

2015

# Stable Money: An Evaluation of Political Stability and U.S. Bilateral Aid in Latin America

Aaron Nicole Nelson  
nelson236@marshall.edu

Follow this and additional works at: <http://mds.marshall.edu/etd>



Part of the [Geographic Information Sciences Commons](#), and the [Political Science Commons](#)

---

## Recommended Citation

Nelson, Aaron Nicole, "Stable Money: An Evaluation of Political Stability and U.S. Bilateral Aid in Latin America" (2015). *Theses, Dissertations and Capstones*. Paper 959.

This Thesis is brought to you for free and open access by Marshall Digital Scholar. It has been accepted for inclusion in Theses, Dissertations and Capstones by an authorized administrator of Marshall Digital Scholar. For more information, please contact [zhangj@marshall.edu](mailto:zhangj@marshall.edu).

STABLE MONEY: AN EVALUATION OF POLITICAL STABILITY AND U.S. BILATERAL AID IN  
LATIN AMERICA

A thesis submitted to  
the Graduate College of  
Marshall University  
In partial fulfillment of  
the requirements for the degree of  
Master of Science  
in  
Geography  
by  
Aaron Nicole Nelson  
Approved by  
Dr. Anita Walz, Committee Chairperson  
Dr. Godwin Djietror  
Dr. Kevin Law

Marshall University  
December 2015

APPROVAL OF THESIS/DISSERTATION

We, the faculty supervising the work of Aaron Nicole Nelson, affirm that the thesis, *Stable Money: An Evaluation of Political Stability and Bilateral Aid in Latin America*, meets the high academic standards for original scholarship and creative work established by the Masters of Science in Geography and the Marshall University Graduate College. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.



Dr. Anita Walz, Department of Geography



Committee Chairperson

12-9-15

Date



Dr. Kevin Law, Department of Geography



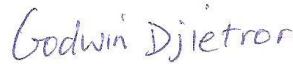
Committee Member

12/9/15

Date



Dr. Godwin Djietror, Department of Geography



Committee Member

12/9/15

Date

© 2015

Aaron N. Nelson  
ALL RIGHTS RESERVED

## CONTENTS

List of Tables.....	vii
List of Figures.....	viii
List of Appendices.....	vii
Abstract.....	ix
Chapter 1 Introduction and Literature Review.....	1
A Brief History of U.S. Bilateral Aid to Latin America.....	3
Breakdown of Bilateral Aid.....	4
Political Stability.....	7
Contradictory Results.....	8
Research Problem and Objectives.....	10
Chapter 2 Methodology.....	11
Study Area.....	11
Bilateral Aid.....	13
Political Stability.....	13
Analytical Methods.....	13
Chapter 3 Results and Discussion.....	15
Linear Regression Analysis Results.....	15
Grouping Analysis Results.....	18
Political Stability and Bilateral Aid.....	18
Political Stability and Classified Bilateral Aid.....	20
Security Aid.....	22
Health Aid.....	24
Humanitarian Aid.....	24
Food Aid.....	29
Other Aid.....	30

Chapter 4 Conclusion.....	35
Bibliography.....	37
Appendix 1 Letter from The Intuitional Research Board.....	39
Appendix 2 Data Tables.....	40
Appendix 3 Reference Maps.....	43
Appendix 4 List of Abbreviations.....	46
Appendix 5 Scatterplots.....	47

## LIST OF TABLES

Table 1 Coefficients of Determination and Significance.....	16-17
Table 2 Total Bilateral Aid and Averaged Political Stability.....	20
Table 3 Total Bilateral Aid per Program Category.....	22
Table 4 Total Security Aid.....	23
Table 5 Security Aid and Political Stability.....	24
Table 6 Total Health Aid.....	25
Table 7 Health Aid and Political Stability.....	26
Table 8 Total Humanitarian Aid.....	27
Table 9 Humanitarian Aid and Political Stability.....	29
Table 10 Total Food Aid.....	30
Table 11 Food Aid and Political Stability.....	31
Table 12 Total Other Aid.....	32
Table 13 Other Aid and Political Stability.....	33
Table 13 Bilateral Aid per Country in Millions.....	40
Table 14 Total Bilateral Aid per Program.....	41
Table 15 Latin American Political Stability Values.....	42



## **LIST OF FIGURES**

Figure 1 The Location of Latin America.....	12
Figure 2 Political Stability and Bilateral Aid Grouping Analysis Results.....	19
Figure 3 Political Stability and Categorized Bilateral Aid Grouping Analysis Results.....	21
Figure 4 Mexico and Central America.....	43
Figure 5 South America.....	44
Figure 6 Caribbean Islands.....	45
Figure 7 The Columbian Example.....	47
Figure 8 Aggregated Bilateral Aid.....	47
Figure 9 Security Aid.....	48
Figure 10 Humanitarian Aid.....	48
Figure 11 Health Aid.....	49
Figure 12 Food Aid.....	49
Figure 13 Other Aid.....	46

## **LIST OF APPENDICES**

Appendix 1 Letter from the Intuition Research Board.....	39
Appendix 2 Data Tables.....	40
Appendix 3 Reference Maps.....	43
Appendix 4 List of Abbreviations.....	46
Appendix 5 Scatterplots.....	45

## **ABSTRACT**

This study examined the potential relationship between U. S. bilateral aid and political stability for the Latin American world region. Two objectives were addressed by the analysis, first, what is the statistical relationship between U.S. bilateral aid and political stability and second, how does the spatial pattern of political stability equate to the spatial distribution of foreign bilateral aid in Latin America. Highly significant statistical relationships were discovered between bilateral aid and political stability. Distinct patterns in both political stability and bilateral aid indicated that politically fragile nations consistently received larger amounts of bilateral aid.

## **CHAPTER 1**

### **INTRODUCTION and LITERATURE REVIEW**

Currently, the United States is highly concerned with development in many parts of the world, but it is no longer economically possible for the U.S. to be involved in every world region. The observed limitations of U.S. involvement has prompted inquiry about which regional sectors are the most important to the security and success of the United States and to what extent the U.S. should remain involved in each one (Petras, 2011). U.S. involvement in the regional sectors of the world is intended to support not only U.S. interests in each region, but it is also to support the development of the region with supplementary funds, goods or services in the form of bilateral foreign assistance with the additional intention of promoting politically stable governments (Barshefsky & Hill, 2008).

While the U.S. remains involved with the governments and peoples of several world regions, involvement in Latin America is rivaled by others, such as Saudi Arabia, Iraq and Kuwait, seeking to gain access to the region's growing markets and natural resources. As other nations are cultivating relationships that conflict with U.S. interests in the region U.S. hegemony is clearly over (Petras, 2011); however, strong historical and cultural ties entwine the U.S. and Latin America. As United States' largest, most proximal geographic neighbor, the political stability of this region is of great importance for many reasons.

The U.S. and Latin America have been able to partner in the area of energy production, which is at the top of most countries' concerns. Latin America, the largest foreign provider of petroleum products to the United States has also been involved with U.S. efforts to establish alternative fuels such as ethanol or solar alternatives. Though Latin America was only able to be the largest foreign petroleum provider to the U.S. for a limited time due to limited deposits, pursuits in alternative fuels are expected to continue. It is inevitable that the oil supply will end and other forms of fuel will be needed for replacements, which will continue and reinforce the interdependence of U.S. and Latin America's alternative fuel development (Tulchin, 2001).

