | Azerbaijan | 2009 | 4      | Autocracy | 173.26                    | x                  |
| 32 | Azerbaijan | 2010 | 4      | Autocracy | 140.23                    | x                  |
| 33 | Bangladesh | 1998 | 17     | Democracy | 12.22                     |                    |
| 34 | Bangladesh | 2000 | 17     | Democracy | 13.90                     |                    |
| 35 | Bangladesh | 2002 | 17     | Democracy | 15.62                     | x                  |
| 36 | Bangladesh | 2003 | 17     | Democracy | 20.86                     | x                  |
| 37 | Bangladesh | 2004 | 17     | Democracy | 22.93                     | x                  |
| 38 | Bangladesh | 2005 | 17     | Democracy | 25.37                     | x                  |
| 39 | Bangladesh | 2006 | 17     | Democracy | 32.43                     | x                  |
| 40 | Bangladesh | 2007 | 17     | Democracy | 39.12                     | x                  |
| 41 | Bangladesh | 2008 | 5      | Autocracy | 49.59                     | x                  |
| 42 | Bangladesh | 2009 | 5      | Autocracy | 62.33                     | x                  |
| 43 | Belarus    | 1998 | 4      | Autocracy | 29.11                     | x                  |
| 44 | Belarus    | 2000 | 4      | Autocracy | 20.78                     | x                  |
| 45 | Belarus    | 2002 | 4      | Autocracy | 15.03                     | x                  |
| 46 | Belarus    | 2003 | 4      | Autocracy | 14.22                     | x                  |
| 47 | Belarus    | 2004 | 4      | Autocracy | 22.70                     | x                  |
| 48 | Belarus    | 2005 | 4      | Autocracy | 26.38                     | x                  |
| 49 | Belarus    | 2006 | 4      | Autocracy | 20.55                     | x                  |
| 50 | Belarus    | 2007 | 4      | Autocracy | 27.93                     | x                  |
| 51 | Belarus    | 2008 | 4      | Autocracy | 30.16                     | x                  |
| 52 | Belarus    | 2009 | 4      | Autocracy | 61.22                     | x                  |
| 53 | Belarus    | 2010 | 4      | Autocracy | 52.99                     | x                  |
| 54 | Bolivia    | 1998 | 20     | Democracy | 10.64                     |                    |
| 55 | Bolivia    | 2000 | 20     | Democracy | 11.54                     |                    |
| 56 | Bolivia    | 2002 | 20     | Democracy | 15.60                     |                    |
| 57 | Bolivia    | 2003 | 20     | Democracy | 12.77                     | x                  |
| 58 | Bolivia    | 2004 | 19     | Democracy | 17.54                     | x                  |
| 59 | Bolivia    | 2005 | 19     | Democracy | 22.92                     | x                  |

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Table 3.10 – *Continued from previous page*

|    | Country  | Year | Polity | Regime    | Remittances<br>per Capita | Tax<br>Observation |
|----|----------|------|--------|-----------|---------------------------|--------------------|
| 60 | Bolivia  | 2006 | 19     | Democracy | 36.03                     | x                  |
| 61 | Bolivia  | 2007 | 19     | Democracy | 63.35                     | x                  |
| 62 | Botswana | 1998 | 19     | Democracy | 29.06                     |                    |
| 63 | Botswana | 2000 | 19     | Democracy | 19.61                     |                    |
| 64 | Botswana | 2002 | 19     | Democracy | 14.53                     |                    |
| 65 | Botswana | 2003 | 19     | Democracy | 15.01                     |                    |
| 66 | Botswana | 2004 | 19     | Democracy | 21.21                     |                    |
| 67 | Botswana | 2005 | 19     | Democracy | 49.34                     |                    |
| 68 | Botswana | 2006 | 19     | Democracy | 62.85                     |                    |
| 69 | Botswana | 2007 | 19     | Democracy | 54.72                     | x                  |
| 70 | Botswana | 2008 | 19     | Democracy | 48.14                     | x                  |
| 71 | Botswana | 2009 | 19     | Democracy | 24.21                     | x                  |
| 72 | Brazil   | 1998 | 19     | Democracy | 11.87                     | x                  |
| 73 | Brazil   | 2000 | 19     | Democracy | 10.83                     | x                  |
| 74 | Brazil   | 2002 | 19     | Democracy | 10.03                     | x                  |
| 75 | Brazil   | 2003 | 19     | Democracy | 13.65                     | x                  |
| 76 | Brazil   | 2004 | 19     | Democracy | 15.52                     | x                  |
| 77 | Brazil   | 2005 | 19     | Democracy | 19.43                     | x                  |
| 78 | Brazil   | 2006 | 19     | Democracy | 15.07                     | x                  |
| 79 | Brazil   | 2007 | 19     | Democracy | 17.47                     | x                  |
| 80 | Brazil   | 2008 | 19     | Democracy | 17.40                     | x                  |
| 81 | Brazil   | 2009 | 19     | Democracy | 18.99                     | x                  |
| 82 | Brazil   | 2010 | 19     | Democracy | 14.93                     | x                  |
| 83 | Brazil   | 2011 | 19     | Democracy | 14.11                     | x                  |
| 84 | Bulgaria | 1998 | 19     | Democracy | 6.09                      | x                  |
| 85 | Bulgaria | 2000 | 19     | Democracy | 5.18                      | x                  |
| 86 | Bulgaria | 2002 | 20     | Democracy | 103.01                    | x                  |
| 87 | Bulgaria | 2003 | 20     | Democracy | 149.58                    | x                  |
| 88 | Bulgaria | 2004 | 20     | Democracy | 219.66                    | x                  |
| 89 | Bulgaria | 2005 | 20     | Democracy | 221.40                    | x                  |

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Table 3.10 – *Continued from previous page*

|     | Country  | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|----------|------|--------|--------------|---------------------------|--------------------|
| 90  | Cameroon | 1998 | 7      | Intermediate | 1.81                      |                    |
| 91  | Chile    | 2002 | 20     | Democracy    | 0.76                      |                    |
| 92  | Chile    | 2003 | 20     | Democracy    | 0.78                      | x                  |
| 93  | Chile    | 2004 | 20     | Democracy    | 0.74                      | x                  |
| 94  | Chile    | 2005 | 20     | Democracy    | 0.72                      | x                  |
| 95  | Chile    | 2006 | 20     | Democracy    | 0.80                      | x                  |
| 96  | Chile    | 2007 | 21     | Democracy    | 0.15                      | x                  |
| 97  | Chile    | 2008 | 21     | Democracy    | 0.15                      | x                  |
| 98  | Chile    | 2009 | 21     | Democracy    | 0.15                      | x                  |
| 99  | Chile    | 2010 | 21     | Democracy    | 0.26                      | x                  |
| 100 | China    | 1998 | 4      | Autocracy    | 4.04                      |                    |
| 101 | China    | 2000 | 4      | Autocracy    | 2.94                      |                    |
| 102 | China    | 2002 | 4      | Autocracy    | 5.14                      |                    |
| 103 | China    | 2003 | 4      | Autocracy    | 8.04                      |                    |
| 104 | China    | 2004 | 4      | Autocracy    | 11.29                     |                    |
| 105 | China    | 2005 | 4      | Autocracy    | 15.11                     |                    |
| 106 | China    | 2006 | 4      | Autocracy    | 6.77                      | x                  |
| 107 | China    | 2007 | 4      | Autocracy    | 8.50                      | x                  |
| 108 | China    | 2008 | 4      | Autocracy    | 13.29                     | x                  |
| 109 | China    | 2009 | 4      | Autocracy    | 17.13                     | x                  |
| 110 | China    | 2010 | 4      | Autocracy    | 17.20                     | x                  |
| 111 | Colombia | 1998 | 18     | Democracy    | 20.41                     |                    |
| 112 | Colombia | 2000 | 18     | Democracy    | 33.44                     |                    |
| 113 | Colombia | 2002 | 18     | Democracy    | 50.70                     |                    |
| 114 | Colombia | 2003 | 18     | Democracy    | 60.17                     |                    |
| 115 | Colombia | 2004 | 18     | Democracy    | 73.46                     | x                  |
| 116 | Colombia | 2005 | 18     | Democracy    | 75.00                     |                    |
| 117 | Colombia | 2006 | 18     | Democracy    | 77.47                     |                    |
| 118 | Colombia | 2007 | 18     | Democracy    | 88.94                     |                    |
| 119 | Colombia | 2008 | 18     | Democracy    | 100.23                    |                    |

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Table 3.10 – *Continued from previous page*

|     | Country     | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|-------------|------|--------|--------------|---------------------------|--------------------|
| 120 | Colombia    | 2009 | 18     | Democracy    | 106.90                    | x                  |
| 121 | Colombia    | 2010 | 18     | Democracy    | 90.06                     | x                  |
| 122 | Colombia    | 2011 | 18     | Democracy    | 86.79                     | x                  |
| 123 | Congo, Rep. | 1998 | 5      | Autocracy    | 1.59                      |                    |
| 124 | Congo, Rep. | 2000 | 5      | Autocracy    | 3.83                      |                    |
| 125 | Congo, Rep. | 2002 | 6      | Autocracy    | 3.78                      | x                  |
| 126 | Congo, Rep. | 2003 | 7      | Intermediate | 0.36                      | x                  |
| 127 | Congo, Rep. | 2004 | 7      | Intermediate | 3.68                      | x                  |
| 128 | Congo, Rep. | 2005 | 7      | Intermediate | 4.34                      | x                  |
| 129 | Costa Rica  | 1998 | 21     | Democracy    | 35.57                     |                    |
| 130 | Costa Rica  | 2000 | 21     | Democracy    | 32.92                     |                    |
| 131 | Costa Rica  | 2002 | 21     | Democracy    | 49.44                     |                    |
| 132 | Costa Rica  | 2003 | 21     | Democracy    | 61.23                     |                    |
| 133 | Costa Rica  | 2004 | 21     | Democracy    | 76.93                     |                    |
| 134 | Costa Rica  | 2005 | 21     | Democracy    | 75.25                     |                    |
| 135 | Costa Rica  | 2006 | 21     | Democracy    | 97.30                     |                    |
| 136 | Costa Rica  | 2007 | 21     | Democracy    | 116.83                    |                    |
| 137 | Costa Rica  | 2008 | 21     | Democracy    | 138.45                    |                    |
| 138 | Costa Rica  | 2009 | 21     | Democracy    | 133.42                    | x                  |
| 139 | Croatia     | 1998 | 6      | Autocracy    | 135.08                    | x                  |
| 140 | Croatia     | 2000 | 12     | Intermediate | 122.34                    | x                  |
| 141 | Croatia     | 2002 | 19     | Democracy    | 168.23                    | x                  |
| 142 | Croatia     | 2003 | 19     | Democracy    | 98.82                     | x                  |
| 143 | Croatia     | 2004 | 19     | Democracy    | 116.35                    | x                  |
| 144 | Croatia     | 2005 | 19     | Democracy    | 149.73                    | x                  |
| 145 | Croatia     | 2006 | 20     | Democracy    | 155.97                    | x                  |
| 146 | Croatia     | 2007 | 20     | Democracy    | 185.76                    | x                  |
| 147 | Croatia     | 2008 | 20     | Democracy    | 241.69                    | x                  |
| 148 | Croatia     | 2009 | 20     | Democracy    | 278.23                    | x                  |
| 149 | Croatia     | 2010 | 20     | Democracy    | 272.76                    | x                  |

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|     | Country            | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|--------------------|------|--------|--------------|---------------------------|--------------------|
| 150 | Cyprus             | 2005 | 21     | Democracy    | 241.12                    | x                  |
| 151 | Dominican Republic | 1998 | 19     | Democracy    | 138.34                    |                    |
| 152 | Dominican Republic | 2000 | 19     | Democracy    | 191.27                    |                    |
| 153 | Dominican Republic | 2002 | 19     | Democracy    | 225.22                    |                    |
| 154 | Dominican Republic | 2003 | 19     | Democracy    | 245.58                    |                    |
| 155 | Dominican Republic | 2004 | 19     | Democracy    | 256.35                    |                    |
| 156 | Dominican Republic | 2005 | 19     | Democracy    | 271.65                    | x                  |
| 157 | Dominican Republic | 2006 | 19     | Democracy    | 291.03                    | x                  |
| 158 | Dominican Republic | 2007 | 19     | Democracy    | 322.16                    | x                  |
| 159 | Ecuador            | 2000 | 20     | Democracy    | 88.67                     |                    |
| 160 | Ecuador            | 2002 | 17     | Democracy    | 111.15                    |                    |
| 161 | Ecuador            | 2003 | 17     | Democracy    | 110.36                    |                    |
| 162 | Ecuador            | 2004 | 17     | Democracy    | 123.00                    |                    |
| 163 | Ecuador            | 2005 | 17     | Democracy    | 135.86                    |                    |
| 164 | Ecuador            | 2006 | 17     | Democracy    | 178.56                    |                    |
| 165 | Ecuador            | 2007 | 18     | Democracy    | 209.21                    |                    |
| 166 | Ecuador            | 2008 | 16     | Intermediate | 234.18                    |                    |
| 167 | Ecuador            | 2009 | 16     | Intermediate | 212.83                    |                    |
| 168 | Ecuador            | 2010 | 16     | Intermediate | 185.85                    |                    |
| 169 | Egypt, Arab Rep.   | 1998 | 5      | Autocracy    | 58.60                     | x                  |
| 170 | Egypt, Arab Rep.   | 2000 | 5      | Autocracy    | 49.70                     |                    |
| 171 | Egypt, Arab Rep.   | 2002 | 5      | Autocracy    | 43.32                     |                    |
| 172 | Egypt, Arab Rep.   | 2003 | 5      | Autocracy    | 42.36                     | x                  |
| 173 | Egypt, Arab Rep.   | 2004 | 5      | Autocracy    | 42.64                     | x                  |
| 174 | Egypt, Arab Rep.   | 2005 | 5      | Autocracy    | 47.32                     | x                  |
| 175 | Egypt, Arab Rep.   | 2006 | 8      | Intermediate | 69.90                     | x                  |
| 176 | Egypt, Arab Rep.   | 2007 | 8      | Intermediate | 73.02                     | x                  |
| 177 | Egypt, Arab Rep.   | 2008 | 8      | Intermediate | 103.14                    | x                  |
| 178 | Egypt, Arab Rep.   | 2009 | 8      | Intermediate | 115.16                    | x                  |
| 179 | Egypt, Arab Rep.   | 2010 | 8      | Intermediate | 93.12                     | x                  |

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|     | Country     | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|-------------|------|--------|--------------|---------------------------|--------------------|
| 180 | El Salvador | 1998 | 18     | Democracy    | 204.86                    |                    |
| 181 | El Salvador | 2000 | 18     | Democracy    | 233.99                    |                    |
| 182 | El Salvador | 2002 | 18     | Democracy    | 321.79                    |                    |
| 183 | El Salvador | 2003 | 18     | Democracy    | 325.17                    | x                  |
| 184 | El Salvador | 2004 | 18     | Democracy    | 352.01                    | x                  |
| 185 | El Salvador | 2005 | 18     | Democracy    | 423.80                    | x                  |
| 186 | El Salvador | 2006 | 18     | Democracy    | 498.74                    | x                  |
| 187 | El Salvador | 2007 | 18     | Democracy    | 571.24                    | x                  |
| 188 | El Salvador | 2008 | 18     | Democracy    | 605.76                    | x                  |
| 189 | El Salvador | 2009 | 18     | Democracy    | 610.35                    | x                  |
| 190 | El Salvador | 2010 | 19     | Democracy    | 550.23                    | x                  |
| 191 | Ethiopia    | 1998 | 12     | Intermediate | 0.15                      | x                  |
| 192 | Ethiopia    | 2000 | 12     | Intermediate | 0.53                      | x                  |
| 193 | Ethiopia    | 2002 | 12     | Intermediate | 0.27                      | x                  |
| 194 | Ethiopia    | 2003 | 12     | Intermediate | 0.47                      | x                  |
| 195 | Ethiopia    | 2004 | 12     | Intermediate | 0.65                      | x                  |
| 196 | Ethiopia    | 2005 | 12     | Intermediate | 1.81                      | x                  |
| 197 | Ethiopia    | 2006 | 8      | Intermediate | 2.28                      | x                  |
| 198 | Ethiopia    | 2007 | 8      | Intermediate | 2.20                      | x                  |
| 199 | Ethiopia    | 2008 | 8      | Intermediate | 4.45                      | x                  |
| 200 | Ethiopia    | 2009 | 8      | Intermediate | 4.68                      | x                  |
| 201 | Ethiopia    | 2010 | 8      | Intermediate | 3.08                      | x                  |
| 202 | Georgia     | 2002 | 16     | Intermediate | 41.33                     | x                  |
| 203 | Georgia     | 2003 | 16     | Intermediate | 52.89                     | x                  |
| 204 | Georgia     | 2004 | 16     | Intermediate | 54.51                     | x                  |
| 205 | Georgia     | 2005 | 18     | Democracy    | 70.22                     | x                  |
| 206 | Georgia     | 2006 | 18     | Democracy    | 102.26                    | x                  |
| 207 | Georgia     | 2007 | 18     | Democracy    | 142.64                    | x                  |
| 208 | Georgia     | 2008 | 17     | Democracy    | 201.23                    | x                  |
| 209 | Georgia     | 2009 | 17     | Democracy    | 242.94                    | x                  |

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|     | Country   | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|-----------|------|--------|--------------|---------------------------|--------------------|
| 210 | Georgia   | 2010 | 17     | Democracy    | 252.02                    | x                  |
| 211 | Ghana     | 1998 | 13     | Intermediate | 1.48                      |                    |
| 212 | Ghana     | 2000 | 13     | Intermediate | 1.67                      |                    |
| 213 | Ghana     | 2002 | 17     | Democracy    | 2.38                      | x                  |
| 214 | Ghana     | 2003 | 17     | Democracy    | 2.20                      | x                  |
| 215 | Ghana     | 2004 | 17     | Democracy    | 3.21                      | x                  |
| 216 | Ghana     | 2005 | 19     | Democracy    | 3.95                      | x                  |
| 217 | Ghana     | 2006 | 19     | Democracy    | 4.64                      | x                  |
| 218 | Ghana     | 2007 | 19     | Democracy    | 4.80                      | x                  |
| 219 | Guatemala | 1998 | 19     | Democracy    | 39.04                     | x                  |
| 220 | Guatemala | 2000 | 19     | Democracy    | 42.55                     | x                  |
| 221 | Guatemala | 2002 | 19     | Democracy    | 55.21                     | x                  |
| 222 | Guatemala | 2003 | 19     | Democracy    | 136.00                    | x                  |
| 223 | Guatemala | 2004 | 19     | Democracy    | 177.98                    | x                  |
| 224 | Guatemala | 2005 | 19     | Democracy    | 212.45                    | x                  |
| 225 | Guatemala | 2006 | 19     | Democracy    | 241.87                    | x                  |
| 226 | Guatemala | 2007 | 19     | Democracy    | 284.72                    | x                  |
| 227 | Guatemala | 2008 | 19     | Democracy    | 318.08                    | x                  |
| 228 | Guatemala | 2009 | 19     | Democracy    | 326.77                    | x                  |
| 229 | Hungary   | 1998 | 21     | Democracy    | 20.72                     | x                  |
| 230 | Hungary   | 2000 | 21     | Democracy    | 20.83                     | x                  |
| 231 | Hungary   | 2002 | 21     | Democracy    | 29.06                     | x                  |
| 232 | Hungary   | 2003 | 21     | Democracy    | 27.46                     | x                  |
| 233 | Hungary   | 2004 | 21     | Democracy    | 29.11                     | x                  |
| 234 | Hungary   | 2005 | 21     | Democracy    | 169.86                    | x                  |
| 235 | India     | 1998 | 20     | Democracy    | 10.43                     | x                  |
| 236 | India     | 2000 | 20     | Democracy    | 10.85                     | x                  |
| 237 | India     | 2002 | 20     | Democracy    | 13.47                     | x                  |
| 238 | India     | 2003 | 20     | Democracy    | 14.61                     | x                  |
| 239 | India     | 2004 | 20     | Democracy    | 19.20                     | x                  |