Because Latin America has a strong resource base and a short transfer time for these materials, securing the political stability in Latin America benefits not only the region, but the U.S. as well. Latin America provides a wealth of economic pursuits for the U.S. Vast import and export markets have been established in the Latin American region as goods flow into and out of the region (Barshefsky & Hill, 2008). Latin America is rich with several minerals, oil and other natural resources that are in demand in the U.S. which increases the importance of the region for the latter. The ability to import resources from a proximal neighbor decreases the cost of the import by decreasing the amount of transfer time for each resource being imported, also decreasing the cost of resource products for U.S. consumers, and making the Latin American markets ideal for the U.S. consumer base (Adams, 2015).

National security is always a top priority of any government and the U.S. is no different. Although there is a great deal of immigration, both legal and illegal flowing into the U.S. from Latin America, the region provides other security interests for the U.S. government (Barshefsky & Hill, 2008). Negotiation between armed forces in Latin America has increased over the last few decades, with emphasis on uniting the national military forces to achieve common goals for the region as well as the U.S. Though the U.S. efforts of national security are focused on borders that are shared with the region, these efforts have expanded to encompass illicit drug trafficking, organized crime and terrorism within Latin America (Tulchin, 2001).

Although Latin America has grown stronger and expanded relationships with other countries and regions, the American interests in the region have grown as well (Barshefsky & Hill, 2008). As a growing trade partner, Latin America is also the largest source of immigrants to the U.S. Because of these reasons among several others, the United States has three important objectives for the Latin American region: fostering political stability, economic prosperity and democratic governments (Barshefsky & Hill, 2008). The political stability of the region is a necessary concern for the U.S. The stability of Latin America is fragile and poses threats to

economic pursuits (including energy development) and national security in the region (Tarnoff and Knowles, 2005).

### **A Brief History of U.S. Bilateral Aid to Latin America**

The United States has been a major donor of foreign assistance to countries in Latin America since the late 1950s. Aid spiked in the early 1960s following the introduction of President Kennedy's Alliance for Progress. The 1970s saw a period of decline in bilateral aid to the region until 1979 (Adams, 2015). In 1979, bilateral assistance to the region increased again after the Sandinistas took control of Nicaragua. During the 1980s, considerable bilateral aid was used to support the Contras, which were seeking to overthrow the previously established Sandinista government. Additional bilateral aid was also sent to other Central American governments which were being overrun by insurgencies (Guess, 2011). The mid-1990s faced another decline in bilateral aid flows, marking the end of Central American conflicts as electoral democracy spread throughout the region. Although bilateral aid to the Latin American region began to decline in the mid-1990s, the late 1990s saw another increase in bilateral aid flows which continued to increase throughout the decade which was partially due to increased spending on humanitarian and development projects throughout Latin America (Adams, 2015).

Extensive humanitarian aid to several countries in Central America was received due to Hurricane Mitch in 1998 and the establishment of additional bilateral aid programs in 2003 and 2004 provided new sources of U.S. bilateral aid assistance to Latin America. Significant bilateral aid assistance was also provided to Haiti in 2010 following the massive earthquake in January (Adams, 2015). Increased bilateral aid to the Latin American region has been the result of presidential actions that have sought to combat drug trafficking and internal armed conflicts while fostering development. Humanitarian relief was the focus of U.S. bilateral aid programs for the decade beginning in 2000. However, the majority of bilateral aid through 2010 was concentrated on counternarcotic and other security programs (Guess, 2011).

## **Breakdown of Bilateral Aid**

U.S. bilateral aid is foreign assistance that is directly given to recipient countries from the U.S. government and is commonly given for specific projects. Bilateral aid was designed to stimulate economic and human development around the world as by 1961, during the establishment of the U.S. Agency for International Development, commonly called USAID. USAID functioned as a government dependent program until becoming an independent agency in 1999 (Tarnoff & Knowles, 2005).

Bilateral aid is a combination of nineteen programs that provide assistance to countries in several forms, including cash, loans, grants, commodities, equipment or training (Tarnoff & Knowles, 2005). USAID manages bilateral aid distribution in conjunction with the Secretary of State and the State Department as well as the foreign Operations Committee and the Committee of International Relations (Cingranelli & Pasquallero, 1985). Bilateral aid has been designed by these overseeing agencies to stimulate economic and human development around the world with five basic goals central to all bilateral aid programs which are listed by the U.S. Overseas Loans and Grants (2013) as:

1. Promote transformational development
2. Strengthening fragile states
3. Providing humanitarian assistance
4. Supporting U.S. geostrategic interests
5. Mitigating global and international ills

Although there are several different factors that affect the political stability of a government, the U.S. seeks to mitigate the impact of these various factors through the use of bilateral aid. Bilateral aid has been used for many years to reward democratic regimes as well as to sway more authoritarian governments toward more democratic operations (Adams, 2015). The U.S. has used bilateral aid for many years to gain favor with many countries and this has been done through several bilateral aid programs (Tarnoff & Knowles, 2005). While there are

several aid programs that function within the foreign aid parameter, the programs are organized into five categories which are Security, Health, Humanitarian, Food and Other Assistance. Each of the five categories has specific objectives that dictate how aid funds are to be divided and awarded, and while this is true, many objectives of the bilateral aid categories overlap. The overlap in bilateral aid programs ensures that qualifying nations received adequate funds to support relief and assistance programs that function within them (Tarnoff & Knowles, 2005).

Security Assistance includes four bilateral aid programs which are Emergency Security Assistance, Narcotics Control, Non-Proliferation and Anti-Terrorism Assistance and the Department of Defense funding. Each of these programs contributes to ensuring the security of receiving nations in various ways. Emergency Security assistance provides funds, commodities, or services that are given to countries which have undergone a national emergency/crisis such as environmental disasters or invasion that would destabilize the national government (Heslop, 2014).

Health Assistance is compiled of three bilateral aid programs; Child Health and Safety, Global Health and Child Survival and Global HIV and AIDS Initiative. The goal of the health assistance programs is to improve the health of citizens in countries which are unable to provide health services to rural or poverty stricken areas abroad. The assistance received from health programs is intended to be used as a protective or preventative measure to ensure the health and wellbeing of citizens which would normally be without care (Heslop, 2014).

Migration and Refugee Assistance, Peace Corps, Development Assistance and the Millennium Challenge Corporation are the individual programs that constitute the Humanitarian bilateral assistance program classification. Migration and Refugee Assistance (MRA) provides aid in several different forms for countries that are receiving a large portion of migrants, mostly as refugees from adjoining area or proximal countries that are undergoing political upheaval, large-scale riots, or dangerous environmental hazards. MRA provides temporary shelters, food, clothing and some medical benefits for refugee populations to relieve the monetary and

commodity stresses that migrant and refugee populations create for recipient governments (Guess, 2011). Peace Corps is a well-known program which provides assistance for countries, mostly in the form of educational assistance. Development Assistance provides funds for increasing the human development of specific countries or regions, such as building roads or sewage/water treatment facilities. The newest program, the Millennium Challenge Corporation (MCC) is dedicated to reducing the spread of HIV/AIDS among the populations that are most heavily affected by the virus. The MCC provides health education about how the virus spreads as well as supplementary health care assistance for rural/poverty stricken populations that suffer from rampant occurrences of HIV and AIDS (Tarnoff & Knowles, 2005).

Food Assistance, which provides food benefits to countries that have demonstrated the need for assistance, is comprised of four individual bilateral aid programs. Food for Education, Title I, Title II and Other Food Aid are the individual programs that provide a food benefit, however these programs are unequally distributed throughout the Latin American region, serving the least number of nation states (Guess, 2011). Title I and Title II are programs that have been in long standing, providing resources for food production, actual food stuffs and agricultural education/training for food production and storage. Other Food Aid is a miscellaneous category which provides emergency assistance for countries that are suffering food/agricultural shortages for domestic consumption while Food for Education provides nutritious meals for school aged children (Tulchin, 2001).

The final category of bilateral aid is Other Assistance. Other Assistance includes four ambiguous programs: Other State Assistance, Other US Aid, Other USDA and Other Grant Programs. These programs provide additional emergency aid for sudden, but temporary, government strife. However, they also provide additional aid for countries that are not under emergency situations (Tulchin, 2001). Funds can be requested during temporary emergency situations, as well as providing funding for qualifying countries with relaxed approval guidelines (Guess, 2011).



## **Political Stability**

The abstract concept of political stability is subjectively measured as the amount of violent and terroristic actions reported in a given nation, most of which are committed against the citizens residing within a given nation (Lemco, 1991). While the concept of political stability is abstract, it is defined most simplistically by the electronic Encyclopedia Britannica as “one [government] that survives through crises without internal warfare”. While this is certainly true, two main characteristics that politically stable nations share, almost unanimously, are durability and integrity of the current political government (Lemco, 1991).

The durability of a politically stable government reflects the ability of the nation to withstand hardships while also limiting the timespan of the hardship circumstances. While this is complex, the politically stable government is not typically faced with major societal upheavals because the residents are satisfied with the current government, which reflects the integrity of the current regime (Lemco, 1991). The basic government freely and openly interacts regularly with the public, allowing them to have a voice in government proceedings. This interaction between government and public enhances the political stability of a given national government (Ake, 1975).

The political stability of a nation can be threatened by many factors, including but not limited to problems such as conflict and proximity to conflict, insufficient resources, government corruption, and development conditions (Ake, 1975). Any of these factors, in conjunction with other factors can cause a nation to become politically fragile. Sudden change in a political environment circulates down to the general public, which enhances the chance of public and societal revolt in many forms (Barshefsky & Hill, 2008). The general population contributes to declining political stability when circumstances are conceived as unpleasant and when the rights of the population are being heavily restricted (Heslop, 2014).

## **Contradictory Results**

Currently, multiple billions of dollars in bilateral aid are given to Latin America to fund a variety of development projects and security programs, however there is little agreement between any groups as to the actual impact of bilateral aid assistance (Barshefsky & Hill, 2008). Various studies have been conducted to examine the association and possible relationships between U.S. foreign aid and the political stability of nations throughout the world. Previous studies on the political stability of Latin American countries have used numerous variables, as well as a variety of models, in the attempt to measure and explain political stability of governments around the world.

Though there have been many studies conducted on the factors that potentially influence the political stability of a nation, most of these studies concentrate on various economic and development issues within a nation with several explanatory variables employed in each study. Still, there is a gap in the literature where bilateral aid is concerned in assessing political stability (Ake, 1975). Many studies have attempted to assess the relationship between US foreign aid programs and political stability, however contradictory conclusions have been reached as a result of the differences in parameters that were examined as well as the inclusive and exclusive models employed by different researchers.

Various datasets exist which attempt to measure the political stability of a country or small regions, such as the political terror scale and the political stability index. Differences within the data used have caused researchers to come to a variety of different conclusions. Typically, researchers have used the political terror scale to evaluate political stability of individual nations, however the political terror scale has raised several questions, including but not limited to, the coding scheme employed (country are ranked from -2.5 to 2.5) and the conceptualization of 'political terror' (Ake, 1975). The lack of specifications in which the political terror scale was constructed has left too much room for interpretation of what the values include, causing studies conducted with this figures to be highly scrutinized (Petras, 2014).

Many different models have been used by researchers to establish a direct relationship between bilateral aid and political stability, ranging from inclusive to exclusive models. While inclusive models are limited only by the size of the region being evaluated, exclusive models use a specific variable, such as human development or economic rankings as guidelines for a country's addition to the exclusion model. The use of inclusion versus exclusion models has produced various results ranging from highly significant relationships to different degrees of significance throughout contiguous regions.

Cingranelli and Pasquallero (1985) found that the decision process for foreign aid calculation was classified as routine when deciding aid for Latin American distributions. Further investigation of the decision making process revealed it to be a most rudimentary two fold process. While much light was shed on the decision making process, the study failed to illustrate a consistent relationship between the variables of bilateral aid allocation and political stability. Cingranelli and Pasquallero (1985) used low human development as exclusion criteria which limited the countries evaluated in their analysis.

In 1988, McCormick and Mitchell rebutted Cingranelli and Pasquallero's 1985 findings in a study that employed an inclusive model instead of an exclusion model. The results indicated significant relationships between U.S. foreign bilateral aid distribution and political stability.

Barshefsky and Hill (2008) generated an analytical report on the political stability and bilateral aid influences in the Latin American region. This report suggests that political stability is directly related to the allocation of bilateral aid. Though a direct link was established for the Latin American region, the Task Force identified additional variables such as human rights, degree of political freedom as well as economic conditions, which would further impact political stability. Tulchin (2001) also evaluated Latin America's political stability and found that there are several variables related to the political stability of the region such as access to medical care, personal security and the protection of indigenous peoples/cultural sites and freedom of economic pursuits. However, Tulchin (2001) concluded that while many variables have the ability to

impact the political stability of the region, the most significant variable in relation to increasing or decreasing political stability was bilateral aid received from many different aid agencies throughout the world, not just U.S. bilateral aid.

There is a lack of research that evaluates political stability with only U.S. bilateral aid because many other variables, ranging from poverty to human rights, are typically included. Bilateral aid has had contradictory relationships with political stability, additional explanatory variables have generally been employed to obtain significant relationship results. These particular methods have obscured the relationships between political stability and individual variables and produced overgeneralized results.

### **Research Problem and Objectives**

Because many different variables have been used to explain political stability, the overall view of political stability is highly generalized. The evaluation of a single variable in relation to political stability allows for a much finer view of the intricate relationship dynamics. Previous researchers have used multiple variables that have obscured the finer details of relationships between political stability and the variables used. To obtain a finer picture of the intricate dynamics of political stability and the variables that impact it, a study that evaluates the relationship between political stability and one variable, such as human rights, bilateral aid or human development is necessary. The objectives of this analysis are two-fold, namely determining the relationship between U.S. foreign bilateral aid and the political stability of Latin America, and evaluating how the spatial pattern of political stability of Latin American countries relates to the spatial distribution of U.S. foreign bilateral aid in the region.

## **CHAPTER 2**

### **METHODOLOGY**

#### **Study Area**

The study area includes Latin America and the Caribbean Island (LAC) world region (Figure 1) and is more commonly referred to simply as Latin America. Latin America constitutes the southern portion of the “western hemisphere” of the world. Including 47 countries, the region can be divided into three sub-regions, one of which can also be divided into two smaller regions. The three sub-regions are Mexico and Central America, which are combined to make the more commonly known Central American region; South America, which is generally limited to the South American continent (which is sometimes referred to as the Southern Cone); and the Caribbean Islands. The Caribbean Island sub-region can be divided into two smaller sub-regions, namely Greater Antilles and Lesser Antilles. The focus of the study is limited to the 2000-2010 timeframe. The analysis in this study was conducted at both the world region scale of Latin America and at the scale of the individual sub-regions. Appendix 3 provides reference maps for each sub-region and the countries that are within each region.