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|     | Country            | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|--------------------|------|--------|--------------|---------------------------|--------------------|
| 240 | India              | 2005 | 20     | Democracy    | 16.88                     | x                  |
| 241 | India              | 2006 | 20     | Democracy    | 19.63                     | x                  |
| 242 | India              | 2007 | 20     | Democracy    | 24.78                     | x                  |
| 243 | Indonesia          | 1998 | 4      | Autocracy    | 3.62                      | x                  |
| 244 | Indonesia          | 2000 | 17     | Democracy    | 5.38                      | x                  |
| 245 | Indonesia          | 2002 | 17     | Democracy    | 4.93                      | x                  |
| 246 | Indonesia          | 2003 | 17     | Democracy    | 5.85                      | x                  |
| 247 | Indonesia          | 2004 | 17     | Democracy    | 6.82                      | x                  |
| 248 | Indonesia          | 2005 | 19     | Democracy    | 8.43                      | x                  |
| 249 | Indonesia          | 2006 | 19     | Democracy    | 24.14                     | x                  |
| 250 | Indonesia          | 2007 | 19     | Democracy    | 25.13                     | x                  |
| 251 | Iran, Islamic Rep. | 1998 | 14     | Intermediate | 6.40                      | x                  |
| 252 | Iran, Islamic Rep. | 2000 | 14     | Intermediate | 7.83                      | x                  |
| 253 | Iran, Islamic Rep. | 2002 | 14     | Intermediate | 10.20                     | x                  |
| 254 | Iran, Islamic Rep. | 2003 | 14     | Intermediate | 12.57                     | x                  |
| 255 | Iran, Islamic Rep. | 2004 | 14     | Intermediate | 17.19                     | x                  |
| 256 | Iran, Islamic Rep. | 2005 | 5      | Autocracy    | 14.88                     | x                  |
| 257 | Iran, Islamic Rep. | 2006 | 5      | Autocracy    | 14.71                     | x                  |
| 258 | Iran, Islamic Rep. | 2007 | 5      | Autocracy    | 14.54                     | x                  |
| 259 | Iran, Islamic Rep. | 2008 | 5      | Autocracy    | 15.53                     | x                  |
| 260 | Jamaica            | 2006 | 20     | Democracy    | 666.37                    | x                  |
| 261 | Jordan             | 1998 | 9      | Intermediate | 407.92                    | x                  |
| 262 | Jordan             | 2000 | 9      | Intermediate | 374.20                    | x                  |
| 263 | Jordan             | 2002 | 9      | Intermediate | 409.06                    | x                  |
| 264 | Jordan             | 2003 | 9      | Intermediate | 425.37                    | x                  |
| 265 | Jordan             | 2004 | 9      | Intermediate | 426.24                    | x                  |
| 266 | Jordan             | 2005 | 9      | Intermediate | 440.52                    | x                  |
| 267 | Jordan             | 2006 | 9      | Intermediate | 447.40                    | x                  |
| 268 | Jordan             | 2007 | 9      | Intermediate | 504.68                    | x                  |
| 269 | Jordan             | 2008 | 8      | Intermediate | 587.60                    | x                  |

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|     | Country         | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|-----------------|------|--------|--------------|---------------------------|--------------------|
| 270 | Jordan          | 2009 | 8      | Intermediate | 606.66                    | x                  |
| 271 | Jordan          | 2010 | 8      | Intermediate | 585.83                    | x                  |
| 272 | Kazakhstan      | 1998 | 7      | Intermediate | 3.88                      | x                  |
| 273 | Kazakhstan      | 2000 | 7      | Intermediate | 4.29                      | x                  |
| 274 | Kazakhstan      | 2002 | 7      | Intermediate | 11.53                     | x                  |
| 275 | Kazakhstan      | 2003 | 5      | Autocracy    | 13.79                     | x                  |
| 276 | Kazakhstan      | 2004 | 5      | Autocracy    | 9.89                      | x                  |
| 277 | Kazakhstan      | 2005 | 5      | Autocracy    | 11.05                     | x                  |
| 278 | Kazakhstan      | 2006 | 5      | Autocracy    | 4.09                      |                    |
| 279 | Kazakhstan      | 2007 | 5      | Autocracy    | 5.46                      |                    |
| 280 | Kazakhstan      | 2008 | 5      | Autocracy    | 9.23                      |                    |
| 281 | Kazakhstan      | 2009 | 5      | Autocracy    | 8.01                      |                    |
| 282 | Kazakhstan      | 2010 | 5      | Autocracy    | 12.32                     |                    |
| 283 | Kenya           | 1998 | 9      | Intermediate | 12.15                     | x                  |
| 284 | Kenya           | 2000 | 9      | Intermediate | 14.16                     | x                  |
| 285 | Kenya           | 2002 | 9      | Intermediate | 17.12                     | x                  |
| 286 | Kenya           | 2003 | 19     | Democracy    | 13.12                     | x                  |
| 287 | Kenya           | 2004 | 19     | Democracy    | 15.87                     | x                  |
| 288 | Kenya           | 2005 | 19     | Democracy    | 17.80                     | x                  |
| 289 | Kenya           | 2006 | 19     | Democracy    | 11.88                     | x                  |
| 290 | Kenya           | 2007 | 19     | Democracy    | 15.52                     | x                  |
| 291 | Kenya           | 2008 | 18     | Democracy    | 17.09                     | x                  |
| 292 | Kenya           | 2009 | 18     | Democracy    | 17.21                     | x                  |
| 293 | Kenya           | 2010 | 18     | Democracy    | 15.86                     | x                  |
| 294 | Kyrgyz Republic | 1998 | 8      | Intermediate | 0.58                      | x                  |
| 295 | Kyrgyz Republic | 2000 | 8      | Intermediate | 3.82                      | x                  |
| 296 | Kyrgyz Republic | 2002 | 8      | Intermediate | 2.25                      | x                  |
| 297 | Kyrgyz Republic | 2003 | 8      | Intermediate | 7.36                      |                    |
| 298 | Kyrgyz Republic | 2004 | 8      | Intermediate | 15.50                     |                    |
| 299 | Kyrgyz Republic | 2005 | 8      | Intermediate | 36.96                     |                    |

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| Country | Year            | Polity | Regime | Remittances<br>per Capita | Tax<br>Observation |   |
|---------|-----------------|--------|--------|---------------------------|--------------------|---|
| 300     | Kyrgyz Republic | 2006   | 14     | Intermediate              | 60.68              |   |
| 301     | Kyrgyz Republic | 2007   | 15     | Intermediate              | 90.65              | x |
| 302     | Kyrgyz Republic | 2008   | 14     | Intermediate              | 133.63             | x |
| 303     | Kyrgyz Republic | 2009   | 14     | Intermediate              | 229.99             | x |
| 304     | Kyrgyz Republic | 2010   | 12     | Intermediate              | 182.41             | x |
| 305     | Latvia          | 1998   | 19     | Democracy                 | 18.79              | x |
| 306     | Latvia          | 2000   | 19     | Democracy                 | 20.33              | x |
| 307     | Latvia          | 2002   | 19     | Democracy                 | 48.09              | x |
| 308     | Latvia          | 2003   | 19     | Democracy                 | 59.91              | x |
| 309     | Latvia          | 2004   | 19     | Democracy                 | 75.66              | x |
| 310     | Latvia          | 2005   | 19     | Democracy                 | 101.36             | x |
| 311     | Lebanon         | 2005   | 11     | Intermediate              | 1450.97            | x |
| 312     | Lebanon         | 2006   | 17     | Democracy                 | 1235.13            | x |
| 313     | Lebanon         | 2007   | 17     | Democracy                 | 1275.11            | x |
| 314     | Lebanon         | 2008   | 17     | Democracy                 | 1393.60            | x |
| 315     | Lebanon         | 2009   | 17     | Democracy                 | 1715.35            | x |
| 316     | Lesotho         | 1998   | 19     | Democracy                 | 210.22             | x |
| 317     | Lesotho         | 2000   | 13     | Intermediate              | 150.00             | x |
| 318     | Lesotho         | 2002   | 17     | Democracy                 | 214.58             | x |
| 319     | Lesotho         | 2003   | 19     | Democracy                 | 206.60             | x |
| 320     | Lesotho         | 2004   | 19     | Democracy                 | 293.29             | x |
| 321     | Lesotho         | 2005   | 19     | Democracy                 | 328.03             | x |
| 322     | Lesotho         | 2006   | 19     | Democracy                 | 311.22             | x |
| 323     | Lesotho         | 2007   | 19     | Democracy                 | 316.36             | x |
| 324     | Lesotho         | 2008   | 19     | Democracy                 | 326.29             | x |
| 325     | Liberia         | 2005   | 14     | Intermediate              | 18.35              |   |
| 326     | Liberia         | 2006   | 16     | Intermediate              | 9.74               | x |
| 327     | Liberia         | 2007   | 17     | Democracy                 | 23.29              | x |
| 328     | Liberia         | 2008   | 17     | Democracy                 | 17.60              | x |
| 329     | Lithuania       | 1998   | 21     | Democracy                 | 0.82               |   |

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Table 3.10 – *Continued from previous page*

| Country | Year       | Polity | Regime | Remittances<br>per Capita | Tax<br>Observation |
|---------|------------|--------|--------|---------------------------|--------------------|
| 330     | Lithuania  | 2000   | 21     | Democracy                 | 0.85               |
| 331     | Lithuania  | 2002   | 21     | Democracy                 | 22.80 x            |
| 332     | Lithuania  | 2003   | 21     | Democracy                 | 31.73 x            |
| 333     | Lithuania  | 2004   | 21     | Democracy                 | 33.62 x            |
| 334     | Lithuania  | 2005   | 21     | Democracy                 | 96.09 x            |
| 335     | Madagascar | 1998   | 19     | Democracy                 | 0.85               |
| 336     | Madagascar | 2000   | 18     | Democracy                 | 0.76               |
| 337     | Madagascar | 2002   | 18     | Democracy                 | 0.67 x             |
| 338     | Madagascar | 2003   | 18     | Democracy                 | 1.75 x             |
| 339     | Madagascar | 2004   | 18     | Democracy                 | 0.94 x             |
| 340     | Madagascar | 2005   | 18     | Democracy                 | 0.65 x             |
| 341     | Madagascar | 2006   | 18     | Democracy                 | 0.60 x             |
| 342     | Malawi     | 1998   | 17     | Democracy                 | 0.07               |
| 343     | Malawi     | 2000   | 17     | Democracy                 | 0.07               |
| 344     | Malawi     | 2002   | 15     | Intermediate              | 0.06               |
| 345     | Malawi     | 2003   | 15     | Intermediate              | 0.07               |
| 346     | Malawi     | 2006   | 17     | Democracy                 | 1.74               |
| 347     | Malawi     | 2007   | 17     | Democracy                 | 1.11               |
| 348     | Malawi     | 2008   | 17     | Democracy                 | 1.53               |
| 349     | Malawi     | 2009   | 17     | Democracy                 | 1.18               |
| 350     | Malaysia   | 1998   | 14     | Intermediate              | 8.92 x             |
| 351     | Malaysia   | 2000   | 14     | Intermediate              | 14.10 x            |
| 352     | Malaysia   | 2002   | 14     | Intermediate              | 15.34 x            |
| 353     | Malaysia   | 2003   | 14     | Intermediate              | 17.82 x            |
| 354     | Malaysia   | 2004   | 14     | Intermediate              | 22.94 x            |
| 355     | Malaysia   | 2005   | 14     | Intermediate              | 31.61 x            |
| 356     | Malaysia   | 2006   | 14     | Intermediate              | 43.22 x            |
| 357     | Malaysia   | 2007   | 14     | Intermediate              | 51.87 x            |
| 358     | Malaysia   | 2008   | 14     | Intermediate              | 58.04 x            |
| 359     | Malaysia   | 2009   | 17     | Democracy                 | 48.68 x            |

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|     | Country   | Year | Polity | Regime    | Remittances<br>per Capita | Tax<br>Observation |
|-----|-----------|------|--------|-----------|---------------------------|--------------------|
| 360 | Malaysia  | 2010 | 17     | Democracy | 40.69                     | x                  |
| 361 | Malaysia  | 2011 | 17     | Democracy | 39.01                     | x                  |
| 362 | Mauritius | 1998 | 21     | Democracy | 146.31                    |                    |
| 363 | Mauritius | 2000 | 21     | Democracy | 151.45                    |                    |
| 364 | Mauritius | 2002 | 21     | Democracy | 179.18                    |                    |
| 365 | Mauritius | 2003 | 21     | Democracy | 177.66                    |                    |
| 366 | Mauritius | 2004 | 21     | Democracy | 175.82                    |                    |
| 367 | Mauritius | 2005 | 21     | Democracy | 174.32                    |                    |
| 368 | Mauritius | 2006 | 21     | Democracy | 0.49                      |                    |
| 369 | Mauritius | 2007 | 21     | Democracy | 0.58                      |                    |
| 370 | Mauritius | 2008 | 21     | Democracy | 0.56                      |                    |
| 371 | Mauritius | 2009 | 21     | Democracy | 0.50                      |                    |
| 372 | Mauritius | 2010 | 21     | Democracy | 0.52                      | x                  |
| 373 | Mexico    | 1998 | 17     | Democracy | 56.04                     | x                  |
| 374 | Mexico    | 2000 | 17     | Democracy | 64.98                     | x                  |
| 375 | Mexico    | 2002 | 19     | Democracy | 96.32                     |                    |
| 376 | Mexico    | 2003 | 19     | Democracy | 103.35                    |                    |
| 377 | Mexico    | 2004 | 19     | Democracy | 154.12                    |                    |
| 378 | Mexico    | 2005 | 19     | Democracy | 181.58                    |                    |
| 379 | Mexico    | 2006 | 19     | Democracy | 205.38                    |                    |
| 380 | Mexico    | 2007 | 19     | Democracy | 236.74                    |                    |
| 381 | Mongolia  | 2000 | 21     | Democracy | 3.03                      | x                  |
| 382 | Mongolia  | 2002 | 21     | Democracy | 10.33                     | x                  |
| 383 | Mongolia  | 2003 | 21     | Democracy | 23.05                     | x                  |
| 384 | Mongolia  | 2004 | 21     | Democracy | 52.09                     | x                  |
| 385 | Mongolia  | 2005 | 21     | Democracy | 81.12                     |                    |
| 386 | Mongolia  | 2006 | 21     | Democracy | 71.39                     |                    |
| 387 | Mongolia  | 2007 | 21     | Democracy | 70.87                     | x                  |
| 388 | Mongolia  | 2008 | 21     | Democracy | 68.60                     | x                  |
| 389 | Mongolia  | 2009 | 21     | Democracy | 85.31                     | x                  |

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|     | Country    | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|------------|------|--------|--------------|---------------------------|--------------------|
| 390 | Mongolia   | 2010 | 21     | Democracy    | 74.70                     | x                  |
| 391 | Morocco    | 1998 | 4      | Autocracy    | 68.52                     |                    |
| 392 | Morocco    | 2000 | 5      | Autocracy    | 68.31                     |                    |
| 393 | Morocco    | 2002 | 5      | Autocracy    | 112.36                    |                    |
| 394 | Morocco    | 2003 | 5      | Autocracy    | 98.16                     | x                  |
| 395 | Morocco    | 2004 | 5      | Autocracy    | 122.15                    | x                  |
| 396 | Morocco    | 2005 | 5      | Autocracy    | 141.37                    | x                  |
| 397 | Morocco    | 2006 | 5      | Autocracy    | 152.34                    | x                  |
| 398 | Morocco    | 2007 | 5      | Autocracy    | 179.35                    | x                  |
| 399 | Mozambique | 2006 | 16     | Intermediate | 2.80                      |                    |
| 400 | Mozambique | 2007 | 16     | Intermediate | 3.71                      |                    |
| 401 | Mozambique | 2008 | 16     | Intermediate | 4.48                      |                    |
| 402 | Mozambique | 2009 | 16     | Intermediate | 5.08                      |                    |
| 403 | Mozambique | 2010 | 16     | Intermediate | 4.76                      |                    |
| 404 | Mozambique | 2011 | 16     | Intermediate | 5.78                      | x                  |
| 405 | Namibia    | 2000 | 17     | Democracy    | 5.51                      | x                  |
| 406 | Namibia    | 2002 | 17     | Democracy    | 4.56                      | x                  |
| 407 | Namibia    | 2003 | 17     | Democracy    | 4.06                      | x                  |
| 408 | Namibia    | 2004 | 17     | Democracy    | 6.17                      | x                  |
| 409 | Namibia    | 2005 | 17     | Democracy    | 7.61                      | x                  |
| 410 | Namibia    | 2006 | 17     | Democracy    | 8.66                      | x                  |
| 411 | Namibia    | 2007 | 17     | Democracy    | 8.00                      | x                  |
| 412 | Nepal      | 1998 | 16     | Intermediate | 2.28                      | x                  |
| 413 | Nepal      | 2000 | 17     | Democracy    | 3.68                      | x                  |
| 414 | Nepal      | 2002 | 17     | Democracy    | 6.21                      | x                  |
| 415 | Nepal      | 2003 | 5      | Autocracy    | 28.15                     | x                  |
| 416 | Nepal      | 2004 | 5      | Autocracy    | 31.44                     | x                  |
| 417 | Nepal      | 2005 | 5      | Autocracy    | 33.01                     | x                  |
| 418 | Nepal      | 2006 | 5      | Autocracy    | 47.91                     | x                  |
| 419 | Nepal      | 2007 | 17     | Democracy    | 56.69                     | x                  |