#### **Bilateral Aid**

The total economic historical funds received by each Latin American country were compiled from Greenbook, powered by the US Overseas Loans and Grants Program (2013). The data were organized in two ways. First, the aggregate total of bilateral aid per program for each year was derived for the region; second, given that the total amount of bilateral aid only reveals relationships on an aggregated basis, the total bilateral aid were disaggregated to the historical funds per program per year for each country in the region and then classified into the five bilateral aid categories. The historical funds per program per country were used to identify any potential relationships between political stability and classified bilateral aid programs.



**Figure 1** The location of Latin America with sub-regions. Country names are provided in reference maps in Appendix 3.

## **Political Stability**

The political stability ranking of each country was provided by the World Bank (2014). The political stability of a country is an indicator of the fragility of a nation's government and ranges from 0-100, with 0 indicating politically fragile and increasing values indicate increasing political stability (World Bank, 2014). Because not all countries within Latin America are sovereign, some political stability scores were not available. These countries were not discounted, but given the scores of their controlling territories if an alternate score was not already calculated and provided by the World Bank. While each country had either a score or was given the score of the controlling territory when acceptable, not all countries in Latin America had political stability values for each year and these values were represented as -99 (no data available).

## **Analytical Methods**

Regression analysis was used to explore the relationship between U.S. bilateral aid and political stability in Latin America. The dependent variable was the political stability value and the explanatory variable was the economic historical bilateral aid dollar amounts received by each country in Latin America. The regression analysis was conducted on both the aggregated and disaggregated bilateral aid amounts.

Grouping analysis was employed to identify groups or 'clusters' of countries that fall into one of three categories for each bilateral aid and political stability, which was accomplished using ArcGIS. Grouping analysis is a "...classification procedure that tries to find natural clusters in the data. The solution is achieved with a given number of groups to create, where all countries within each group are as similar as possible but the groups themselves are as different as possible" (ArcGIS Online Help). Country similarity was based on a given attribute, either political stability or bilateral aid and the tool was used with no spatial constraints to allow for the Latin American region to be grouped for each variable without having to share a boarder. Outliers were removed to display the most effective grouping for all analyses. The output for

cluster analysis was in the form of a map, thus choropleth maps were created to illustrate political stability and bilateral aid groups that were used to evaluate how the political stability of a country compares to the distribution of U.S. foreign bilateral aid. Results from the grouping analysis were displayed in tabular format when acceptable.

The grouping analysis was employed to identify groups of countries classified as low, moderate and high values for averaged political stability, total bilateral aid and total bilateral aid per program. The average political stability was analyzed for clusters of fragile (PSV =1-30), stable (PSV =31-57) and highly stable countries (PSV =58-100) classes, which were determined by the ArcGIS grouping analysis tool.

P-values and coefficients of determination ( $R^2 * 100$ ) returned by the regression analysis were extracted and evaluated for the existence, significance and trends of relationships between the variables. The analysis was conducted in two ways; first an inclusive model was used to include all countries and second, an exclusion model was used in which outliers were removed. Outliers were determined to be Columbia, Bolivia, Peru, Mexico and Haiti. Removing outliers from the analysis did not significantly change the p-values or the coefficient of determination; because of this, the exclusion model will not be further discussed.



## **CHAPTER 3**

### **RESULTS and DISCUSSION**

#### **Linear Regression Analysis Results**

The results of the regression analysis (Table 1) indicated highly significant relationships between the averaged political stability values (PSV) and aggregated bilateral aid for the Latin American region ( $p \leq 0.001$ ). Two programs indicated non-significant values, Child Health and Safety (CHS) and Developmental Assistance (DEV); CHS indicated insignificant p-values for 2008-2009 and DEV returned non-significant p-values for 2002-2003. The strongest relationships identified were found with Emergency Security Assistance (ESS; COD= 23.2) and Other State Aid (OSA; COD = 45.3).

While the regression results did indicate highly significant relationships, the coefficients of determination were used to identify trends in strength of the relationship over the study period for each of the analyses. Security aid indicated an increasing trend with Non-Proliferation/Anti-Terrorism (NP) and Department of Defense (DOD). However Emergency Security Assistance (ESS) was decreasing and Counternarcotic Assistance (NARC) indicated no change. Humanitarian aid indicated increasing trends for Migration and Refugee Assistance (MRA), Millennium Challenge Corporation (MCC) and Peace Corps but, Development Assistance (DEV). Peace Corps indicated a dramatic increasing trend. Health aid indicated decreasing trends for Child Health and Safety (CHS) and Global Health (GH) though Global HIV and AIDS (GHIV) indicated an increasing trend. All food aid programs indicated decreasing trends. Other aid programs indicated an increasing trend for Other State Assistance (OSA), Other USDA (OUSD) and Other USAID (OAID). Other Active Grants, (OAG) indicated a decreasing trend.

**Table 1** Coefficients of determination and significance levels of U.S. bilateral aid and political stability in Latin America. 2001 is not represented due to the lack of political stability values for each country. The level of significance is indicated as follows: ns: not significant, \*:  $p \leq 0.05$ , \*\*:  $p \leq 0.01$ , \*\*\*:  $p \leq 0.001$ , \*\*\*\*:  $p \leq 0.0001$ , dashes indicate missing information (continued on following page).

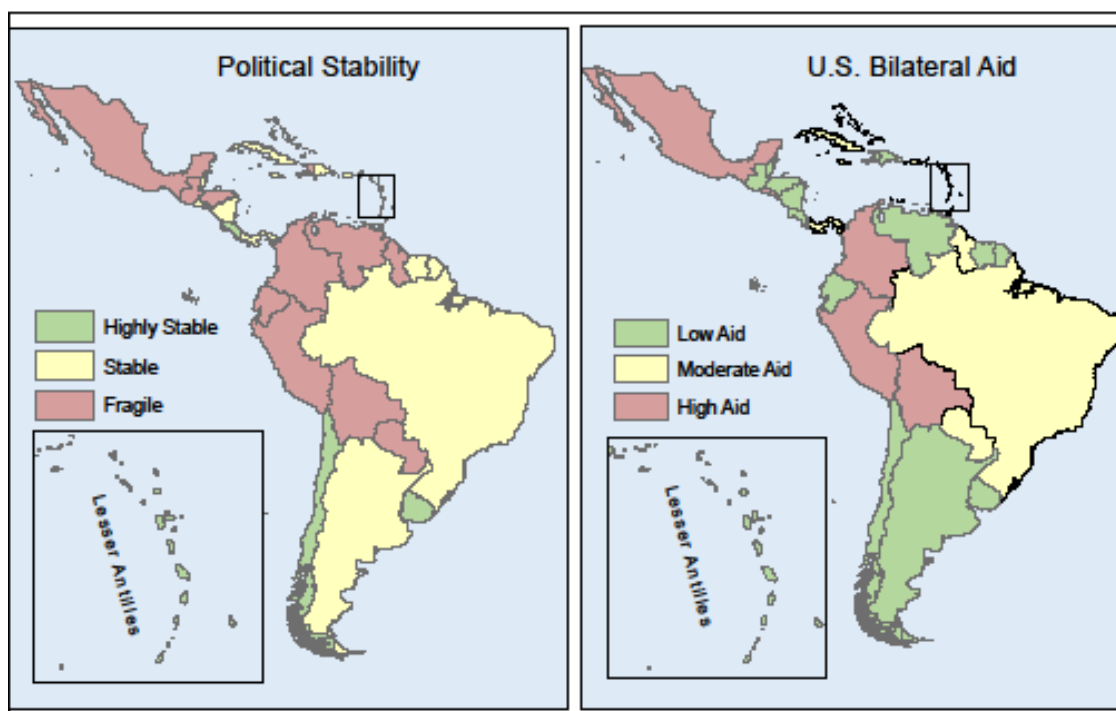
Coefficients of Determination and Significance of U.S. Bilateral Aid and Political Stability											
Program Classification	Year Program	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010
Security	NARC	13***	18.9***	13.6***	0.4*	16.3***	15.8***	23.4***	13.3***	6.8**	14.7***
	NP	16.3***	2.6**	0.7***	12.1***	12.1***	11.8***	16.4***	19***	4.4**	10***
	DOD	--	--	--	--	2.5**	3.1***	0.4**	1*	3*	3.1***
	ESS	23.1**	23.2***	19**	19.3**	21.6**	13.9**	13.5**	18.9**	17**	17.9**
Humanitarian	PC	1.1***	24.5***	24.8***	20.7***	31.2***	32.2***	30.4***	31.1***	27.1***	33.3***
	DEV	0.001*	ns	ns	1.2*	0.001*	0.001*	0.001*	0.001*	0.001**	0.001*
	MRA	10***	10.3***	10.3***	3.3***	1.4***	11.6***	12.5***	10.1***	10.8***	15.3***
	MCC	--	--	--	--	2.6**	1.8**	0.3*	5.5***	5.3***	2.4**
Health	CHS	17.1**	17.6**	31.2***	31.1***	21.4***	31.8***	35***	ns	ns	8.2*
	GH	--	--	--	--	--	--	--	16.3***	11.9***	12.9***
	GHIV	--	--	--	3***	10.3***	10.6***	10***	10.5***	9.8***	8***
Food	OFA	8***	0.2*	10.6***	10.1***	0.9***	8.7***	4.2***	10.8***	2*	6.9***
	T1	14.3***	13.2***	6.5*	54****	4.4**	15.8***	0.6*	2.5**	7.1**	0.4*
	F4ED	--	6***	9.5***	5***	1.7**	9.7***	4***	4.1**	4.9***	4.6**
	T2	22.8***	20.5***	22***	22.2***	26.6***	23.4***	25.1***	11.9***	12***	9*
Other	OAG	17.7***	3***	11***	26.1***	17.3***	27.3***	31.8***	12***	10.4***	8.6***
	OAID	1.6**	1.6*	44.7***	31.6***	19.1***	36.9***	2.7***	48.7****	36.6***	7.1**
	OUSD	--	--	5.7***	0.8***	1.9***	3.8***	8.5***	5.4***	3.5***	9.1***
	OSA	16.2***	1.7**	15.1***	0.001*	0.1**	13.4***	1.5**	45.3***	44.5***	45***
Aggregate		19.3***	24.5***	24.2***	37***	37***	27.8***	19.2***	30.9***	32.3***	22.9***

Dramatic trends can be seen in each category of bilateral aid. Security aid indicates the most dramatic decreasing trend with Emergency Security Assistance. Child Health and Survival indicates the most dramatic decreasing trend of health aid and Title 1 is the most dramatic decrease of food aid. Humanitarian aid indicated the most dramatic increase with Peace Corps and Other State Aid was the most dramatic increase of other aid.

### **Grouping Analysis Results**

**Political Stability and Bilateral Aid.** The grouping analysis (Figure 2) performed on political stability revealed that two dominant groups of fragile nations are found in Latin America when the political stability of the region is mapped. The first dominant cluster of fragile states consists of Mexico, Guatemala, and Honduras. The second extends from Guyana and continues along the northern coastal nations before terminating in Paraguay, forming a crescent of fragility around the northern portion of South America. Grouping analysis performed on total bilateral aid indicates two dominant groups as well, one in Mexico and Central America and the other in South America.

The largest group, highly stable/low aid is constituted by mostly island nations within the Lesser Antilles with the addition of Chile, Uruguay and Costa Rica (Table 2). Countries within the stable group are most evenly distributed between moderate and low aid groups while countries within the fragile political stability group are most evenly distributed between high and moderate aid groups. No countries were grouped as high aid and highly stable or highly stable and moderate aid, which indicates that as the political stability of nations within Latin America increases, the amount of bilateral aid received by these decreases.



**Figure 2** Grouping analysis results for average political stability and total bilateral aid.

Grouping analysis performed on total bilateral aid and political stability indicates politically fragile countries generally receive the largest distribution of U.S. bilateral aid, while highly politically stable countries receive less aid, if any at all. This suggests that the U.S. government donates large amounts of funds to countries to assist in the stabilization of political processes and government, which is one goal of bilateral aid, however the political stability of recipient countries does not always increase. Because American intervention in politically fragile nations is a goal of bilateral aid, high funds would be sent to politically fragile nations for support.

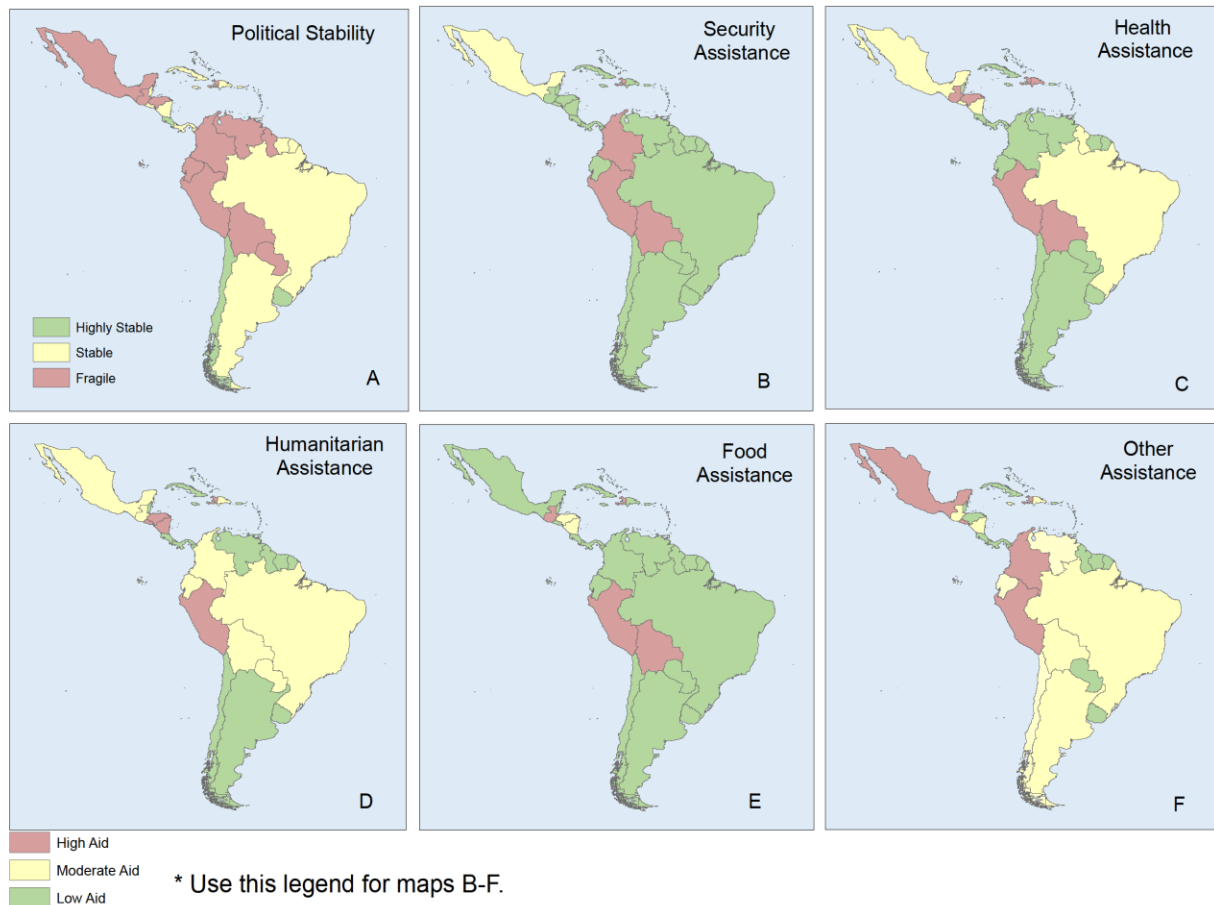
**Table 2** Bilateral aid and political stability grouping analysis results for each country.