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Table 3.10 – *Continued from previous page*

|     | Country  | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|----------|------|--------|--------------|---------------------------|--------------------|
| 420 | Nepal    | 2008 | 17     | Democracy    | 66.82                     | x                  |
| 421 | Nepal    | 2009 | 17     | Democracy    | 103.89                    | x                  |
| 422 | Nepal    | 2010 | 17     | Democracy    | 112.45                    | x                  |
| 423 | Nepal    | 2011 | 17     | Democracy    | 129.21                    | x                  |
| 424 | Nigeria  | 1998 | 5      | Autocracy    | 16.85                     |                    |
| 425 | Nigeria  | 2000 | 15     | Intermediate | 10.86                     |                    |
| 426 | Nigeria  | 2002 | 15     | Intermediate | 9.26                      |                    |
| 427 | Nigeria  | 2003 | 15     | Intermediate | 9.36                      |                    |
| 428 | Nigeria  | 2004 | 15     | Intermediate | 8.02                      | x                  |
| 429 | Nigeria  | 2005 | 15     | Intermediate | 16.71                     | x                  |
| 430 | Nigeria  | 2006 | 15     | Intermediate | 104.88                    | x                  |
| 431 | Nigeria  | 2007 | 15     | Intermediate | 118.15                    | x                  |
| 432 | Nigeria  | 2008 | 15     | Intermediate | 122.37                    | x                  |
| 433 | Nigeria  | 2009 | 15     | Intermediate | 127.02                    | x                  |
| 434 | Nigeria  | 2010 | 15     | Intermediate | 118.21                    | x                  |
| 435 | Oman     | 1998 | 2      | Autocracy    | 17.91                     | x                  |
| 436 | Oman     | 2000 | 2      | Autocracy    | 17.95                     | x                  |
| 437 | Oman     | 2002 | 2      | Autocracy    | 17.42                     | x                  |
| 438 | Oman     | 2003 | 3      | Autocracy    | 16.90                     | x                  |
| 439 | Oman     | 2004 | 3      | Autocracy    | 16.33                     | x                  |
| 440 | Oman     | 2005 | 3      | Autocracy    | 15.83                     | x                  |
| 441 | Oman     | 2006 | 3      | Autocracy    | 15.47                     | x                  |
| 442 | Oman     | 2007 | 3      | Autocracy    | 15.27                     | x                  |
| 443 | Pakistan | 1998 | 18     | Democracy    | 12.78                     | x                  |
| 444 | Pakistan | 2000 | 5      | Autocracy    | 7.08                      | x                  |
| 445 | Pakistan | 2002 | 5      | Autocracy    | 9.95                      | x                  |
| 446 | Pakistan | 2003 | 6      | Autocracy    | 23.74                     | x                  |
| 447 | Pakistan | 2004 | 6      | Autocracy    | 26.01                     | x                  |
| 448 | Pakistan | 2005 | 6      | Autocracy    | 25.43                     | x                  |
| 449 | Pakistan | 2006 | 6      | Autocracy    | 27.09                     | x                  |

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Table 3.10 – *Continued from previous page*

|     | Country          | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|------------------|------|--------|--------------|---------------------------|--------------------|
| 450 | Pakistan         | 2007 | 6      | Autocracy    | 31.83                     | x                  |
| 451 | Pakistan         | 2008 | 13     | Intermediate | 36.59                     | x                  |
| 452 | Pakistan         | 2009 | 16     | Intermediate | 42.15                     | x                  |
| 453 | Pakistan         | 2010 | 16     | Intermediate | 51.25                     | x                  |
| 454 | Pakistan         | 2011 | 17     | Democracy    | 55.96                     | x                  |
| 455 | Panama           | 1998 | 20     | Democracy    | 22.38                     | x                  |
| 456 | Panama           | 2000 | 20     | Democracy    | 16.13                     | x                  |
| 457 | Panama           | 2002 | 20     | Democracy    | 23.46                     | x                  |
| 458 | Panama           | 2003 | 20     | Democracy    | 26.62                     |                    |
| 459 | Panama           | 2004 | 20     | Democracy    | 32.95                     |                    |
| 460 | Panama           | 2005 | 20     | Democracy    | 32.97                     |                    |
| 461 | Panama           | 2006 | 20     | Democracy    | 38.50                     |                    |
| 462 | Panama           | 2007 | 20     | Democracy    | 45.82                     |                    |
| 463 | Panama           | 2008 | 20     | Democracy    | 51.65                     |                    |
| 464 | Panama           | 2009 | 20     | Democracy    | 68.83                     |                    |
| 465 | Papua New Guinea | 1998 | 15     | Intermediate | 2.81                      | x                  |
| 466 | Papua New Guinea | 2000 | 15     | Intermediate | 1.50                      | x                  |
| 467 | Papua New Guinea | 2002 | 15     | Intermediate | 1.07                      | x                  |
| 468 | Papua New Guinea | 2003 | 15     | Intermediate | 0.99                      | x                  |
| 469 | Papua New Guinea | 2004 | 15     | Intermediate | 1.19                      |                    |
| 470 | Papua New Guinea | 2005 | 15     | Intermediate | 1.60                      |                    |
| 471 | Peru             | 2004 | 20     | Democracy    | 32.08                     | x                  |
| 472 | Peru             | 2005 | 20     | Democracy    | 41.33                     | x                  |
| 473 | Peru             | 2006 | 20     | Democracy    | 51.94                     | x                  |
| 474 | Peru             | 2007 | 20     | Democracy    | 65.55                     | x                  |
| 475 | Peru             | 2008 | 20     | Democracy    | 75.22                     | x                  |
| 476 | Peru             | 2009 | 20     | Democracy    | 85.37                     | x                  |
| 477 | Peru             | 2010 | 20     | Democracy    | 83.25                     | x                  |
| 478 | Peru             | 2011 | 20     | Democracy    | 86.59                     | x                  |
| 479 | Philippines      | 1998 | 19     | Democracy    | 93.42                     | x                  |

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Table 3.10 – *Continued from previous page*

|     | Country            | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|--------------------|------|--------|--------------|---------------------------|--------------------|
| 480 | Philippines        | 2000 | 19     | Democracy    | 88.36                     | x                  |
| 481 | Philippines        | 2002 | 19     | Democracy    | 110.58                    | x                  |
| 482 | Philippines        | 2003 | 19     | Democracy    | 120.25                    | x                  |
| 483 | Philippines        | 2004 | 19     | Democracy    | 124.00                    | x                  |
| 484 | Philippines        | 2005 | 19     | Democracy    | 136.18                    | x                  |
| 485 | Philippines        | 2006 | 19     | Democracy    | 160.01                    | x                  |
| 486 | Philippines        | 2007 | 19     | Democracy    | 177.37                    | x                  |
| 487 | Philippines        | 2008 | 19     | Democracy    | 184.95                    | x                  |
| 488 | Philippines        | 2009 | 19     | Democracy    | 208.59                    | x                  |
| 489 | Philippines        | 2010 | 19     | Democracy    | 217.22                    | x                  |
| 490 | Romania            | 1998 | 19     | Democracy    | 0.71                      |                    |
| 491 | Romania            | 2000 | 19     | Democracy    | 4.27                      |                    |
| 492 | Romania            | 2002 | 19     | Democracy    | 5.24                      |                    |
| 493 | Romania            | 2003 | 19     | Democracy    | 6.58                      | x                  |
| 494 | Romania            | 2004 | 19     | Democracy    | 5.75                      | x                  |
| 495 | Romania            | 2005 | 20     | Democracy    | 6.15                      | x                  |
| 496 | Russian Federation | 2000 | 14     | Intermediate | 8.76                      |                    |
| 497 | Russian Federation | 2002 | 17     | Democracy    | 9.61                      |                    |
| 498 | Russian Federation | 2003 | 17     | Democracy    | 9.35                      | x                  |
| 499 | Russian Federation | 2004 | 17     | Democracy    | 10.04                     | x                  |
| 500 | Russian Federation | 2005 | 17     | Democracy    | 17.35                     | x                  |
| 501 | Rwanda             | 2006 | 8      | Intermediate | 0.94                      |                    |
| 502 | Rwanda             | 2007 | 8      | Intermediate | 3.00                      |                    |
| 503 | Rwanda             | 2008 | 8      | Intermediate | 12.24                     |                    |
| 504 | Rwanda             | 2009 | 8      | Intermediate | 6.63                      | x                  |
| 505 | Rwanda             | 2010 | 8      | Intermediate | 8.80                      | x                  |
| 506 | Rwanda             | 2011 | 7      | Intermediate | 9.82                      | x                  |
| 507 | South Africa       | 1998 | 20     | Democracy    | 5.03                      |                    |
| 508 | South Africa       | 2000 | 20     | Democracy    | 7.63                      |                    |
| 509 | South Africa       | 2002 | 20     | Democracy    | 6.62                      | x                  |

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Table 3.10 – *Continued from previous page*

|     | Country              | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|----------------------|------|--------|--------------|---------------------------|--------------------|
| 510 | South Africa         | 2003 | 20     | Democracy    | 6.30                      | x                  |
| 511 | South Africa         | 2004 | 20     | Democracy    | 9.36                      | x                  |
| 512 | South Africa         | 2005 | 20     | Democracy    | 11.12                     | x                  |
| 513 | South Africa         | 2006 | 20     | Democracy    | 12.88                     | x                  |
| 514 | South Africa         | 2007 | 20     | Democracy    | 14.33                     | x                  |
| 515 | South Africa         | 2008 | 20     | Democracy    | 16.20                     | x                  |
| 516 | South Africa         | 2009 | 20     | Democracy    | 15.81                     | x                  |
| 517 | South Africa         | 2010 | 20     | Democracy    | 17.16                     | x                  |
| 518 | Sri Lanka            | 1998 | 16     | Intermediate | 50.75                     | x                  |
| 519 | Sri Lanka            | 2000 | 16     | Intermediate | 56.28                     | x                  |
| 520 | Sri Lanka            | 2002 | 17     | Democracy    | 63.04                     | x                  |
| 521 | Sri Lanka            | 2003 | 17     | Democracy    | 69.19                     | x                  |
| 522 | Sri Lanka            | 2004 | 16     | Intermediate | 74.99                     | x                  |
| 523 | Sri Lanka            | 2005 | 16     | Intermediate | 81.79                     | x                  |
| 524 | Sri Lanka            | 2006 | 16     | Intermediate | 100.57                    | x                  |
| 525 | Sri Lanka            | 2007 | 17     | Democracy    | 109.11                    | x                  |
| 526 | Sri Lanka            | 2008 | 17     | Democracy    | 125.12                    | x                  |
| 527 | Swaziland            | 1998 | 2      | Autocracy    | 83.28                     |                    |
| 528 | Swaziland            | 2000 | 2      | Autocracy    | 66.81                     |                    |
| 529 | Swaziland            | 2002 | 2      | Autocracy    | 49.20                     |                    |
| 530 | Swaziland            | 2003 | 2      | Autocracy    | 41.28                     |                    |
| 531 | Swaziland            | 2004 | 2      | Autocracy    | 59.95                     |                    |
| 532 | Swaziland            | 2005 | 2      | Autocracy    | 75.63                     |                    |
| 533 | Swaziland            | 2006 | 2      | Autocracy    | 86.38                     |                    |
| 534 | Swaziland            | 2007 | 2      | Autocracy    | 85.54                     |                    |
| 535 | Syrian Arab Republic | 1998 | 2      | Autocracy    | 15.69                     |                    |
| 536 | Syrian Arab Republic | 2000 | 2      | Autocracy    | 12.38                     | x                  |
| 537 | Syrian Arab Republic | 2002 | 4      | Autocracy    | 10.18                     | x                  |
| 538 | Syrian Arab Republic | 2003 | 4      | Autocracy    | 7.94                      | x                  |
| 539 | Syrian Arab Republic | 2004 | 4      | Autocracy    | 51.39                     | x                  |

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Table 3.10 – *Continued from previous page*

| Country | Year                 | Polity | Regime | Remittances<br>per Capita | Tax<br>Observation |   |
|---------|----------------------|--------|--------|---------------------------|--------------------|---|
| 540     | Syrian Arab Republic | 2005   | 4      | Autocracy                 | 48.37              | x |
| 541     | Syrian Arab Republic | 2006   | 4      | Autocracy                 | 45.30              | x |
| 542     | Syrian Arab Republic | 2007   | 4      | Autocracy                 | 42.28              | x |
| 543     | Tanzania             | 1998   | 10     | Intermediate              | 0.05               |   |
| 544     | Tanzania             | 2000   | 10     | Intermediate              | 0.22               |   |
| 545     | Tanzania             | 2002   | 10     | Intermediate              | 0.44               |   |
| 546     | Tanzania             | 2003   | 10     | Intermediate              | 0.34               |   |
| 547     | Tanzania             | 2004   | 10     | Intermediate              | 0.24               |   |
| 548     | Tanzania             | 2005   | 10     | Intermediate              | 0.37               |   |
| 549     | Tanzania             | 2006   | 10     | Intermediate              | 0.50               |   |
| 550     | Tanzania             | 2007   | 10     | Intermediate              | 0.39               |   |
| 551     | Tanzania             | 2008   | 10     | Intermediate              | 0.62               |   |
| 552     | Tanzania             | 2009   | 10     | Intermediate              | 0.87               |   |
| 553     | Thailand             | 1998   | 20     | Democracy                 | 27.55              |   |
| 554     | Thailand             | 2000   | 20     | Democracy                 | 23.69              |   |
| 555     | Thailand             | 2002   | 20     | Democracy                 | 19.86              |   |
| 556     | Thailand             | 2003   | 20     | Democracy                 | 21.63              |   |
| 557     | Thailand             | 2004   | 20     | Democracy                 | 24.92              | x |
| 558     | Thailand             | 2005   | 20     | Democracy                 | 24.92              | x |
| 559     | Thailand             | 2006   | 20     | Democracy                 | 18.11              | x |
| 560     | Thailand             | 2007   | 6      | Autocracy                 | 20.23              | x |
| 561     | Thailand             | 2008   | 10     | Intermediate              | 24.74              | x |
| 562     | Thailand             | 2009   | 15     | Intermediate              | 28.68              | x |
| 563     | Thailand             | 2010   | 15     | Intermediate              | 41.89              | x |
| 564     | Thailand             | 2011   | 15     | Intermediate              | 53.92              | x |
| 565     | Trinidad and Tobago  | 1998   | 21     | Democracy                 | 23.96              |   |
| 566     | Trinidad and Tobago  | 2000   | 21     | Democracy                 | 43.01              |   |
| 567     | Trinidad and Tobago  | 2002   | 21     | Democracy                 | 32.15              | x |
| 568     | Trinidad and Tobago  | 2003   | 21     | Democracy                 | 61.91              | x |
| 569     | Trinidad and Tobago  | 2004   | 21     | Democracy                 | 67.61              | x |

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Table 3.10 – *Continued from previous page*

| Country | Year                | Polity | Regime | Remittances<br>per Capita | Tax<br>Observation |   |
|---------|---------------------|--------|--------|---------------------------|--------------------|---|
| 570     | Trinidad and Tobago | 2005   | 21     | Democracy                 | 67.34              | x |
| 571     | Trinidad and Tobago | 2006   | 21     | Democracy                 | 71.25              | x |
| 572     | Trinidad and Tobago | 2007   | 21     | Democracy                 | 69.97              | x |
| 573     | Trinidad and Tobago | 2008   | 21     | Democracy                 | 83.51              | x |
| 574     | Trinidad and Tobago | 2009   | 21     | Democracy                 | 71.78              | x |
| 575     | Tunisia             | 1998   | 8      | Intermediate              | 74.28              | x |
| 576     | Tunisia             | 2000   | 8      | Intermediate              | 80.50              | x |
| 577     | Tunisia             | 2002   | 8      | Intermediate              | 95.84              | x |
| 578     | Tunisia             | 2003   | 7      | Intermediate              | 109.42             | x |
| 579     | Tunisia             | 2004   | 7      | Intermediate              | 127.06             | x |
| 580     | Tunisia             | 2005   | 7      | Intermediate              | 144.11             | x |
| 581     | Tunisia             | 2006   | 7      | Intermediate              | 138.86             | x |
| 582     | Tunisia             | 2007   | 7      | Intermediate              | 149.10             | x |
| 583     | Tunisia             | 2008   | 7      | Intermediate              | 167.80             | x |
| 584     | Tunisia             | 2009   | 7      | Intermediate              | 191.40             | x |
| 585     | Tunisia             | 2010   | 7      | Intermediate              | 188.18             | x |
| 586     | Turkey              | 1998   | 18     | Democracy                 | 69.52              |   |
| 587     | Turkey              | 2000   | 18     | Democracy                 | 72.83              |   |
| 588     | Turkey              | 2002   | 18     | Democracy                 | 43.46              |   |
| 589     | Turkey              | 2003   | 18     | Democracy                 | 29.77              |   |
| 590     | Turkey              | 2004   | 18     | Democracy                 | 11.06              |   |
| 591     | Turkey              | 2005   | 18     | Democracy                 | 12.03              |   |
| 592     | Turkey              | 2006   | 18     | Democracy                 | 13.09              |   |
| 593     | Turkey              | 2007   | 18     | Democracy                 | 16.70              |   |
| 594     | Turkey              | 2008   | 18     | Democracy                 | 17.96              |   |
| 595     | Turkey              | 2009   | 18     | Democracy                 | 20.98              | x |
| 596     | Turkey              | 2010   | 18     | Democracy                 | 14.74              | x |
| 597     | Uganda              | 2000   | 7      | Intermediate              | 9.89               | x |
| 598     | Uganda              | 2002   | 7      | Intermediate              | 13.89              | x |
| 599     | Uganda              | 2003   | 7      | Intermediate              | 16.29              | x |

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Table 3.10 – *Continued from previous page*

|     | Country       | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|---------------|------|--------|--------------|---------------------------|--------------------|
| 600 | Uganda        | 2004 | 7      | Intermediate | 11.13                     | x                  |
| 601 | Uganda        | 2005 | 7      | Intermediate | 11.18                     | x                  |
| 602 | Uganda        | 2006 | 10     | Intermediate | 11.20                     | x                  |
| 603 | Uganda        | 2007 | 10     | Intermediate | 13.83                     | x                  |
| 604 | Uganda        | 2008 | 10     | Intermediate | 14.70                     | x                  |
| 605 | Uganda        | 2009 | 10     | Intermediate | 22.77                     | x                  |
| 606 | Uganda        | 2010 | 10     | Intermediate | 23.77                     | x                  |
| 607 | Ukraine       | 2000 | 18     | Democracy    | 0.36                      | x                  |
| 608 | Ukraine       | 2002 | 17     | Democracy    | 2.90                      | x                  |
| 609 | Ukraine       | 2003 | 17     | Democracy    | 4.34                      | x                  |
| 610 | Ukraine       | 2004 | 17     | Democracy    | 6.90                      | x                  |
| 611 | Ukraine       | 2005 | 17     | Democracy    | 8.66                      | x                  |
| 612 | Ukraine       | 2006 | 17     | Democracy    | 51.12                     | x                  |
| 613 | Ukraine       | 2007 | 18     | Democracy    | 66.30                     | x                  |
| 614 | Ukraine       | 2008 | 18     | Democracy    | 113.74                    | x                  |
| 615 | Ukraine       | 2009 | 18     | Democracy    | 146.61                    | x                  |
| 616 | Ukraine       | 2010 | 18     | Democracy    | 129.00                    | x                  |
| 617 | Uruguay       | 2002 | 21     | Democracy    | 0.00                      | x                  |
| 618 | Uruguay       | 2003 | 21     | Democracy    | 10.83                     | x                  |
| 619 | Uruguay       | 2004 | 21     | Democracy    | 18.57                     | x                  |
| 620 | Uruguay       | 2005 | 21     | Democracy    | 21.03                     | x                  |
| 621 | Uruguay       | 2006 | 21     | Democracy    | 23.08                     | x                  |
| 622 | Uruguay       | 2007 | 21     | Democracy    | 26.70                     | x                  |
| 623 | Venezuela, RB | 2000 | 18     | Democracy    | 0.71                      | x                  |
| 624 | Venezuela, RB | 2002 | 17     | Democracy    | 0.76                      | x                  |
| 625 | Venezuela, RB | 2003 | 17     | Democracy    | 0.75                      | x                  |
| 626 | Venezuela, RB | 2004 | 17     | Democracy    | 8.06                      | x                  |
| 627 | Venezuela, RB | 2005 | 17     | Democracy    | 5.45                      | x                  |
| 628 | Venezuela, RB | 2006 | 17     | Democracy    | 5.54                      | x                  |
| 629 | Venezuela, RB | 2007 | 16     | Intermediate | 6.07                      |                    |

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Table 3.10 – *Continued from previous page*

|     | Country     | Year | Polity | Regime       | Remittances<br>per Capita | Tax<br>Observation |
|-----|-------------|------|--------|--------------|---------------------------|--------------------|
| 630 | Vietnam     | 2002 | 4      | Autocracy    | 13.99                     |                    |
| 631 | Vietnam     | 2003 | 4      | Autocracy    | 22.25                     |                    |
| 632 | Vietnam     | 2004 | 4      | Autocracy    | 26.10                     |                    |
| 633 | Vietnam     | 2005 | 4      | Autocracy    | 28.37                     |                    |
| 634 | Vietnam     | 2006 | 4      | Autocracy    | 38.23                     |                    |
| 635 | Vietnam     | 2007 | 4      | Autocracy    | 45.61                     |                    |
| 636 | Vietnam     | 2008 | 4      | Autocracy    | 73.38                     |                    |
| 637 | Vietnam     | 2009 | 4      | Autocracy    | 79.94                     |                    |
| 638 | Vietnam     | 2010 | 4      | Autocracy    | 69.98                     |                    |
| 639 | Yemen, Rep. | 1998 | 9      | Intermediate | 72.64                     | x                  |
| 640 | Yemen, Rep. | 2000 | 9      | Intermediate | 71.80                     | x                  |
| 641 | Yemen, Rep. | 2002 | 9      | Intermediate | 71.80                     |                    |
| 642 | Yemen, Rep. | 2003 | 9      | Intermediate | 69.75                     |                    |
| 643 | Yemen, Rep. | 2004 | 9      | Intermediate | 66.55                     |                    |
| 644 | Yemen, Rep. | 2005 | 9      | Intermediate | 65.40                     |                    |
| 645 | Yemen, Rep. | 2006 | 9      | Intermediate | 63.69                     |                    |
| 646 | Yemen, Rep. | 2007 | 9      | Intermediate | 62.08                     |                    |
| 647 | Zambia      | 2004 | 16     | Intermediate | 3.33                      | x                  |
| 648 | Zambia      | 2005 | 16     | Intermediate | 4.33                      | x                  |
| 649 | Zambia      | 2006 | 16     | Intermediate | 4.61                      | x                  |
| 650 | Zambia      | 2007 | 16     | Intermediate | 4.90                      | x                  |

## CHAPTER 4

# Democratic Quality & Emigration in Latin America

### 4.1 Introduction

International migration is a major area of research that has attracted both academics and policy-makers. Over the past thirty years, the global migrant population has increased dramatically over the past thirty years. In particular, migration from poorer, developing countries to wealthier, developed countries has increased due to changes in technological, social and economic factors.

At the same time, there has been a growth in the number of democracies across developing countries. The third wave of democratization began in the 1970s and continued through the early 1990s. By then, nearly all Latin American countries held open elections that allowed opposition parties to form new political landscapes. Many democracies have seen advances in economic development and positive economic growth. However, economic development and political stability is not a given in these democracies. Some developing democracies are found to be very weak due to high levels of corruption and weak economic growth (Treisman, 2000; Przeworski et al., 2000). Political competition has opened up avenues for new opposition groups to peacefully compete for power but in some countries it has also led to episodes of instability (Roberts and Wibbels, 1999; Valenzuela, 2004).

Do poor performing democracies push citizens to move abroad? In a democ-

racy, citizens and interest groups can voice their demands to the government in regards to public goods and policies. The state is expected to enforce the rule of law indiscriminately and govern with transparency. However, poor governance, in the form of high corruption and poor accountability, can undermine the regime's ability to improve the quality of life for citizens. Just as poor economic performance can persuade citizens to emigrate, poor quality of government can also affect one's own calculus on whether to emigrate.

Latin America provides an appropriate case study since the region underwent democratization and is a major migrant-sending region to developed countries. By the mid-1990s, nearly all the countries in Latin America were considered to be democracies. However, the region has gone through many episodes of instability due to economic volatility and electoral disputes (Mainwaring and Pérez-Liñán, 2014). At the same time, rates of Latin American emigration rose after democratization with the United States being the main country of destination (Ratha, Mohapatra and Silwal, 2011). Emigration rates vary between these countries; Central American countries have the highest rates of emigration and the lowest rates are found in the Southern Cone.

While geography, economy, and technology all contribute to international migration flows, the political factors remain understudied. This paper will show that democratic quality has an interaction effect with economic growth in explaining Latin American emigration to the United States. Given two countries that both share the low economic growth, the country with higher democratic quality will have higher emigration than a country with lower quality institutions. In general, higher quality institutions will generate more emigrants from Latin America when economic performance is poor.

## 4.2 Democracy and Emigration

### 4.2.1 Migration Theories

Economic theories of international migration focus on migrants' maximizing wages or minimizing risk. Many macro and micro-economic theories explain how international migration changes with economic development (Massey et al., 1993). Neoclassical theories argue that workers from low-wage countries will migrate to high-wage countries. Hatton and Williamson (2005) posit that wage inequality drives migration from one country to another. As migrants increase the labor supply in the destination country, then wages for native workers will decline. More importantly, since migrants tend to be low-skilled, native workers in blue-collar sectors of the economy will bear the brunt of migration's effect on wages. These theories argue that migration will cease when wages equalize between both countries. At the individual-level, the decision to migrate is based on maximizing wages while taking into account the costs of migration. The costs of migration include transportation, opportunity costs, and adaptation to new surroundings. If the benefits of migration outweigh the total costs of migrating, then the individual will move. Thus, wage inequalities will generate a push to emigrate from the poorer country.

The new economic theories of migration focus on the household as the unit of analysis. The decision to migrate is a family decision akin to diversification of risk (Massey et al., 1993). Economic uncertainty in the home country will convince the household to send one or more members to a destination country as a way of insuring against possible economic shocks in the home country. Consequently, the wages earned in the destination country can be sent back in the form of remittances to support the household economically (Stark and Bloom, 1985). Remittances, as a result of emigration, provide a buffer against economic shock. In sum, economic uncertainty in the home country motivates emigration as a strategy to minimize



risk for the household.

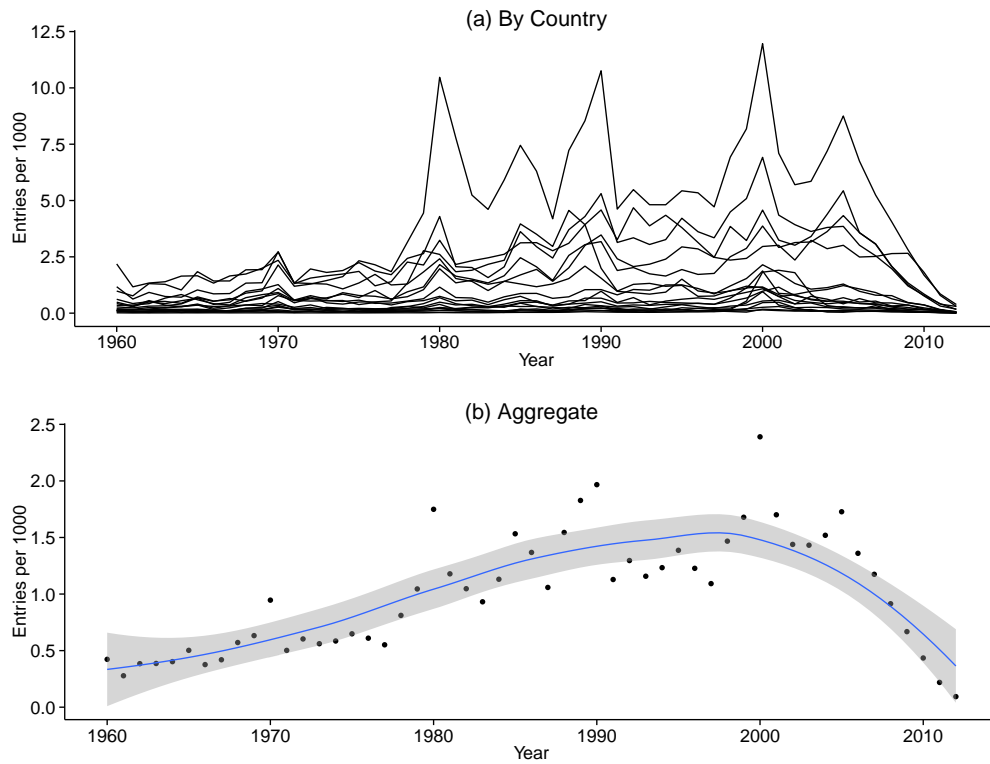
Closely related to economic theories of migration, social-network theories seek to explain how international migration is sustained. Social network theory primarily argues that once migrant networks are established in the destination country, these networks will reduce the cost of migration that follow (Massey et al., 1990). Declining costs are made possible through the network's ability to ease adaptation to new surroundings and provide support in traveling. For example, relatives abroad can arrange travel for newcomers and help them find employment. Furthermore, these declining costs make migration an even more attractive strategy to insure against risk (Massey et al., 1993, 448-450). Social network theory complements previous economic theories to explain why migration persists despite the seemingly high costs associated with it.

According to economic theories of migration, poor economic performance and global inequality should drive migration. Workers in poor countries will emigrate to wealthier countries to gain relatively higher wages. An economic shock to the home country, in the form of recession or high inflation, should also produce emigration. Furthermore, these economic theories have implications about *who* migrates. If economic theories propose emigration as a means to maximize income and insure against risk, the poorest segments of the populations should be the likeliest candidates to be international migrants. Yet, the poorest individuals and households are unlikely to incur the costs of migrating (UNDP, 2009*a*; Fajnzylber and Lopez, 2008). This makes middle class households in developing countries the likelier candidates to move. Middle-income households have a greater incentive to insure against risks and can also able bear the costs of emigrating. This pattern is similar at the country-level in that poorer countries do not necessarily have higher emigration rates than middle-income countries. Economic theories have presented profound insights in explaining the variation in emigration across and within countries, but often do not accurately predict the onset of migration or its

continued flows.

Latin American emigration to the United States had a general increase since the third wave of democratization thirty years ago. According to the World Bank, the global stock of Latin American migrants was about 30.2 million people in 2012 (Ratha, Mohapatra and Silwal, 2011). Only Asia ranks ahead of Latin America as the largest sending region. A large majority of Latin Americans migrate northwards to the United States and Figure 4.1 shows the general trend from 1960 to 2010. The non-linear trend in Figure 4.1b shows that Latin American migration increased during the 1980s and 1990s as the region underwent democratization. There was a general decline in Latin American emigration after 2000 at a time when Latin American countries were enjoying a commodity boom and the US economy entered recession towards the end of the decade.

Figure 4.1: Latin American Migration to the United States



Source: American Community Surveys (2007-2012 5-year estimates)

Figure 4.1 shows that Latin American migration has both cross-sectional and temporal variation, and this could be explained by several different factors. First, the fluctuations in the emigration rate from Latin America to the U.S. could be due to economic forces both in the home country and the destination country. Even though countries were democratizing in this time period, some countries in Latin America experienced economic crises in the 1980s and 1990s. Meanwhile, the American economy was growing, generating a pull-pressure for many potential migrants in the same period.

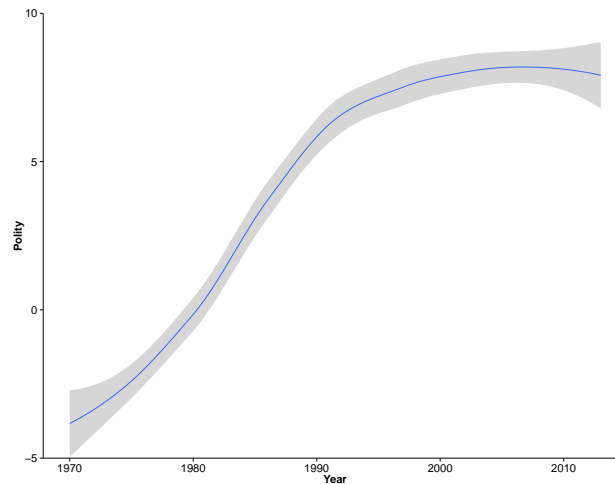
The variation in emigration could also be explained by national level factors in the sending countries. Latin American countries differ according to demographic composition, economic characteristics, and political institutions. The Southern Cone countries such as Chile and Argentina are relatively wealthier and have smaller migration rates to the United States. Geography can explain the variation in that the closer the distance to the destination country, the lower the costs of migration. Central American countries are much poorer than other countries in the region but are relatively closer to the United States. Thus, they have the highest emigration rates to the US.

#### **4.2.2 Variations of Democracy in Latin America**

While the countries of Latin America are considered more democratic than 40 years ago, there is variation in terms of the quality of these democracies. Figure 4.2 shows the trend in polity scores for 18 Latin American countries. By the middle of the 1990s, Latin America can be considered a democratic region. Despite the noted economic benefits of having a democratic regime over an authoritarian regime, Latin American democracies have a mixed record on economic performance (Przeworski et al., 2000; Boix and Stokes, 2003). Democratization has not resolved the historical economic troubles of the region and has contributed to political instability (Valenzuela, 2004; Hochstetler, 2006; Llanos and Marsteintredet,

2010). Presidential breakdowns are not uncommon in Latin America, but they rarely result from coup attempts nor do they lead to regime collapse (Llanos and Marsteintredet, 2010). Although relevant, economic conditions are insufficient in explaining political instability in the region.

Figure 4.2: Polity Scores: Latin America

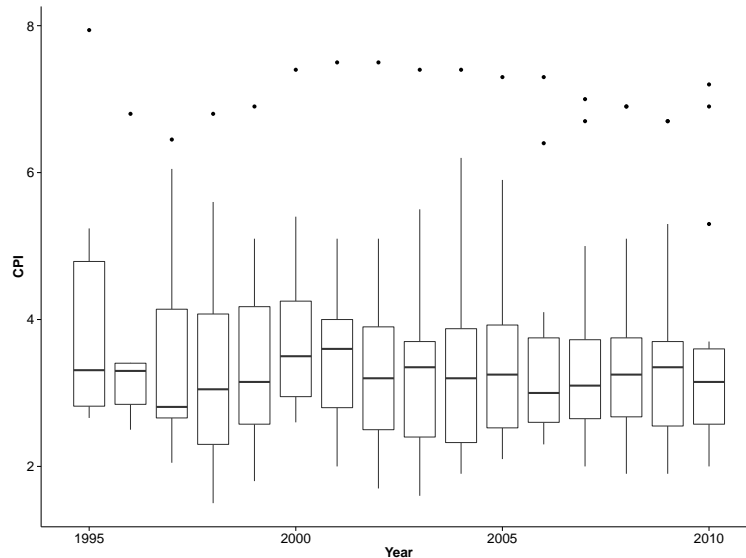


Source: Polity IV.

Some argue that presidential systems contribute to political instability in democratic Latin America. Presidents struggle with congresses that either have more power and/or are controlled by opposition parties (Linz, 1990; Valenzuela, 2004; Hochstetler, 2006; Cheibub, 2007; Llanos and Marsteintredet, 2010). Amidst the backdrop of economic troubles, a hostile congress controlled by the opposition will find it opportunistic to weaken the president. Furthermore, presidential systems have the problem of dual legitimacy where both president and congress can claim to have a mandate from voters (Linz, 1990). Military legacies can also inhibit political stability if military officers have influence in contemporary politics (Karl, 1995; Cheibub, 2007; Booth, Wade and Walker, 2014). Problems of representation from political instability and high party fragmentation can also produce disillusionment with democracy (Stokes, 2001; Mainwaring and Pérez-Liñán,

2014). Even though democratization has been successful, the political instability stems from the democratic institutions.

Figure 4.3: Corruptions Perceptions Index in Latin America



Source: Transparency International in Berkman et al (2013)

Corruption is a major concern for Latin America's democratic consolidation. Democratization increases the number of actors involved in policy-making decisions at different levels of government such as the executive, legislative, and subnational offices (Weyland, 1998; Treisman, 2007a). Uneven economic growth and lower economic development is associated with higher levels of corruption (Treisman, 2000, 2007b). Figure 4.3 shows that Latin American democracies have performed poorly in terms of perceived corruption scores. Long-lasting democracies are associated with lower corruption yet we do not see improvement in the corruption indices over time in Latin America (Treisman, 2007b). High perceptions of corruption weakens support for incumbents and could trigger mass protests against them, which can destabilize governments (Canache and Allison, 2005; Llanos and Marsteintredet, 2010).

Crime and insecurity are growing political issue in contemporary Latin American politics. The region has seen an increase in crime since the 1990s and it is now one of the top issues concerning citizens (UNDP, 2009*b*, 2013). Several countries such as El Salvador, Honduras, and Venezuela have the highest homicide rates in the world. Bateson (2012) and Hiskey, Montalvo and Orcés (2014) find that crime victimization is associated with dissatisfaction with democracy, support for authoritarianism and intentions to emigrate.