Political Stability Bilateral Aid	Highly Stable	Stable	Fragile
High Aid		El Salvador	Mexico, Haiti, Columbia, Peru, Bolivia
Moderate Aid		Cayman Islands, Dominican Republic, Cuba, Nicaragua, Panama, Jamaica, Bahamas, Brazil	Ecuador, Paraguay, Honduras, Guatemala, Guyana
No/Low Aid	Chile, Uruguay, Anguilla, Antigua, British Virgin Islands, Dominica, Guatemala, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, St. Bart's, St. Lucia, St. Martin, St. Vincent, Turks & Caicos, Aruba, Barbados, Costa Rica	Trinidad & Tobago, St. Kitts, US Virgins Islands, Puerto Rico, Belize, Suriname, French Guiana, Argentina	Venezuela

**Political Stability and Classified Bilateral Aid.** Bilateral aid for each Latin American country was disaggregated into the per program aid for each Latin American country. The disaggregated data was then classified by aid type for evaluation and for display purposes.

U.S. bilateral aid can be grouped into five major categories of bilateral aid; Security, Health, Humanitarian, Food and Other Aid assistance (Figure 3). The five classifications were

determined by classifying the individual aid programs by grouping aid programs that have the same general purpose. While Security, Humanitarian, Food and Other assistance had four individual programs each, the Health programs had only three individual programs.



**Figure 3** ArcGIS grouping analysis results for political stability and categorized bilateral aid.

Total amounts of bilateral aid per program was determined, then the sum for each bilateral aid classification was established. Of more than \$20 billion received by the Latin American region from 2000-2010, security aid had the highest budget (55% of the total) and health aid had the lowest budget (8% of the total; Table 3).

**Table 3** Total bilateral aid received by Latin American countries per aid category and the percent of total bilateral aid budget for each category of aid (2000-2010).

Category	Total	% Total
Security	11,255,558,067	55%
Health	1,707,501,885	8%
Humanitarian	3,317,451,849	16%
Food	2,025,152,870	10%
Other	2,219,560,448	11%
Total	20,525,225,119	100%

**Security Aid.** Security aid, with 55% of the total bilateral aid funding, includes four bilateral aid programs that share the common goal of increasing security efforts within Latin America. The four programs are Emergency Security Assistance (ESS), Department of Defense Assistance (DOD), Anti-Narcotics Assistance (NARC) and Non-Proliferation and Anti-Terrorism (NP; Table 4).

Security aid is concentrated in five countries, high aid is concentrated in three countries of South America, while only Mexico and Haiti are grouped as moderate aid (Table 5). This indicates that the distribution of security aid is very limited. The three countries receiving the highest amount of security assistance also fall within the distinct fragile political stability crescent of South America and Mexico and Haiti are also politically fragile. Because security aid programs are generally used to support the national security of a nation, it is reasonable to assume that politically fragile countries are consistently ravaged with national security threats ranging from insurgencies to narcotics trafficking.

**Table 4** Total bilateral aid received by Latin American countries per each security program and the percent of the total security budget (2000-2010).

<b>Security</b>	<b>Total</b>	<b>% Total</b>
Anti-Narcotics (NARC)	8,127,147,353	72%
Non-Proliferation (NP)	67,921,808	1%
Department of Defense (DOD)	429,967,086	4%
Emergency Security (ESS)	2,630,251,814	23%



**Table 5** Security aid and political stability grouping analysis results.

Political Stability Bilateral Aid	Highly Stable	Stable	Fragile
High Aid			Columbia, Peru, Bolivia
Moderate Aid		Cayman Islands, Dominican Republic, Cuba, Nicaragua, Panama, Jamaica, Bahamas, Brazil	Mexico, Haiti
No/Low Aid	Costa Rica, Uruguay, Chile, Cuba, Dominica, Bahamas, Guatemala, Turks & Caicos, Puerto Rico, Jamaica, Cayman Islands, St. Bart's, St. Lucia, St. Martins, St. Kitts, Grenada, Aruba, Barbados, Anguilla, U.S. Virgin Islands, Antigua, Guadeloupe, Martinique, Montserrat, Netherlands Antilles	Belize, Dominican Republic, Nicaragua, Panama, Suriname, French Guiana, Brazil, Argentina	Guatemala, Honduras, Guyana, Venezuela, Ecuador, Paraguay

**Health Aid.** Health aid is intended to support the health of a nation's population.

Because health aid is concentrated in politically fragile nations, assumptions can be made that the general health of the population of fragile nations is poor. Some stable nations appear to either have health crises occurring or are unable to maintain health of citizens with their own resources. Health assistance is a combination of three health programs, namely Global HIV and AIDS (GHIV), Global Health (GH), and Child Health and Survival (CHS), which received 8% of the total 2000-2010 budget for bilateral aid (Table 6). Each of these programs serves to support and increase health and wellness in many countries. CHS receives the largest funds,

mostly because it is the oldest established health program, constituting over half of the total budget for bilateral aid health programs.

**Table 6** Total health aid received by Latin American countries per each health program and the percent of the total health budget (2000-2010).

Heath	Total	% Total
Child Health and Survival (CHS)	871,758,751	51%
Global Health (GH)	628,491,576	37%
Global HIV & AIDS (GHIV)	207,251,588	12%

High amounts of health assistance from U.S. bilateral health programs concentrated in politically fragile nations, however, one country, Dominican Republic is considered to be stable while receiving a high amount of health aid and four additional stable countries received moderate health assistance (Table 7). Highly stable countries received a low amount of health aid.