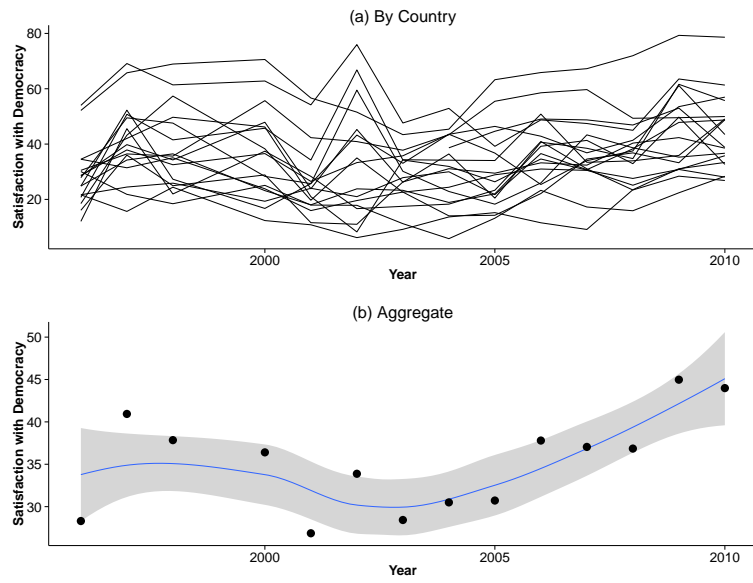
Latin American public opinion has grown skeptical of the benefits of democracy. Figure 4.4 and Figure 4.5 present the time trends on Latin American attitudes towards democracies. Figure 4.4a shows the variation across countries and over time in regards to satisfaction with democracy. Some countries report satisfaction higher than 50%, but many countries have stayed within 20 to 40 percent since the late 1990s. Figure 4.4b provides an aggregate trend of the region and we see that satisfaction improved since 2000, but remains below 50%.

Despite the dissatisfaction with democracy, Latin Americans still prefer democracy over an authoritarian regime. However, that sentiment is getting weaker over time. Figure 4.5 shows that the Latin American preference for democracy has slightly dipped for the region, sliding from 70% to 60%. Looking at the profile plot in Figure 4.5a, the variation for democratic support increases over time. Corruption and insecurity are considered to be major factors driving this decline in democratic support (Ceobanu, Wood and Ribeiro, 2010; Hiskey, Montalvo and Orcés, 2014).

### **4.2.3 Emigration from Democracies**

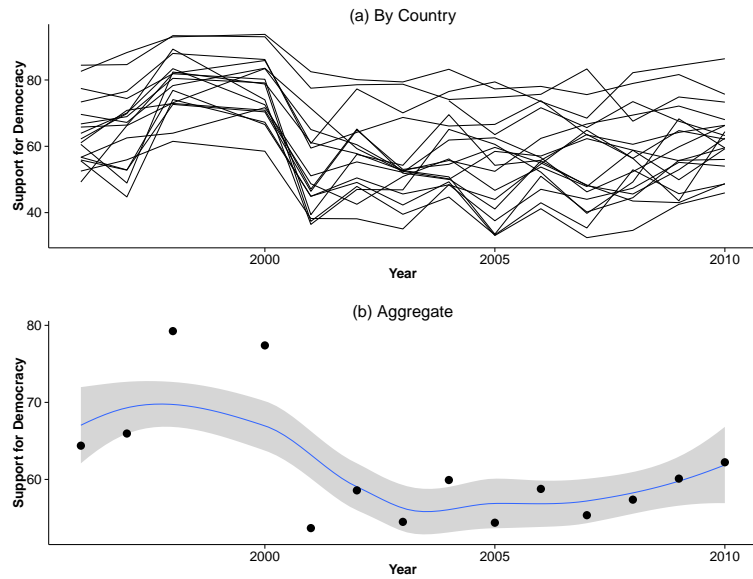
There are very few papers that explore the relationship between political institutions and emigration. Hiskey, Montalvo and Orcés (2014) argue that political factors enter into the decisions to emigrate for citizens exposed to defective demo-

Figure 4.4: Satisfaction with Democracy in Latin America (1997-2010)



Source: Latinobarometro (1997-2010).

Figure 4.5: Longitudinal Plots: Support for Democracy in Latin America (1997-2010)



Source: Latinobarometro (1997-2010).

cratic governments. The “reverse prospect channel” is a mechanism where one’s past and present political attitudes influence intentions to migrate. They use a cross-section of public opinion data and add contextual political variables such as Freedom House scores to show that higher levels of democratic satisfaction discourages migration. Insecurity and poor experiences with politics generate pressures to emigrate. However, the cross-sectional analysis does not take into account potential temporal confounding such as changes in the crime rate or previous migration flows. Furthermore, the dependent variable measures *intentions* to emigrate rather than the act of migration itself.

As low-quality institutions can potentially push citizens to emigrate, the institutions abroad can pull migrants. Fitzgerald, Leblang and Teets (2014) argue that citizenship rights and the strength of far right-wing parties can influence migration flows to destination countries. Potential destination countries with strong right-wing parties are likely to deter migration because of the hostile political climate that migrants can experience upon settling. Countries with liberal citizenship regimes are likely to attract more migrants. The analysis exclusively analyzes the pull factors of migration and does not account for the home country context that generates push factors.

On the contrary to Hiskey, Montalvo and Orcés (2014), it is plausible that emigration can affect institutions at home. Docquier et al. (2015) argue and show that countries with high rates of emigration see improvements in their democratic qualities such as political and civil liberties index. They find that emigration improves the scores on institutional indicators such as Freedom House’s political and civil liberties. These results are driven by emigration to wealthy democratic countries, which echoes Fitzgerald, Leblang and Teets (2014). The data used in Docquier et al. (2015) and Fitzgerald, Leblang and Teets (2014) rely on the bilateral migration matrix that measures migration flows to 20 OECD countries (Brücker, Stella and Marfouk, 2013). This data only contains measures in 5-year



intervals leaving authors to either reduce the sample of the panel dataset (Docquier et al., 2015) or use multiple imputations (Fitzgerald, Leblang and Teets, 2014).

Emigration has a mixed record with institutional quality. Emigration, and the subsequent remittances to the home country, have been shown to decrease institutional quality and formal political participation (Abdih et al., 2011; Ahmed, 2012; Goodman and Hiskey, 2008; Bravo, 2008). There are other cases where emigration can motivate political participation and lead to democratizing effects such as political competition and increased accountability (Kapur, 2010; Burgess, 2012; Duquette-Rury, 2014; Escribà-Folch, Meseguer and Wright, 2015). The causal relationship between politics and emigration is still open to debate.

### **4.3 Democracies and Emigration: Protection Against Uncertainty and Risk**

While previous papers discuss the role of institutions and emigration, the question remains as to why Latin Americans are leaving their young democracies in higher numbers than they did during the authoritarian era. Hiskey, Montalvo and Orcés (2014) show that insecurity and poor experiences with politics encourage emigration but the paper does not attribute to why that is the case. What is it about institutional quality that could drive citizens away to the United States, or any other country, where they would not have the same rights. Migrating away from a democracy is akin to disenfranchising oneself for a better life. I will argue that young democracies have political uncertainties that raise economic costs for household. Emigration can assist in decreasing those costs from political uncertainties and protecting the household from any risks associated with it.

### 4.3.1 Democracies and Political Uncertainty

Political uncertainty is inherent in democracies. Political competition itself leads to *electoral uncertainty* as to whom will take control of the government. Democracy introduces new actors in terms of political parties but also in legislative institutions such as congress. Furthermore, with decentralization, the number of political actors multiplies with offices in subnational levels of government. Decisions on policy-making can be made at different levels of government, which affects daily life for citizens. There is *policy uncertainty* and *enforcement uncertainty*, making it unclear what policy will be implemented and whether it will be enforced consistently.

Elections introduce citizens with alternative options to the incumbent party and make the change in power probable. New political parties present policy programs that are in disagreement with others and these parties compete for votes. The degrees of electoral uncertainty can vary according to the nature of the political system within a democracy. On one extreme, electoral volatility and fragmented party systems may have higher uncertainty due to numerous candidates and constant changes in power. For example, Guatemala is known to have a fragmented party system where new parties appear in every election (Booth, Wade and Walker, 2014). Electoral volatility in places such as Peru and Venezuela can sustain electoral uncertainty beyond one election, and potentially destabilize a country. Roberts and Wibbels (1999) find that party polarization and institutional changes between elections contribute to volatility. In contrast, less volatile and fragmented electoral systems have less uncertainty because of the relative predictability of elections.

Consequently, this electoral uncertainty may bring about policy uncertainty. Policy uncertainty may arise following an election as new actors take the reins of government. Voters may be told one thing during the campaign, but witness other

policies enacted instead, as was the case with Menem in Argentina and Fujimori in Peru (Stokes, 2001). Though elections confirm who will take power, they do not guarantee what policies will be implemented. In addition, Latin American presidents often face an opposition-controlled congress that can lead to legislative gridlock and potential instability (Llanos and Marsteintredet, 2010). Legislative institutions, along with the party system, could lead to different degrees of policy uncertainty.

Finally, enforcement uncertainty can arise from a lack of consistent implementation of policy. Inconsistent policy can be manifested in politically-driven distribution of goods such as anti-poverty programs that favor the incumbent's constituents or used to attract swing voters (Zucco, 2008; Magaloni, 2006). Democracy can bring about bribery opportunities where local officials can extract rent from citizens (Weyland, 1998; Fan, Lin and Treisman, 2009). Weak regulatory bodies can also contribute to policy uncertainty as a country may not have the capacity to carry out policy programs.

#### **4.3.2 Political Uncertainty and Emigration**

These political uncertainties raise the economic costs for households and citizens. Households attribute the costs of economic sustenance to political uncertainty. In particular, policy and enforcement uncertainty increase costs and raise risks for the household. Households prefer to be certain about policy enforcement to allow them to budget appropriately. The high costs associated with political uncertainty will result in low confidence in local democracy and divestment from local politics.

Low confidence in local institutions could generate a political divestment from a young democracy. Citizens may no longer see the benefits of voting as their welfare has not improved under the democratic regime. With the local government

being too weak to deliver goods or enforce policies, individuals and households will seek other means to improve their welfare and minimize the risks that are associated with political uncertainty. Akin to diversifying against economic risks (Stark and Bloom, 1985; Massey et al., 1993), emigration becomes an attractive option to guard against political uncertainty. Migration and the remittances that follow will allow households to buffer against any politically-driven shock such as cuts in social spending or increased taxes.

Weak accountability in a developing democracy can exacerbate lower confidence. While a democracy provides channels and options for voice, weak accountability may make exit a more viable option (Hirschman, 1993, 1970). In this scenario, hegemonic parties or small fragmented party systems can lead to flawed representation of citizen interest to government. If democracy continues to disappoint in improving one's life prospects, then emigration becomes more attractive, thus leading to divestment in local politics.

This divestment from local politics will influence the emigration calculus as households seek to diversify against risk. In his study of local Oaxacan politics, Bravo (2008) shows that households with a family member abroad are less likely to vote or participate formally in politics. Such behavior is also seen in other works on Mexican politics where electoral behavior declines as emigration becomes more prevalent (Goodman and Hiskey, 2008; Pérez-Armendáriz and Crow, 2010). Bravo (2008) argues that households with migrants abroad, as well as those receiving remittances, have little incentive to invest in local politics and do not rely on the local government since the household economy relies on a family member abroad.

Since the local government is no longer the chief provider of goods, citizens with relatives abroad are more concerned with the fortunes of their loved ones than with improving welfare through local means. The use of remittances to substitute for deficient public goods implies that emigration may have been a result of low confidence in the government. Thus, emigration and the subsequent remittance

inflows reflect household strategies to minimize risk. We should expect lower democratic quality, as measured through corruption and weak accountability, to encourage emigration.

### **4.3.3 Politics, Economics, and Emigration**

When explaining international migration it is possible that democratic quality interacts with economic performance of the home country. Economic effects are one of the most consistent predictors of international migration (Clark, Hatton and Williamson, 2007; Karemera, Oguledo and Davis, 2000; Hatton and Williamson, 2005). Positive economic performance, such as high GDP growth rates or low unemployment, can discourage migration as households see positive prospects in staying. On the other hand, weak economic performance incentivizes households to send one member abroad to increase household income and decrease economic risk via remittances.

The political context of the home country can interact with economic performance. For example, given two countries with the same level of low economic performance, households in the poorer quality democracy will have greater motivation to emigrate than one in a strong democracy. Poor democratic quality will give citizens less confidence in the government's ability to overcome difficult economic times. If democratic quality is higher, then citizens will have confidence that the government can overcome economic hardship or provide policy assistance to bear through the increased costs of an economic downturn.

On the other side, the effect of economic growth in discouraging emigration can be undermined by weak democratic quality. A country suffering from poor governance and corruption may make economic development difficult and costly. A poor track record from local government will push households to bypass the state to seek private alternatives. For example, Adida and Girod (2011) show

how Mexican households take their own initiative to provide themselves with access to water and sanitation when the local government is incapable of delivering such public goods. The lack of confidence citizens have in the democratic regime will undermine any positive economic factors when contemplating the migration decision. Citizens may feel that the local political context provides too many barriers to reap the benefits of economic growth. Given two countries with high economic growth, the country with poor democratic quality may see more people moving away than the one with the stronger democracy.

## 4.4 Data & Methods

This data set contains 281 country-year observations from 18 Latin American countries between 1997 to 2010. The summary statistics are presented in Table 4.1. The dependent variable measures the number of migrant entries into the United States in a given year from each Latin American country. I constructed the variable using data in the American Community Surveys (ACS).<sup>1</sup> To create the measure of migrant entries I relied on two variables from the ACS to create the frequencies of migrant entries by country-year: country of birth and year of entry. I used these frequencies to calculate the number of entries per 1000 people in the home country. The ACS data does not exactly measure entries into the country because it relies on self-reporting. However, this makes for a more comparable variable of emigration flows given the data available.<sup>2</sup> As shown in Table 4.1 and in Figure 4.1, the emigration variable is skewed and I will use a log-transformation

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<sup>1</sup>Five-year estimates from 2012.

<sup>2</sup>Passel and Suro (2005) compare different data sources of immigration in the United States. They compare Latino immigration flows into the United States from 1992-2004 using the Decennial Census, American Community Surveys, and the Current Population Surveys. Using year of entry as the measure for immigration, they find that each data source have similar trends of Latino immigration, and Mexican immigration, over time. See Massey (2010) for a comprehensive review of American immigration data

Table 4.1: Summary Statistics

| Variable                 | Mean  | Median | SD    | Min    | Max   |
|--------------------------|-------|--------|-------|--------|-------|
| Entries per 1000         | 1.24  | 0.48   | 1.76  | 0.02   | 11.96 |
| Log Entries per 1000     | -0.68 | -0.74  | 1.41  | -3.76  | 2.48  |
| Corruption Control       | 2.20  | 2.10   | 0.68  | 1.05   | 4.05  |
| Government Effectiveness | 2.28  | 2.27   | 0.56  | 1.33   | 3.78  |
| Rule of Law              | 2.04  | 1.84   | 0.64  | 0.86   | 3.82  |
| Voice & Accountability   | 2.61  | 2.52   | 0.50  | 1.60   | 3.74  |
| GDP Growth               | 3.60  | 3.92   | 3.66  | -10.89 | 18.29 |
| US Unemployment          | 5.62  | 5.40   | 1.58  | 4.00   | 9.60  |
| Home-USA GDP ratio       | 0.09  | 0.08   | 0.05  | 0.02   | 0.20  |
| Population Age 15-29 (%) | 27.24 | 27.53  | 1.64  | 22.20  | 30.32 |
| Inflation, CPI (%)       | 9.53  | 6.81   | 10.80 | 0.18   | 96.09 |

in the regression analysis.

I use a series of explanatory variable to measure democratic quality. The Worldwide Governance Indicators from the World Bank provide variables that measure institutional quality (Kaufmann, Kraay and Mastruzzi, 2010).<sup>3</sup> Corruption control measures perception in which public officials use their authority for public gain. Government effectiveness measures the quality of public services and its degree of autonomy from political pressures. Rule of law measures the confidence that governments enforce contracts and protects property rights, along with protecting citizens from crime and violence. Voice and accountability captures the perceptions where citizens feel they can participate in the political process. These measures are derived from a variety of sources such as Latinobarometer, Americasbarometer and the Gallup World Poll. They are originally scaled from -2.5 to 2.5, but I rescaled them to non-negative numbers for ease of interpretation in the regression. Linear interpolations are used to impute missing data in 1997, 1999, and 2001. The greater the values, the better the quality of institutions. Table 4.2 shows that the four institutional variables are highly correlated with each other.

The following variables will be controls that are commonly used predictors for

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<sup>3</sup>Data available at: [www.govindicators.org](http://www.govindicators.org)

Table 4.2: Correlation Matrix: World Governance Indicators

|                          | Corruption<br>Control | Government<br>Effectiveness | Rule of<br>Law | Voice/<br>Accountability |
|--------------------------|-----------------------|-----------------------------|----------------|--------------------------|
| Corruption Control       | 1.00                  | 0.90                        | 0.93           | 0.84                     |
| Government Effectiveness | 0.90                  | 1.00                        | 0.89           | 0.81                     |
| Rule of Law              | 0.93                  | 0.89                        | 1.00           | 0.90                     |
| Voice/Accountability     | 0.84                  | 0.81                        | 0.90           | 1.00                     |

Source: Kaufmann, Kraay and Mastruzzi (2010)

migration. Table 4.1 presents the summary statistics. The economic variables of the home country are from the World Bank's World Development Indicators. GDP growth captures the economic performance from the home country. Higher economic growth should discourage migration. I use the unemployment of the United States, the destination country, to capture the pull factor in migration. United States unemployment figures are from the Bureau of Labor Statistics. The Home-USA GDP per capita ratio measures the relative income gap between the two countries. We should expect relatively poorer countries to have a higher payoff in migrating. The share of the population between 15 and 29 is a demographic variable where we expect a surplus in the youth population to generate pressures to migrate. This demographic variable is taken from the United Nations Population Division. Finally, inflation in the home country is added to the model to account for economic shocks that may encourage emigration. On the other hand, inflation can make emigration more costly as the currency in the home country is less valued.

To estimate the effects of the covariates onto the emigration rate of Latin Americans into the US, I used an ordinary least squares regression with country-fixed effects. Country fixed-effects take into account time-invariant characteristics between countries such as distance to the destination country. As we saw in Figure 4.1, we see that some countries have higher emigration rates than others throughout the time period. These fixed-effects should capture migration-specific factors within each country. To account for time trends, each model will have



quadratic time polynomials.<sup>4</sup> I use a quadratic time trend over time-fixed effects to preserve as many degrees of freedom as possible. Even though the emigration rate does not have a smooth trend by country, the overall trend is quadratic.<sup>5</sup> All covariates are lagged by one year to remedy the reverse causation issue.

Finally, I re-weight observations according to migration stock. I use migration populations in the United States as a share in the home country in 1990 to create weights to reduce the influence of observations with historical migration to the US. For example, both Mexico and El Salvador have a migration stock in the United States of at least 10% of the home population.<sup>6</sup> The weights can account for countries with large migrant networks, which reduces the costs of migration and leads to higher emigration rates.