**Table 7** Political stability and health aid grouping analysis results.

Political Stability Bilateral Aid	Highly Stable	Stable	Fragile
High Aid		Dominican Republic	Guatemala, Honduras, Haiti, Peru, Bolivia
Moderate Aid		Nicaragua, El Salvador, Brazil, Guyana	Mexico
No/Low Aid	Costa Rica, Chile, Uruguay, Antigua, Anguilla, British Virgin Islands, Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, St. Bart's, St. Vincent, St. Lucia, St. Kitts, St. Martin, Turks & Caicos, US Virgin Islands, Aruba, Barbados, Trinidad & Tobago	Belize, Panama, Cuba, Bahamas, Jamaica, Cayman Islands, Puerto Rico, French Guiana, Suriname, Argentina	Venezuela, Columbia, Ecuador, Paraguay

**Humanitarian Aid.** Humanitarian aid constitutes 16% of the total U.S. bilateral aid funds and consists of four individual aid programs, Peace Corp (PC), Developmental Aid (DEV), Migration and Refugee Aid (MRA) and the Millennium Challenge Corporation (MCC). DEV was the highest funded program constituting 57% of total humanitarian aid (Table 8).

**Table 8** Total humanitarian aid received by Latin American countries per each program and the percent of the total humanitarian budget (2000-2010).

<b>Humanitarian</b>	<b>Total</b>	<b>% Total</b>
Peace Corps (PC)	35,281,730	12%
Developmental Aid (DEV)	1,893,021,250	57%
Migration and Refugee Aid (MRA)	110,997,553	3%
Millennium Challenge Corp (MCC)	928,151,316	28%

The difference in total support between security and humanitarian programs bilateral aid indicates security issues are a higher concern for bilateral aid programs than the humanitarian goals under which bilateral aid programs were designed. Humanitarian aid is distributed to more countries in Latin America which may cause each country receiving humanitarian assistance to be given what may be less than adequate funding.

Grouping analysis performed on classified humanitarian aid (Table 9) reveals groups of high aid recipients, El Salvador, Nicaragua, Honduras and Peru, from both stable and fragile political stability classifications. Seven politically fragile countries received moderate aid along with only two stable countries and the vast majority of low aid countries were highly politically stable and stable countries, however one fragile country, Guyana, was also grouped into the low aid classification. No highly politically stable or stable countries were granted high or moderate humanitarian aid. Because U.S. bilateral aid focuses on humanitarian goals, the assumption

could be made that the countries that receive the largest amount of humanitarian aid have demonstrated humanitarian or developmental need.

**Table 9** Political stability and humanitarian bilateral assistance country groups.

Political Stability Bilateral Aid	Highly Stable	Stable	Fragile
High Aid		El Salvador, Nicaragua	Honduras, Peru
Moderate Aid		Dominican Republic, Brazil	Mexico, Guatemala, Columbia, Ecuador, Bolivia, Paraguay, Haiti
No/Low Aid	Costa Rica, Chile, Uruguay, Antigua, Anguilla, British Virgin Islands, Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, St. Bart's, St. Vincent, St. Lucia, St. Kitts, St. Martin, Turks & Caicos, US Virgin Islands, Aruba, Barbados, Trinidad & Tobago	Belize, Panama, Suriname, French Guiana, Argentina, Bahamas, Puerto Rico, Cayman Islands, Cuba	Guyana

**Food Aid.** Food aid is a combination of four food programs; Other Food Aid (OFA), Food for Education (F4ED), Title 1 (T1) and Title 2 (T2). Constituting 10% of the 2000-2010 bilateral aid budget and totaling at just over 2 billion dollars (Table 10), food aid is more funded than only the health category, (10%).

Bilateral food assistance exhibits high aid recipient groups consisting of South American and Central American countries, with the exception of Haiti, which is within the Caribbean sub-region, however only politically fragile nations received high food aid (Table 11). While the two

largest groups in the classified food aid category are highly politically stable and stable nations receiving either no or low aid, several fragile countries received no or low amounts of food aid. Food aid was concentrated in six of the 47 countries that constitute Latin America and all six of them are politically fragile with the exception of Nicaragua, which is considered stable.

**Table 10** Total food aid received by Latin American countries per each program and the percent of the total food budget (2000-2010).

<b>Food</b>	<b>Total</b>	<b>% Total</b>
Other Food Aid (OFA)	252,688,909	12%
Title I (TI)	202,773,956	10%
Food for Education (F4ED)	141,724,943	7%
Title II (T2)	1,427,965,062	71%

**Table 11** Political stability and bilateral food aid grouping analysis results.

Political Stability Bilateral Aid	Highly Stable	Stable	Fragile
High Aid			Guatemala, Peru, Bolivia, Haiti
Moderate Aid		Nicaragua	Honduras
No/Low Aid	Costa Rica, Chile, Uruguay, Antigua, Anguilla, British Virgin Islands, Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, St. Bart's, St. Vincent, St. Lucia, St. Kitts, St. Martin, Turks & Caicos, US Virgin Islands, Aruba, Barbados, Trinidad & Tobago	Belize, Panama, Brazil, Suriname, French Guiana, Argentina, Bahamas, Jamaica, Puerto Rico, El Salvador, Dominican Republic, Cayman Islands, Cuba	Mexico, Columbia, Ecuador, Paraguay, Guyana, Venezuela

**Other Aid.** The last bilateral aid classification is other aid, with 11% of the total bilateral aid budget (2000-2010), groups four programs that have rather ambiguous guidelines for distribution. The four programs included in this classification are Other State Aid (OSA), Other USAID (OAID), Other USDA (OUSD) and Other Active Grants (OAG). Of the four programs, OAID received the highest funding at 1.3 billion dollars, constituting 62% of other aid and the least funded program was OUSD, at 7.7 million dollars, constituting less than 1% of other bilateral aid programs (Table 12).



Grouping analysis for other aid classification (Table 13) revealed one highly stable nation, Chile, receiving moderate aid while the remaining highly stable nations received no or low aid. Stable countries were spread throughout high, moderate and low aid, with the largest concentration of stable countries in the moderate aid group. Politically fragile countries were most evenly distributed between the aid groups with the low aid group having the least amount of fragile countries. While other bilateral aid constitutes only 11% of the total bilateral aid for the 2000-2010 timespan, it serves the largest portion of Latin American countries.

**Table 12** Total other aid received by Latin American countries per each program and the percent of the total humanitarian budget (2000-2010).

Other	Total	% Total
Other Active Grants (OAG)	725,822,007	33%
Other USAID (OAID)	1,384,524,552	62%
Other USDA (OUSD)	7,743,408	1%
Other State Aid (OSA)	101,470,481	4%

As many countries within the Latin American region receive substantial bilateral aid, the countries receiving the highest aid are the countries that are most politically fragile, which supports the United States' attempt to stabilize foreign governments. While various trends were identified for aggregated bilateral aid, the trends indicated by individual bilateral aid programs has a mixture of results. Nine programs indicated a decreasing trend, nine programs indicating an increasing trend and one program indicating a steady trend.

**Table 13** Political stability and other bilateral aid grouping analysis results.

Political Stability Bilateral Aid	Highly Stable	Stable	Fragile
High Aid		El Salvador	Mexico, Columbia, Peru, Haiti
Moderate Aid	Chile	Jamaica, Cayman Islands, Dominican Republic, Nicaragua, Honduras, Panama, Brazil, Argentina	Guatemala, Venezuela, Ecuador, Bolivia
No/Low Aid	Uruguay, Antigua, Anguilla, British Virgin Islands, Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, St. Bart's St. Vincent, St. Lucia, St. Martin, St. Kitts, Turks & Caicos, US Virgin Islands, Aruba, Barbados, Trinidad & Tobago	Bahamas, Puerto Rico, French Guiana, Cuba, Belize, Suriname	Guyana, Paraguay, Ecuador

Highly significant relationships found between political stability and aggregated bilateral aid indicated that bilateral aid had little influence on the political stability of Latin American countries. While one of the many goals and purposes of bilateral aid is to strengthen politically

fragile countries, it is apparent that increasing the amount of bilateral aid to already fragile countries has little effect on increasing political stability within the Latin American region.