## 4.5 Results

The interaction results tell us that greater institutional quality will *encourage* emigration at low levels of economic growth. The regression models in both Table 4.3 and Table 4.4 incorporate weights based on prior migration population, country fixed-effects and quadratic time polynomials. Columns 2 and 4 add inflation into the model, but it reduces the number of observations.<sup>7</sup> The interactions between institutional quality and economic growth requires careful interpretation of the results. Furthermore, the small range of the institutional variables should also require care in interpreting the effects.

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<sup>4</sup>Other models include a dummy variable for the year 2000 in addition to the time polynomials and time-fixed effects. The results are consistent. Results using time-fixed effects are reported in the appendix

<sup>5</sup>The quadratic trend can also be an artifact of the data. There can be a bias in that the survey may not adequately capture old migrants (due to age) and recent migrants (due to sensitivity issues). The quadratic time polynomials should be control this bias and variation.

<sup>6</sup>I omitted Mexico and El Salvador in separate models and the results are consistent.

<sup>7</sup>Argentine and Chilean observations drop due to lack of inflation data in the sample.

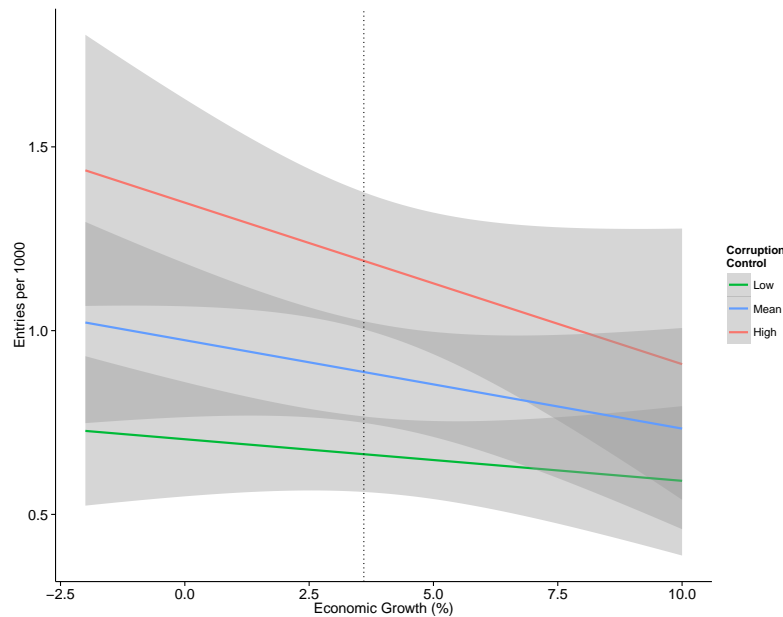
Table 4.3 presents the results using corruption control and voice/accountability as the institutional variables. Corruption control yields positive and significant results whereas voice and accountability yield a significant effect when inflation is included in the model. The marginal effect suggests that greater institutional quality can encourage migration when there is zero economic growth. This is intuitive since zero economic growth can drive citizens to emigrate. Also, the marginal effect suggests that those with higher quality institutions may have smaller costs to leave the country.

However, these marginal effects are conditional on zero economic growth and the scale of these institutional variables is small. A one-point increase along corruption control or voice accountability is similar to going from a poor-performing democracy like El Salvador to a historically stable democracy like Costa Rica. According to Table 4.3, Costa Rica's emigration rate should be 10% higher than El Salvador's based on the level of corruption in each country, assuming they both have zero economic growth.

When plotting the predicted values, institutional quality has an effect on emigration rates when economic growth is low. Figure 4.6 presents the expected number of migrant entries into the United States conditional on level of corruption. According to the results, there is a clear distinction between having high and low control of corruption. As economic growth goes beyond 5%, the differences between institutional quality decrease. At the mean economic growth level for Latin America (3.6%), the difference between a country with higher control of corruption to lower control is around 0.05 per 1000. Over a span of 10 years, the difference in institutional quality could produce as much as 0.005% of the home population. That is equivalent to 30,000 Salvadorans or 600,000 Mexicans entering the United States in a span of a decade.

Table 4.4 show results using government effectiveness and rule of law as explanatory variables. The effects are similar to those in Table 4.3 in that there

Figure 4.6: Corruption, Economic Growth and Emigration



Note: Low (high) corruption control are 2 standard deviations below (above) mean.

is a reduction of 15% to 20% in the emigration rate when institutional quality improves. At low economic growth, greater institutional quality encourages migration, but institutions matter less as the economy grows.

The control variables in the model did not yield consistent results. The GDP growth coefficient is the effect of the economy on emigration when institutional quality is zero. No observation in the data sample had a score of zero. The interaction results suggest that GDP growth discourages emigration holding institutional quality constant. The interaction strongly suggests the push pressure that a poor performing economy has on emigration. Unemployment in the United States has the strongest effect on emigration rates, showing that it is a strong pull factor for Latin Americans. A one percent increase in US unemployment will reduce the emigration rate by 20 percent. Inflation and the GDP ratio between the home country and the United States did not yield significant results. The time square polynomials capture the quadratic trend in the emigration data.

The appendix reports several robustness checks. The first robustness check incorporate time fixed effects. The political variables and interactions yield results consistent with the previous models. I also exclude Mexico and El Salvador, the two countries with the highest migrant populations relative to the home country population.

Table 4.3: Democratic Quality and Emigration:  
Corruption Control & Voice Accountability

|                               | <i>Dependent variable: Log Entries per 1000</i> |                      |                      |                      |
|-------------------------------|---|----------------------|----------------------|----------------------|
|                               | (1)   | (2)                  | (3)                  | (4)                  |
| Constant                      | -3.331**<br>(1.433)                             | -1.255<br>(1.433)    | -3.405**<br>(1.507)  | -3.521**<br>(1.730)  |
| Corruption Control            | 0.437***<br>(0.154)                             | 0.349*<br>(0.178)    |                      |                      |
| Voice/Accountability          |   |                      | 0.227<br>(0.138)     | 0.585***<br>(0.202)  |
| GDP Growth                    | 0.021<br>(0.019)                                | 0.0001<br>(0.030)    | 0.051*<br>(0.027)    | -0.002<br>(0.048)    |
| Corruption Control×GDP Growth | -0.032***<br>(0.009)                            | -0.029**<br>(0.013)  |                      |                      |
| Voice/Acct.×GDP Growth        |   |                      | -0.038***<br>(0.011) | -0.025<br>(0.018)    |
| US Unemployment               | -0.159***<br>(0.023)                            | -0.174***<br>(0.028) | -0.162***<br>(0.024) | -0.180***<br>(0.028) |
| Home/USA GDP ratio            | 5.472<br>(3.904)                                | 0.680<br>(7.680)     | 5.193<br>(3.938)     | 1.072<br>(7.522)     |
| Population (15-29)            | 0.001<br>(0.044)                                | -0.007<br>(0.047)    | 0.021<br>(0.046)     | 0.053<br>(0.050)     |
| Inflation (CPI)               |   | -0.001<br>(0.004)    |                      | -0.003<br>(0.004)    |
| Time                          | 0.195***<br>(0.038)                             | 0.172***<br>(0.048)  | 0.182***<br>(0.038)  | 0.153***<br>(0.046)  |
| Time <sup>2</sup>             | -0.013***<br>(0.002)                            | -0.012***<br>(0.003) | -0.013***<br>(0.002) | -0.011***<br>(0.003) |
| Observations                  | 245   | 200                  | 245                  | 200                  |
| R <sup>2</sup>                | 0.914   | 0.927                | 0.913                | 0.929                |

Note: Models contain country-fixed effects

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 4.4: Democratic Quality and Emigration:  
Government Effectiveness & Rule of Law

|                                | <i>Dependent variable: Log Entries per 1000</i> |                      |                      |                      |
|--------------------------------|---|----------------------|----------------------|----------------------|
|                                | (1)   | (2)                  | (3)                  | (4)                  |
| Constant                       | -2.746**<br>(1.356)                             | -1.190<br>(1.380)    | -3.506**<br>(1.371)  | -2.257<br>(1.468)    |
| Government Effectiveness       | 0.615***<br>(0.167)                             | 0.542***<br>(0.196)  |                      |                      |
| Rule of Law                    |   |                      | 0.540***<br>(0.144)  | 0.604***<br>(0.211)  |
| GDP Growth                     | 0.028<br>(0.020)                                | -0.024<br>(0.038)    | 0.026<br>(0.017)     | 0.012<br>(0.034)     |
| Govt. Effectiveness×GDP Growth | -0.035***<br>(0.010)                            | -0.019<br>(0.016)    |                      |                      |
| Rule of Law×GDP Growth         |   |                      | -0.037***<br>(0.009) | -0.036**<br>(0.016)  |
| US Unemployment                | -0.169***<br>(0.024)                            | -0.187***<br>(0.029) | -0.160***<br>(0.023) | -0.176***<br>(0.028) |
| Home/USA GDP ratio             | 3.009<br>(3.898)                                | 0.308<br>(7.538)     | 1.364<br>(3.961)     | -2.540<br>(7.365)    |
| Population (15-29)             | -0.026<br>(0.045)                               | -0.020<br>(0.047)    | 0.026<br>(0.043)     | 0.016<br>(0.046)     |
| Inflation (CPI)                |   | -0.004<br>(0.004)    |                      | -0.002<br>(0.004)    |
| Time                           | 0.164***<br>(0.038)                             | 0.145***<br>(0.046)  | 0.170***<br>(0.037)  | 0.157***<br>(0.046)  |
| Time <sup>2</sup>              | -0.011***<br>(0.002)                            | -0.010***<br>(0.003) | -0.012***<br>(0.002) | -0.011***<br>(0.003) |
| Observations                   | 245   | 200                  | 245                  | 200                  |
| R <sup>2</sup>                 | 0.916   | 0.928                | 0.918                | 0.930                |

*Note:* Models contain country-fixed effects

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## 4.6 Discussion

Given the results, why are better institutions pushing citizens out? One possibility is that better institutions may make emigration less costly. McKenzie (2007) finds that countries that charge higher prices for passports and exit visas have lower emigration rates. Another possibility is that greater trade and economic engagement with the destination country can foster bilateral trade. Pritchett (2006) and Peters (2015) show that increased bilateral trade and capital flows do not correspond with more open emigration policies. These papers only look at immigration into the OECD. There has been no research to my knowledge on whether open trade leads to open borders in developing countries.

The interaction results suggest that economic growth is a major factor in discouraging emigration, and that institutions matter when growth is low. Higher economic growth discourages emigration across all levels of institutional quality. This finding supports the classical economic theories of migration. When economic growth is low, countries with high-quality institutions have nearly double the emigration rate than those with low-quality institutions. High-quality institutions, and more democratic countries, allow citizens to choose electoral alternatives and expect indiscriminate enforcement of policy. In the case of low economic growth, citizens can also vote with their feet. Akin to moving from one town to another, citizens may prefer to bear the costs of migrating to reap benefits in another town for the long term (Tiebout, 1956). International emigration can be thought of as a Tieboutian phenomena where a developing democracy is a victim of its own success. Poor economic performance in an open polity may lead citizens to vote with their feet to another country where they perceive greater economic prospects.

### 4.6.1 Institutions and Brain Drain

Various levels of institutional quality may have heterogeneous effects on emigration based on different groups in society. The self-selection in migration can provide insight into how institutional quality influences one group of people and not others. Those with medium and high human capital are potential candidates for emigration since they can bear the costs of moving and settling (Niimi and Özden, 2008). Furthermore, in periods of political uncertainty, those with middle to high human capital may have more to lose. Those with poor human capital may have the most to gain from migration, but also have the least to lose under political uncertainty due to a floor effect. Human capital is associated with mobility through income and education since they both can bear the costs of migration and also the costs of settling in the destination country.

In this section, I disaggregate emigration by human capital to show that weaker institutions may be contributing to brain drain. Assuming mobility is higher with more human capital, we should expect those with high human capital to respond to different levels of institutional quality. I use the Brücker, Stella and Marfouk (2013) Brain Drain Dataset that measures emigration rates for developing countries.<sup>8</sup> Human capital is divided into three categories: low-skill, medium-skill and high-skill. The emigration rate measures the total migrant population from a given source country divided by the sum of the migrant and resident population in the same source country. For example, the high-skill emigration rate in Ecuador was 10% in 2000. That means that 10% of all high-skilled Ecuadorians lived outside of Ecuador in 2000. I will use the data from 1995, 2000, 2005 and 2010 and plot it with the World Governance Indicators used in the previous regression models.<sup>9</sup>

The results show that poor institutions can lead to brain drain and that low-

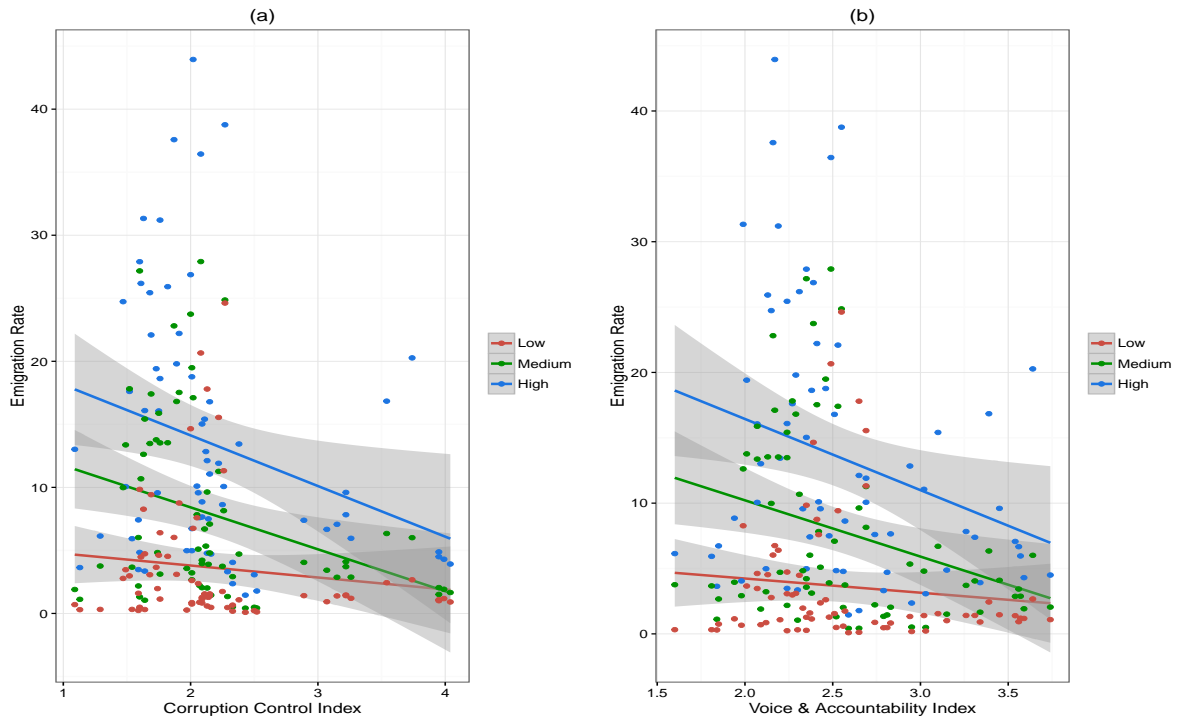
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<sup>8</sup>The data combines the methods from Barro and Lee (2013) for human capital, and Docquier, Lowell and Marfouk (2009) and Defoort (2008) for emigration into OECD countries.

<sup>9</sup>WGI did not have data for 1996 so I matched that data with the 1995 emigration data.



Figure 4.7: Institutions, Human Capital and Emigration from Latin America



Note: Shaded regions represent 95% confidence intervals.

skill labor is not affected by institutions. Figure 4.7 presents bivariate scatter-plots on indices of institutional quality and the emigration rate by skill level. Figure 4.7a uses corruption control and Figure 4.7b uses voice and accountability, respectively.<sup>10</sup> Institutional quality has no association with emigration rates among low-skill labor. First, low-skill labor likely make up the majority of the labor force in Latin America so the share of emigrants is likely to be small. Second, they face greater barriers to emigrate due to costs and rely on social networks to facilitate moving.

Institutional quality has a negative association with the emigration rate among medium and high-skill labor. From the most corrupt countries to the least, the emigration rate drops by ten percent. The higher skilled groups are more likely to

<sup>10</sup>Rule of law and government effectiveness show similar patterns.

emigrate at low levels of institutional quality, but the differences between groups decrease as institutional quality improves. This exploratory analysis suggests that those with greater human capital are affected by political uncertainty as they have the most to lose from the risks associated with weaker institutions in Latin America's young democracies.

#### **4.6.2 (Human) Capital Flight From Venezuela (1998-2006)**

The early years of Hugo Chávez's presidency in Venezuela provide a case where political uncertainty generates pressure to emigrate despite positive economic outlook. Venezuela is not a migrant-sending country like other Latin American countries, but the first decade of the twenty-first century saw a brain drain of the country's scientific talent. Hugo Chávez's policies in nationalizing different sectors of the economy led to many high-skilled Venezuelans emigrating in anticipation that such policies would hinder their economic prospects.

Venezuela was known to be politically stable until the mid-1990s when the party system collapsed and ultimately led to the advent of Hugo Chávez Farías. Since the late 1950s, Venezuela was largely controlled by two political parties. The 1990s saw a presidential impeachment and a collapse in the two party system. By 1998, Hugo Chávez won the presidency and began drafting a new constitution to push forward his Bolivarian Revolution.

Political uncertainty within the oil sector led to scores of Venezuelan scientists to leaving the country. In the first few years of the Chávez administration, the Ministry of Sciences and Technology was created to centralize research and development (De la Vega, 2005). This reform reversed years of decentralization in the R&D sector. This led to clashes between technicians and scientists in the private sector and those in the state sector (Freites, 2010). Decreasing financial support to the R&D sectors in the economy coincided with the government di-

verting PDVSA's revenue for its social programs (Vazquez, 2012). The political tension resulted in a general strike against Hugo Chávez in 2002-2003.

Hugo Chávez's presidency in Venezuela produced a strong degree of political polarization and moments of political instability. Increasing centralization of the economy and increased government spending on social programs sharply divided political society. The years between 2002 and 2004 were crucial in Venezuelan politics in the 21st century. Hugo Chávez survived a coup attempt in 2002. Oil workers led a general strike at the end of 2002, which lasted until the early months of 2003. The government reacted with changes in PDVSA, Venezuela's state-owned company, where the board of directors were replaced and many were fired. The increasing government control of PDVSA symbolized the economic regime under Hugo Chávez as many other sectors of the economy began to be nationalized.

The consequences from the strike and failed referendum against Hugo Chávez led to greater political uncertainty for the Venezuelan intelligentsia. Chávez responded to the strike by overhauling PDVSA's Board of Directors with political allies and firing those who participated in the strike. Along with the divisive class rhetoric from the president, many of Venezuela's skilled scientists and technicians found themselves alienated from other opportunities in the country (Nierbrzydowski and De La Vega, 2010; Vazquez, 2012). Nierbrzydowski and De La Vega (2010) underscore how professional Venezuelans felt antagonized by the popular president during this time. With Chávez seeking to nationalize other sectors in the economy, many middle-class Venezuelans began contemplating moving abroad (Freites, 2010).

Political uncertainty in Venezuela led to a brain drain where many of the country's highly skilled workers sought economic opportunities elsewhere. Within three years of the general strike, the number of asylum requests to the United States increased from 400 to 1000 (Freites, 2010, 91). According to the US Department of Homeland Security, the number of Venezuelans receiving legal per-

manent residency in the US tripled between 2003 and 2006 (Nierbrzydowski and De La Vega, 2010, 139). Venezuela had witnessed economic downturns in the past, but the political uncertainty of the early 2000s generated push pressures for emigration. Meanwhile, oil rises were increasing, which should have greatly benefited Venezuela and those in the oil sector in particular. Yet, the political unrest in 2002 and 2003 was felt in multiple economic sectors influencing, many to emigrate before anticipated nationalization (Freites, 2010).

## 4.7 Conclusion

This paper argues the role political uncertainty and institutional quality plays in emigration flows from Latin America to the United States. While Latin America has democratized over the past 30 years, there is variation in the quality of democracy as measured by levels of corruption and accountability within countries and across countries over time. Emigration also varies over time across countries with various push and pull factors.

I initially hypothesized that poor-quality institutions are more likely to push citizens to emigrate but the empirical results yield the contrary. Under low economic growth, higher quality institutions are associated with higher emigration to the United States. At zero growth, the difference between high corruption control and low corruption control is around 0.05 persons per 1000, which is equivalent to 0.005% of the home country's population. As higher economic growth discourages emigration, it also weakens the marginal effect of institutions. The results are robust to different model specifications. More democratic countries will see emigrants flee at a greater rate than poor-quality democracies only when their economies are underperforming.

Disaggregating types of emigration flows show that poor institutions may contribute to brain drain in Latin America. Low-skill labor does not respond to

different levels of institutional quality. Medium and high-skill labor are more likely to emigrate under high levels of corruption and low levels of accountability. As institutional quality improves, the emigration rate for higher-skilled groups decline to levels similar to that of low-skilled labor. The exploratory analysis suggests that political institutions influence decisions to emigrate for higher-skilled households because they are likely to bear greater costs and risks under greater political uncertainty.

The Venezuela case study underscores how political uncertainty can generate pressure to emigrate. It focuses on scientists and technicians as a class at odds with the reforms of President Hugo Chávez. Venezuela was once considered one of the more politically stable countries and least-migrant sending countries in Latin America. The advent of Hugo Chavez and the political developments within the first five years of his administration produced the political conditions for emigration. Although oil prices were rising to the benefit of the oil-dependent country, many oil workers along with other professionals emigrated due to increasing political polarization and state control of the economy. They perceived greater risks in staying in Venezuela and sought to take their skills elsewhere for economic benefit.

The empirical analysis of this paper concentrates on Latin America years after democratization. Emigration in Latin America has coincided with transitions to democracy, and the region has witnessed different kinds of transitions. Some transitions to democracy have followed violent civil wars (El Salvador, Guatemala, Nicaragua), repressive military regimes (Argentina, Chile, Brazil), and slow democratic openings (Mexico, Honduras). Emigration from Latin America is self-selective and the socio-economic makeup of these migrants varies by country (Nimi and Özden, 2008). It is important to see what the political consequences are of those early emigration flows to understand more recent emigration flights. The empirical results and brief case study of Venezuela's recent emigration phenomena call more attention to research the political determinants of migration.

## 4.8 Appendix

Table 4.5: Interaction Results with Time-Fixed Effects I

|                                 | <i>Dependent variable: Log Entries per 1000</i> |                      |                      |                      |
|---------------------------------|---|----------------------|----------------------|----------------------|
|                                 | (1)   | (2)                  | (3)                  | (4)                  |
| Constant                        | -2.784**<br>(1.355)                             | -1.002<br>(1.388)    | -3.377**<br>(1.410)  | -4.080**<br>(1.647)  |
| Corruption Control              | 0.380**<br>(0.152)                              | 0.468**<br>(0.182)   |                      |                      |
| Voice/Accountability            |   |                      | 0.305**<br>(0.132)   | 0.811***<br>(0.203)  |
| GDP Growth                      | 0.022<br>(0.018)                                | 0.007<br>(0.033)     | 0.047*<br>(0.025)    | -0.015<br>(0.049)    |
| Corruption Control × GDP Growth | -0.031***<br>(0.009)                            | -0.036***<br>(0.013) |                      |                      |
| Voice/Acct. × GDP Growth        |   |                      | -0.034***<br>(0.010) | -0.025<br>(0.017)    |
| US Unemployment                 | -0.214***<br>(0.027)                            | -0.249***<br>(0.033) | -0.218***<br>(0.027) | -0.304***<br>(0.036) |
| Home/USA GDP Ratio              | 5.950<br>(3.871)                                | 6.982<br>(7.863)     | 5.088<br>(3.884)     | 7.482<br>(7.541)     |
| Population (15-29)              | 0.003<br>(0.042)                                | -0.008<br>(0.045)    | 0.032<br>(0.043)     | 0.080<br>(0.049)     |
| Inflation (CPI)                 |   | 0.002<br>(0.005)     |                      | -0.001<br>(0.004)    |
| Observations                    | 245   | 200                  | 245                  | 200                  |
| R <sup>2</sup>                  | 0.927   | 0.938                | 0.926                | 0.940                |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country and time fixed effects

Table 4.6: Interaction Results with Time-Fixed Effects II

|  | <i>Dependent variable: Log Entries per 1000</i> |                      |                      |                      |
|--|---|----------------------|----------------------|----------------------|
|  | (1)   | (2)                  | (3)                  | (4)                  |
| Constant                                   | -2.436*<br>(1.273)                              | -0.975<br>(1.332)    | -3.063**<br>(1.314)  | -1.950<br>(1.446)    |
| Govt. Effectiveness                        | 0.626***<br>(0.164)                             | 0.681***<br>(0.199)  |                      |                      |
| Rule of Law                                |   |                      | 0.451***<br>(0.139)  | 0.609***<br>(0.207)  |
| GDP Growth                                 | 0.028<br>(0.019)                                | -0.022<br>(0.040)    | 0.023<br>(0.016)     | 0.009<br>(0.037)     |
| Govt. Effectiveness×GDP Growth             | -0.033***<br>(0.009)                            | -0.025<br>(0.016)    |                      |                      |
| Rule of Law×GDP Growth                     |   |                      | -0.033***<br>(0.009) | -0.038**<br>(0.016)  |
| US Unemployment                            | -0.206***<br>(0.026)                            | -0.259***<br>(0.033) | -0.200***<br>(0.027) | -0.241***<br>(0.033) |
| <sup>Home</sup> / <sub>USA</sub> GDP Ratio | 3.199<br>(3.832)                                | 6.770<br>(7.661)     | 2.402<br>(3.929)     | 2.020<br>(7.462)     |
| Population (15-29)                         | -0.026<br>(0.042)                               | -0.023<br>(0.046)    | 0.026<br>(0.041)     | 0.021<br>(0.045)     |
| Inflation (CPI)                            |   | -0.001<br>(0.004)    |                      | 0.0004<br>(0.004)    |
| Observations                               | 245   | 200                  | 245                  | 200                  |
| R <sup>2</sup>                             | 0.929   | 0.939                | 0.929                | 0.939                |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country and time fixed effects



Table 4.7: Excluding Mexico and El Salvador I

|                               | <i>Dependent variable: Log Entries per 1000</i> |                      |                      |                      |
|-------------------------------|---|----------------------|----------------------|----------------------|
|                               | (1)   | (2)                  | (3)                  | (4)                  |
| Constant                      | -3.202**<br>(1.545)                             | -1.016<br>(1.583)    | -3.238**<br>(1.628)  | -3.265*<br>(1.924)   |
| Corruption Control            | 0.453***<br>(0.165)                             | 0.366*<br>(0.193)    |                      |                      |
| Voice/Accountability          |   |                      | 0.225<br>(0.147)     | 0.575***<br>(0.220)  |
| GDP Growth                    | 0.021<br>(0.020)                                | -0.001<br>(0.033)    | 0.051*<br>(0.028)    | -0.003<br>(0.052)    |
| Corruption Control×GDP Growth | -0.033***<br>(0.010)                            | -0.029**<br>(0.014)  |                      |                      |
| Voict/Acct.×GDP Growth        |   |                      | -0.039***<br>(0.012) | -0.025<br>(0.019)    |
| US Unemployment               | -0.160***<br>(0.025)                            | -0.176***<br>(0.030) | -0.162***<br>(0.025) | -0.181***<br>(0.030) |
| Home/USA GDP Ratio            | 5.285<br>(4.162)                                | -0.176<br>(8.413)    | 4.995<br>(4.200)     | 0.247<br>(8.267)     |
| Population (15-29)            | -0.005<br>(0.048)                               | -0.016<br>(0.052)    | 0.016<br>(0.049)     | 0.046<br>(0.056)     |
| Inflation (CPI)               |   | -0.002<br>(0.005)    |                      | -0.003<br>(0.005)    |
| Time                          | 0.195***<br>(0.041)                             | 0.169***<br>(0.052)  | 0.180***<br>(0.041)  | 0.150***<br>(0.050)  |
| Time <sup>2</sup>             | -0.013***<br>(0.002)                            | -0.011***<br>(0.003) | -0.013***<br>(0.002) | -0.011***<br>(0.003) |
| Observations                  | 217   | 172                  | 217                  | 172                  |
| R <sup>2</sup>                | 0.907   | 0.921                | 0.905                | 0.922                |

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country fixed effects

Table 4.8: Excluding Mexico and El Salvador II

|                                | <i>Dependent variable: Log Entries per 1000</i> |           |           |           |
|--------------------------------|---|-----------|-----------|-----------|
|                                | (1)   | (2)       | (3)       | (4)       |
| Constant                       | -2.549*   | -0.913    | -3.358**  | -2.027    |
|                                | (1.461)   | (1.522)   | (1.478)   | (1.620)   |
| Govt. Effectiveness            | 0.639***  | 0.571***  |           |           |
|                                | (0.178)   | (0.212)   |           |           |
| Rule of Law                    |   |           | 0.548***  | 0.614***  |
|                                |   |           | (0.154)   | (0.229)   |
| GDP Growth                     | 0.029   | -0.022    | 0.026     | 0.009     |
|                                | (0.021)   | (0.041)   | (0.018)   | (0.037)   |
| Govt. Effectiveness×GDP Growth | -0.036***                                       | -0.021    |           |           |
|                                | (0.010)   | (0.018)   |           |           |
| Rule of Law×GDP Growth         |   |           | -0.038*** | -0.035**  |
|                                |   |           | (0.010)   | (0.017)   |
| US Unemployment                | -0.171***                                       | -0.189*** | -0.161*** | -0.178*** |
|                                | (0.025)   | (0.031)   | (0.024)   | (0.030)   |
| Home/USA GDP Ratio             | 2.649   | -0.557    | 1.107     | -3.476    |
|                                | (4.150)   | (8.232)   | (4.221)   | (8.060)   |
| Population (15-29)             | -0.034  | -0.030    | 0.021     | 0.009     |
|                                | (0.048)   | (0.052)   | (0.046)   | (0.050)   |
| Inflation (CPI)                |   | -0.004    |           | -0.002    |
|                                |   | (0.005)   |           | (0.005)   |
| Time                           | 0.161***  | 0.140***  | 0.169***  | 0.154***  |
|                                | (0.040)   | (0.050)   | (0.040)   | (0.050)   |
| Time <sup>2</sup>              | -0.011***                                       | -0.010*** | -0.011*** | -0.010*** |
|                                | (0.002)   | (0.003)   | (0.002)   | (0.003)   |
| Observations                   | 217   | 172       | 217       | 172       |
| R <sup>2</sup>                 | 0.910   | 0.922     | 0.911     | 0.923     |

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

All models include country fixed effects

Table 4.9: Random Country Intercept Results

|                                | <i>Dependent variable: Log Entries per 1000</i> |                      |                      |                      |
|--------------------------------|---|----------------------|----------------------|----------------------|
|                                | (1)   | (2)                  | (3)                  | (4)                  |
| Constant                       | -0.331<br>(1.538)                               | -2.410<br>(1.779)    | -0.212<br>(1.496)    | -1.235<br>(1.570)    |
| Corruption Control             | 0.310*<br>(0.167)                               |                      |                      |                      |
| Voice/Accountability           |   | 0.544***<br>(0.193)  |                      |                      |
| Govt. Effectiveness            |   |                      | 0.497***<br>(0.186)  |                      |
| Rule of Law                    |   |                      |                      | 0.540***<br>(0.201)  |
| GDP Growth                     | 0.0003<br>(0.030)                               | 0.002<br>(0.048)     | -0.022<br>(0.038)    | 0.013<br>(0.034)     |
| Corruption Control×GDP Growth  | -0.029**<br>(0.013)                             |                      |                      |                      |
| Voice/Acct.×GDP Growth         |   | -0.026<br>(0.018)    |                      |                      |
| Govt. Effectiveness×GDP Growth |   |                      | -0.020<br>(0.016)    |                      |
| Rule of Law×GDP Growth         |   |                      |                      | -0.036**<br>(0.016)  |
| US Unemployment                | -0.173***<br>(0.027)                            | -0.180***<br>(0.027) | -0.184***<br>(0.028) | -0.175***<br>(0.027) |
| Home/USA GDP Ratio             | 0.494<br>(5.430)                                | 0.889<br>(5.405)     | -0.351<br>(5.415)    | -0.951<br>(5.418)    |
| Population (15-29)             | 0.001<br>(0.045)                                | 0.055<br>(0.048)     | -0.011<br>(0.046)    | 0.024<br>(0.044)     |
| Inflation (CPI)                | -0.002<br>(0.004)                               | -0.003<br>(0.004)    | -0.004<br>(0.004)    | -0.002<br>(0.004)    |
| Time                           | 0.170***<br>(0.039)                             | 0.153***<br>(0.039)  | 0.143***<br>(0.040)  | 0.163***<br>(0.039)  |
| Time <sup>2</sup>              | -0.012***<br>(0.002)                            | -0.011***<br>(0.002) | -0.010***<br>(0.002) | -0.011***<br>(0.002) |
| Observations                   | 200   | 200                  | 200                  | 200                  |
| Log Likelihood                 | -205.057  | -202.716             | -203.943             | -202.230             |
| AIC                            | 434.114   | 429.431              | 431.886              | 428.459              |

Note:

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

## CHAPTER 5

### Concluding Remarks

This dissertation argues and presents evidence that relationships between remittances and political outcomes are mediated through political institutions or source country conditions. I did not find a marginal effect for remittances on an outcome independent of some mediating variable. Scholarly debates about remittances focus on whether remittances will activate voice or exacerbate exit among recipients. In this dissertation, I show that voice and exit largely depend on political and global economic context.

In Chapter 2, remittance recipients' preferences for redistribution were contingent on the economic fortunes of migrants abroad. For example, the American economic recession reduced the volume of remittances that migrants sent to Latin America. This resulted in recipients being exposed to an additional economic risk, even though the purpose of remittances was to insure against risk. The global financial crisis showed us a moment where remittances declined, and the goal of the study was to examine the possible effects from it. Doyle (2015) argues that remittance recipients will reject redistribution, but his study only takes public opinion data from 2009. I use three waves of survey data and while I find no significant difference between remittance recipients and non-recipients prior to the economic crisis, recipients begin to diverge afterwards strongly favoring redistribution. After experiencing additional exposure of risk from abroad, favoring redistribution is a way to diversify against economic troubles at home and abroad.

Regime type was an important mediating effect for the relationship between

remittances and public expenditures in Chapter 3. Democracies exhibited a ceiling effect whereas autocracies were relatively more sensitive to changing levels in remittance flows. The findings do not support or oppose previous work on how remittances decrease public expenditures (Doyle, 2015; Ahmed, 2012; Abdih et al., 2011). By differentiating between types of spending and regimes, I find that remittances have heterogeneous effects. Governments may be strategizing or adapting to the changing demands from the population given the level of remittances. I add a brief case study on remittances and spending in Mexico. I use subnational data to show that higher levels of remittances lead to greater public spending at the state level, conditional on electoral competitiveness.

The findings from Chapter 2 and Chapter 3 imply that remittances have affect on fiscal pressures. Remittances are praised for easing fiscal pressures on governments through increased revenue from indirect taxation (Singer, 2010; Doyle, 2015; World Bank, 2006). While governments can raise revenue through consumption taxes, the potential demands from recipients are ignored. Earlier literature argued that remittances may provide fiscal stress on government services through a substitution effect (Adida and Girod, 2011; Kapur, 2010). However, these demands can change with changes in remittance levels. The global financial crisis led to negative shocks in remittances. The evidence in Chapter 2 suggests that decreasing levels of remittances can build greater fiscal pressures. At the same time, these demands will be treated differently by regime type. Autocratic regimes may face greater fiscal pressures to increase spending in sectors such as health and social protection.

Chapter 4 investigates into the variation of democracies to find that the quality of institutions has the potential to shape emigration flows. Countries with less corruption and greater rule of law were found to have greater emigration to the United States, after controlling for other relevant factors. After disaggregating emigration rates by levels of human capital, I a brain drain from countries with

high-quality institutions and low economic growth. I complemented the analysis with a brief case study of Venezuela under Hugo Chávez. Expropriations across different sectors of the economy along with increased political uncertainty fueled a brain drain of the country's intelligentsia. I initially hypothesized that poor-quality institutions would drive emigration in general but it was not true for low-skilled migrants. Higher-skilled migrants have greater capacity for mobility and may seek to emigrate based on greater prospects abroad than at home where corruption may be rife. This study adds an additional layer to the literature on the determinants of migration.

The literature on the political economy of remittances is still in its infancy. Data limitations have kept scholars from estimating the causal effects of remittances on political and economic outcomes. Identification is a major challenge given the endogeneity concerns with remittances as discussed in the previous chapters. Data limitations have also been a concern, but the quality is improving. Nevertheless, migration and remittances are an important part of society in many developing countries. Millions of households rely on the wages made by migrants in wealthy countries and as we have learned, the economic fates of one country are closely linked with another. Political and economic development is not confined within borders, but wherever the diaspora reaches.

## BIBLIOGRAPHY

- Abdih, Y., R. Chami, J. Dagher and P. Montiel. 2011. "Remittances and Institutions: Are Remittances a Curse?" *World Development* 40(4):657–666.
- Acevedo, Carlos and Maynor Cabrera. 2014. "Social Policies or Private Solidarity? The Equalizing Role of Migration and Remittances in El Salvador." *Falling Inequality in Latin America: Policy Changes and Lessons* p. 164.
- Acosta, P.A., J. Baez, R. Beazley and E. Murruga. 2012. "The Impact of the Financial Crisis on Remittance Flows: The Case of El Salvador." *Migration and Remittances during the Global Financial Crisis and Beyond* pp. 183–191.
- Acosta, Pablo, Cesar Calderon, Pablo Fajnzylber and Humberto Lopez. 2008. "What is the impact of international remittances on poverty and inequality in Latin America?" *World Development* 36(1):89–114.
- Adida, Claire L and Desha M Girod. 2011. "Do migrants improve their hometowns? Remittances and access to public services in Mexico, 1995-2000." *Comparative Political Studies* 44(1):3–27.
- Ahmed, F.Z. 2012. "The Perils of Unearned Foreign Income: Aid, Remittances, and Government Survival." *American Political Science Review* 106(1):146–165.
- Angrist, Joshua D and Jörn-Steffen Pischke. 2008. *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.
- Barham, Bradford and Stephen Boucher. 1998. "Migration, remittances, and inequality: estimating the net effects of migration on income distribution." *Journal of development economics* 55(2):307–331.
- Barro, Robert J and Jong Wha Lee. 2013. "A new data set of educational attainment in the world, 1950–2010." *Journal of development economics* 104:184–198.

- Bateson, Regina. 2012. "Crime victimization and political participation." *American Political Science Review* 106(03):570–587.
- Batista, Catia, Aitor Lacuesta and Pedro C Vicente. 2012. "Testing the 'brain gain' hypothesis: Micro evidence from Cape Verde." *Journal of Development Economics* 97(1):32–45.
- Benabou, Roland and Efe A. Ok. 2001. "Social mobility and the demand for redistribution: The POUM hypothesis." *Quarterly Journal of Economics* 116(2):447–487.
- Boix, Carles and Susan Carol Stokes. 2003. "Endogenous democratization." *World politics* 55(4):517–549.
- Booth, John A, Christine J Wade and Thomas Walker. 2014. *Understanding Central America: global forces, rebellion, and change*. Westview Press.
- Bravo, J. 2008. The Political Economy of Mexico-US Migration. PhD thesis Duke University.
- Brücker, Herbert, Capuano Stella and Abdeslam Marfouk. 2013. "Measuring Migration Flows." *Migration: New Developments* 46(19,198,268):31.
- Burgess, K. 2012. "Migrants, Remittances, and Politics: Loyalty and Voice after Exit." *Fletcher F. World Aff.* 36(1):43–55.
- Canache, Damarys and Michael E Allison. 2005. "Perceptions of political corruption in Latin American democracies." *Latin American Politics and Society* 47(3):91–111.
- Ceobanu, Alin M, Charles H Wood and Ludmila Ribeiro. 2010. "Crime victimization and public support for democracy: evidence from Latin America." *International Journal of Public Opinion Research* p. edq040.



- Chaudhry, Kiren Aziz et al. 1989. “The price of wealth: business and state in labor remittance and oil economies.” *International Organization* 43(1):101–145.
- Chauvet, Lisa, Flore Gubert, Marion Mercier and Sandrine Mesplé-Soms. 2015. “Migrants’ Home Town Associations and Local Development in Mali.” *The Scandinavian Journal of Economics* 117(2):686–722.
- Cheibub, José Antonio. 2007. *Presidentialism, parliamentarism, and democracy*. Cambridge University Press.
- Clark, Ximena, Timothy J Hatton and Jeffrey G Williamson. 2007. “Explaining US immigration, 1971-1998.” *The Review of Economics and Statistics* 89(2):359–373.
- Clarke, George and Scott Wallsten. 2004. “Do remittances protect households in developing countries against shocks? Evidence from a natural disaster in Jamaica.” *World Bank* .
- De la Vega, Iván. 2005. *Mundos en movimiento: movilidad y migración de científicos y tecnólogos venezolanos*. Fundación Polar.
- Defoort, Cécily. 2008. “Long-term trends in international migration: an analysis of the six main receiving countries.” *Population* 63(2):285–317.
- Diaz-Cayeros, Alberto, Beatriz Magaloni and Barry R Weingast. 2003. “Tragic brilliance: Equilibrium hegemony and democratization in Mexico.” *Hoover Institution, Stanford University* .
- Dionne, Kim Yi, Kris L Inman and Gabriella R Montinola. 2014. Another resource curse? The impact of remittances on political participation. Technical report Afrobarometer Working Paper.

- Docquier, Frédéric, B Lindsay Lowell and Abdeslam Marfouk. 2009. “A gendered assessment of highly skilled emigration.” *Population and Development Review* 35(2):297–321.
- Docquier, Frédéric, Elisabetta Lodigiani, Hillel Rapoport and Maurice Schiff. 2015. “Emigration and democracy.” *Journal of Development Economics* .
- Doyle, David. 2015. “Remittances and Social Spending.” *American Political Science Review* 109(04):785–802.
- Duquette-Rury, Lauren. 2014. “Collective remittances and transnational coproduction: the 3× 1 program for migrants and household access to public goods in Mexico.” *Studies in Comparative International Development* 49(1):112–139.
- Escribà-Folch, Abel, Covadonga Meseguer and Joseph Wright. 2015. “Remittances and democratization.” *International Studies Quarterly* .
- Fajnzylber, P. and J.H. Lopez, eds. 2008. *Remittances and Development: Lessons from Latin America*. Washington, DC: World Bank.
- Fan, C Simon, Chen Lin and Daniel Treisman. 2009. “Political decentralization and corruption: Evidence from around the world.” *Journal of Public Economics* 93(1):14–34.
- Fitzgerald, Jennifer, David Leblang and Jessica C Teets. 2014. “Defying the law of gravity: The political economy of international migration.” *World Politics* 66(03):406–445.
- Frankel, Jeffrey. 2011. “Are bilateral remittances countercyclical?” *Open Economies Review* 22(1):1–16.
- Freites, Yajaira. 2010. *Un nuevo producto venezolano de exportación: el capital human (1998-2008)*. Venezuela: Academia de Ciencias Físicas, Matemáticas y Naturales.

- Freund, Caroline and Nikola Spatafora. 2008. "Remittances, transaction costs, and informality." *Journal of Development Economics* 86(2):356–366.
- Giuliano, P. and M. Ruiz-Arranz. 2009. "Remittances, financial development, and growth." *Journal of Development Economics* 90(1):144–152.
- Goodman, G.L. and J.T. Hiskey. 2008. "Exit without leaving: Political disengagement in high migration municipalities in Mexico." *Comparative Politics* 40(2):169–188.
- Greene, Kenneth F. 2007. *Why dominant parties lose: Mexico's democratization in comparative perspective*. Cambridge University Press.
- Hatton, Timothy J and Jeffrey G Williamson. 2005. *Global migration and the world economy: Two centuries of policy and performance*. Cambridge Univ Press.
- Hirschman, Albert, O. 1970. *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Harvard University Press.
- Hirschman, Albert O. 1993. "Exit, voice, and the fate of the German Democratic Republic: An essay in conceptual history." *World Politics* 45(02):173–202.
- Hiskey, Jonathan, Jorge Daniel Montalvo and Diana Orcés. 2014. "Democracy, Governance, and Emigration Intentions in Latin America and the Caribbean." *Studies in Comparative International Development* 49(1):89–111.
- Hochstetler, Kathryn. 2006. "Rethinking presidentialism: Challenges and presidential falls in South America." *Comparative Politics* pp. 401–418.
- Inchauste, Gabriela and Ernesto Stein. 2013. *Remittances and Poverty during an Economic Crisis: Honduras and El Salvador*. Springer.
- Iskander, N.N. 2010. *Creative state: forty years of migration and development policy in Morocco and Mexico*. Cornell University Press.

- Iversen, Torben and David Soskice. 2001. "An asset theory of social policy preferences." *American Political Science Review* 95(4):875–894.
- Kapur, Devesh. 2010. *Diaspora, development, and democracy: the domestic impact of international migration from India*. Princeton University Press.
- Karemera, David, Victor Iwuagwu Oguledo and Bobby Davis. 2000. "A gravity model analysis of international migration to North America." *Applied Economics* 32(13):1745–1755.
- Karl, Terry Lynn. 1995. "The hybrid regimes of Central America." *Journal of democracy* 6(3):72–86.
- Kaufman, Robert R and Alex Segura-Ubiergo. 2001. "Globalization, domestic politics, and social spending in Latin America: a time-series cross-section analysis, 1973–97." *World Politics* 53(04):553–587.
- Kaufmann, Daniel, Aart Kraay and Massimo Mastruzzi. 2010. "The worldwide governance indicators: A summary of methodology." *Data and Analytical Issues, World Bank Policy Research Working Paper* (5430).
- Leblang, David. 2010. "Familiarity breeds investment: Diaspora networks and international investment." *American Political Science Review* 104(03):584–600.
- Lehoucq, Fabrice. 2012. *The politics of modern central america: civil war, democratization, and underdevelopment*. Cambridge University Press.
- Linz, Juan J. 1990. "The perils of presidentialism." *Journal of democracy* 1(1):51–69.
- Llanos, Mariana and Leiv Marsteintredet. 2010. *Presidential breakdowns in Latin America: Causes and outcomes of executive instability in developing democracies*. Palgrave Macmillan.

- Lupu, Noam and Jonas Pontusson. 2011. "The structure of inequality and the politics of redistribution." *American Political Science Review* 105(02):316–336.
- Magaloni, Beatriz. 2006. *Voting for autocracy: Hegemonic party survival and its demise in Mexico*. Cambridge University Press Cambridge.
- Magaloni, Beatriz, Alberto Diaz-Cayeros and Federico Estévez. 2007. "Clientelism and portfolio diversification: a model of electoral investment with applications to Mexico." *Patrons, Clients, and Policies* pp. 182–205.
- Mahoney, James. 2001. *The legacies of liberalism: Path dependence and political regimes in Central America*. JHU Press.
- Mainwaring, Scott and Aníbal Pérez-Liñán. 2014. *Democracies and Dictatorships in Latin America: Emergence, Survival, and Fall*. Cambridge University Press.
- Mares, Isabela and Matthew E Carnes. 2009. "Social policy in developing countries." *Annual Review of Political Science* 12:93.
- Margalit, Yotam. 2013. "Explaining social policy preferences: Evidence from the Great Recession." *American Political Science Review* 107(01):80–103.
- Massey, Douglas S. 2010. "Immigration statistics for the twenty-first century." *The Annals of the American Academy of Political and Social Science* 631(1):124–140.
- Massey, Douglas S, Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino and J Edward Taylor. 1993. "Theories of international migration: a review and appraisal." *Population and development review* pp. 431–466.
- Massey, Douglas S, Rafael Alarcon, Jorge Durand and Humberto Gonzalez. 1990. *Return to Aztlan: The social process of international migration from western Mexico*. University of California Press.
- McKenzie, David. 2007. "Paper walls are easier to tear down: passport costs and legal barriers to emigration." *World Development* 35(11):2026–2039.

- McKenzie, David and Hillel Rapoport. 2007. "Network effects and the dynamics of migration and inequality: theory and evidence from Mexico." *Journal of development Economics* 84(1):1–24.
- Meltzer, Allan H and Scott F Richard. 1981. "A rational theory of the size of government." *The Journal of Political Economy* pp. 914–927.
- Moene, Karl Ove and Michael Wallerstein. 2001. "Inequality, social insurance, and redistribution." *American Political Science Review* pp. 859–874.
- Naudé, W. 2010. "The determinants of migration from Sub-Saharan African countries." *Journal of African Economies* 19(3):330–356.
- Nichter, Simeon. 2008. "Vote buying or turnout buying? Machine politics and the secret ballot." *American political science review* 102(01):19–31.
- Nierbrzydowski, Sirius and Ivan De La Vega. 2010. *Venezuela, política y emigración. El caso de la industria petrolera en 2002 y 2003*. Venezuela: Academia de Ciencias Físicas, Matemáticas y Naturales.
- Niimi, Y and C. Özden. 2008. "Migration and Remittances in Latin America: Patterns and Determinants." *Remittances and Development: Lessons from Latin America* pp. 87–132.
- Orozco, Manuel. 2009. "Migration and remittances in times of recession: Effects on Latin American economies." *Inter-American Dialogue* .
- Orozco, Manuel and Michelle Lapointe. 2004. "Mexican hometown associations and development opportunities." *Journal of International Affairs* pp. 31–51.
- Passel, Jeffrey S and Roberto Suro. 2005. *Rise, peak, and decline: Trends in US immigration 1992-2004*. Pew Hispanic Center Washington, DC.

- Pérez-Armendáriz, C. and D. Crow. 2010. "Do migrants remit democracy? International migration, political beliefs, and behavior in Mexico." *Comparative political studies* 43(1):119–148.
- Peters, Margaret E. 2015. "Open trade, Closed Borders Immigration in the era of Globalization." *World Politics* 67(01):114–154.
- Pfütze, T. 2012. "Does migration promote democratization? Evidence from the Mexican transition." *Journal of Comparative Economics* 40:159–175.
- Pritchett, L. 2006. *Let their people come: breaking the gridlock on international labor mobility*. Ctr for Global Development.
- Przeworski, Adam, Michael E. Alvarez, Jose Antonio Cheibub and Fernando Limongi. 2000. *Democracy and development: political institutions and well-being in the world, 1950-1990*. Cambridge University Press.
- Ralph, Chami, Adolfo Barajas, Thomas Cosimano, Connel Fullenkamp, Michael Gapen and Peter Montiel. 2008. "Macroeconomic consequences of remittances." *IMF Occasional Paper* 259:94.
- Ratha, D., S. Mohapatra and A. Silwal, eds. 2011. *Migration and Remittances Factbook 2011*. Washington, DC: World Bank.
- Ratha, Dilip, Sonia Plaza and Ervin Dervisevic, eds. 2016. *Migration and Remittances Factbook 2016*. Washington, DC: World Bank.
- Rehm, Philipp. 2009. "Risks and redistribution an individual-level analysis." *Comparative Political Studies* 42(7):855–881.
- Rehm, Philipp. 2011. "Social policy by popular demand." *World Politics* 63(02):271–299.

- Rehm, Philipp, Jacob S Hacker and Mark Schlesinger. 2012. "Insecure alliances: Risk, inequality, and support for the welfare state." *American Political Science Review* 106(02):386–406.
- Roberts, Kenneth M and Erik Wibbels. 1999. "Party systems and electoral volatility in Latin America: a test of economic, institutional, and structural explanations." *American Political Science Review* 93(03):575–590.
- Rodríguez, Victoria Elizabeth. 1997. *Decentralization in Mexico*. Westview Press.
- Roig, M. and J. Recaño-Valverde. 2012. "The Impact of the Global Financial Crisis on Migration to and Remittance Flows from Spain." *Migration and Remittances during the Global Financial Crisis and Beyond* pp. 255–270.
- Ross, M.L. 2001. "Does oil hinder democracy?" *World politics* 53(03):325–361.
- Ross, M.L. 2013. "Oil and Gas Data 1932-2011."
- Rudra, Nita. 2002. "Globalization and the decline of the welfare state in less-developed countries." *International Organization* 56(02):411–445.
- Rudra, Nita and Stephan Haggard. 2005. "Globalization, democracy, and effective welfare spending in the developing world." *Comparative Political Studies* 38(9):1015–1049.
- Schneider, Aaron. 2012. *State-building and tax regimes in Central America*. Cambridge University Press.
- Singer, D.A. 2010. "Migrant remittances and exchange rate regimes in the developing world." *American Political Science Review* 104(2):307–323.
- Sirkeci, I., J. Cohen and D. Ratha, eds. 2012. *Migration and Remittances during the Global Financial Crisis and Beyond*. Washington, DC: World Bank.



- Stark, Oded and David E Bloom. 1985. "The new economics of labor migration." *The American Economic Review* 75(2):173–178.
- Stark, Oded, J Edward Taylor and Shlomo Yitzhaki. 1986. "Remittances and inequality." *The economic journal* 96(383):722–740.
- Stokes, S.C. 2005. "Perverse accountability: A formal model of machine politics with evidence from Argentina." *American Political Science Review* 99(3):315–325.
- Stokes, Susan C. 2001. *Mandates and democracy: neoliberalism by surprise in Latin America*. Cambridge University Press.
- Tiebout, Charles M. 1956. "A pure theory of local expenditures." *The journal of political economy* pp. 416–424.
- Treisman, Daniel. 2000. "The causes of corruption: a cross-national study." *Journal of public economics* 76(3):399–457.
- Treisman, Daniel. 2007a. *The architecture of government*. Cambridge University Press.
- Treisman, Daniel. 2007b. "What have we learned about the causes of corruption from ten years of cross-national empirical research?" *Annu. Rev. Polit. Sci.* 10:211–244.
- Tyburski, M.D. 2012. "The Resource Curse Reversed? Remittances and Corruption in Mexico." *International Studies Quarterly* 56:339–350.
- UNDP. 2009a. "Human Development Report 2009—Overcoming Barriers: Human Mobility and Development."
- UNDP. 2009b. "Informe sobre Desarrollo Humano para America Central 2009-2010: Abrir espacios para la seguridad ciudadana y el desarrollo humano."

- UNDP. 2013. *Regional Human Development Report 2013-2014—Citizen Security with a human face: Evidence and Proposals for Latin America*. United Nations Development Programme New York.
- Valenzuela, Arturo. 2004. “Latin American presidencies interrupted.” *Journal of Democracy* 15(4):5–19.
- Vazquez, Gonzalo E. 2012. An Evaluation of Brain Drain in the Case of the Venezuela’s Petroleum Company, Petroleos de Venezuela SA (PDVSA). Master’s thesis University of Miami.
- Weyland, Kurt Gerhard. 1998. “The politics of corruption in Latin America.” *Journal of Democracy* 9(2):108–121.
- World Bank. 2006. *Global Economic Prospects: Economic Implications of Remittances and Migration*. Washington, DC: World Bank.
- World Bank. 2016. “Migration and Remittances: Recent Developments and Outlook.” *MIgration and Development Brief* 26.
- Wright, J., C. Meseguer and F. Escriba. 2012. “Remittances and Democratization.” *Working Paper* .
- Yang, Dean. 2008. “Coping with disaster: The impact of hurricanes on international financial flows, 1970-2002.” *The BE Journal of Economic Analysis & Policy* 8(1).
- Yang, Dean and HwaJung Choi. 2007. “Are remittances insurance? Evidence from rainfall shocks in the Philippines.” *The World Bank Economic Review* 21(2):219–248.
- Yang, Dean, Nava Ashraf, Diego Aycinena and Claudia Martínez A. 2015. “Savings in transnational households: a field experiment among migrants from El Salvador.” *Review of Economics and Statistics* 97(2):332–351.

Zucco, Cesar. 2008. "The president's 'new' constituency: Lula and the pragmatic vote in Brazil's 2006 presidential elections." *Journal of Latin American Studies* 40(01):29-49.