Because it is no longer possible for the U.S. to remain focused in every region of the world, it is necessary to selectively choose recipients of bilateral aid which the U.S. is able to support national and economic interests of both regions. Though historical and cultural ties bind Latin America and the United States, the close proximity of the two regions is of the greatest concern. Since U.S. bilateral aid has a rapidly decreasing influence throughout the Latin American region with total bilateral aid as well as most individual programs. It is again necessary to adjust bilateral aid policy and distribution to achieve and preserve a stable relationship between two regions by increasing the political stability of nations that receive bilateral aid.

## **CHAPTER 4**

### **CONCLUSION**

The objectives within the scope of this study included determining the relationship between U.S. bilateral aid and political stability, for aggregated and disaggregated bilateral aid, and evaluating how the spatial distribution of political stability compares to the distribution of bilateral aid. These two-fold objectives were addressed through regression and grouping analyses. The specific relationships found between bilateral aid and political stability indicated mostly highly significant relationships for the 2000-2010 time period and these relationships were getting weaker for some aid types while gaining strength over time for others (Appendix 5).

The spatial distribution of political stability and bilateral aid indicated that fragile nations within Latin America receive the largest amounts of bilateral aid while politically stable nations received remarkably less aid, if any at all. While this spatial pattern illustrates the overall view of bilateral aid and political stability, it is necessary to note that counties receiving high amounts of bilateral aid repeat from program to program as well as year to year. The countries that consistently receive large amounts of bilateral aid typically have lower political stability scores, which supports goals of bilateral aid. Countries that consistently receive bilateral aid should have higher political stability scores, however this is not always true. Take Columbia for example, Columbia consistently receives high amounts of bilateral aid, however the political stability for the country is chronically low (Figure 7).

Identifying the relationships between U.S. bilateral aid and the political stability of Latin American countries illustrates a part of complex connections between two world regions, namely the U.S. and Latin America. The narrow focus of this study has provided a concentrated view of the relationships that have been discovered between bilateral aid and the political stability of Latin America. To further examine this dynamic relationship follow-up studies require a country-by-country analysis in which specific political circumstances, as well as the use of bilateral aid

are examined. Additional research should include not only the political stability of each nation, but the political histories and current circumstances surrounding governmental actions.

## **Bibliography**

Adams, F. (2015) *Bilateral Aid to Latin America*. Amherst: Cambria Press.

Ake, C. (1975) "A Definition of Political Stability." *Comparative Politics* 7 (2): 271-283.

ArcGIS Online Help. (2013) Tutorial Introduction to GeoEvents.

<http://www.arcgis.com/home/item.html?id=b6a35042effd44ceab3976941d36efcf>.

Accessed October 9, 2014

Barshefsky, C., and J. T. Hill. 2008. "U.S. Latin American Relations: A New Direction for a New Reality." Task Force Report No. 60, Washington, D.C.: Council on Foreign Relations.

Cingranelli, D.L., and T.E. Pasquarello. 1985. "Human Rights Practices and the Distribution of Foreign Aid to Latin American Countries." *American Journal of Political Science*, 29:3 539-563.

Guess, G. M. 2011. "The Politics of United States Foreign Aid." New York: Routledge Publishing.

Heslop, L. 2014. "Political Systems." *Britannica*. March 6, 2013. Accessed November 6, 2014.

Lemco, J. 1991. "Political Stability in Federal Governments." New York: ABC-CLIO Publishers.

McCormick, J.M., and N. Mitchell. 1988. "Is U.S. Aid Really Linked to Human Rights in Latin America?" *Journal of Political Science*, 32:1 231-239.

Petras, J. 2011. "Latin America: Growth, Stability and Inequalities: Lessons for the US and EU." *Global Research Articles: Center for Research on Globalization*.

Tarnoff, C., and L. Knowles. 2005. *Foreign Aid: An Introductory Overview of U.S. Programs and Policy*. Congressional Research, Washington, D.C.: Congressional Research Service.

Tulchin, J. 2001. *Latin America in the New International System*. Boulder: Lynne Rienner Publishers. [www.wilsoncenter.org](http://www.wilsoncenter.org). Accessed March 13, 2013

World Bank. (2014) *U.S. Overseas Loans and Grants*. Washington, D.C., [www.greenbook.gov](http://www.greenbook.gov). Accessed: February 17. 2013

## Appendix 1 Letter from the Intuition Research Board



Office of Research Integrity  
Institutional Review Board

March 27, 2015

Aaron Nicole Nelson  
519 Oak St.  
Wurtland, KY 41144

Dear Aaron:

This letter is in response to the submitted thesis abstract to analyze and identify Latin American countries which have violated or could be at risk for violating the physical integrity human rights standards of their citizens and to evaluate the significance of possible relationships between physical integrity rights and US bilateral aid. After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this study does not involve human subjects as defined in the above referenced instruction it is not considered human subject research. If there are any changes to the abstract you provided then you would need to resubmit that information to the Office of Research Integrity for review and a determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce W. Day, PhD, CIP  
Director

**WE ARE... MARSHALL™**

401 11th Street, Suite 1500 • Huntington, West Virginia 25701 • Tel 304/596-7320 for LBD 41 or 304/696-4303 for LBD 47 • [www.marshall.edu/jri](http://www.marshall.edu/jri)  
A State University of West Virginia • An Equal Opportunity Employer



## Appendix 2 Data Tables

**Table 13** Total bilateral aid received per Latin American country in millions of dollars.

Bilateral Aid Per Country (in millions)											
Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Anguilla	0	0	0	0	0	0	0	0	0	0	0
Antigua & Barbuda	0	0	0	0	0	0.01	0.02	0	0	0.03	0.12
Argentina	2.44	2.08	0.35	0.66	1.28	0.36	2.05	66.5	2.93	2.77	5.76
Aruba	0	0	72.3	0	0	0	0	0	0	0	0
Bahamas	1	1.2	1.71	1.41	1.57	1.86	1	0.54	6.69	3.13	7.58
Barbados	8.62	1.21	0.22	0.43	0.79	1.48	2.89	5.27	0.17	0.17	0.51
Belize	2.37	1.85	1.89	1.75	1.98	8.99	1.91	2.18	1.95	2.62	5.41
Bolivia	230	196	205	237	60.5	156	214	143	126	99.2	63.7
Brazil	20.1	20	23.9	31.2	15.4	46.1	37.3	19.7	35	43.4	33.1
British Virgin Islands	0	0	0	0	0	0	0	0	0	0	0
Cayman Islands	0	0	0	0	-0	0	0	0	0	0	0
Chile	2.12	1.08	6.78	0.79	1.62	2.06	0.98	2.33	13.3	5.61	26
Colombia	1037	69.7	490	604	6.9	561	1112	161	667	281	674
Costa Rica	3.65	2.08	2.06	2.72	3.65	4.41	4.77	6.43	6.28	7.47	10.9
Cuba	4.34	3.59	8.07	7.5	8.19	15.3	17.5	12.1	34	20.6	17.4
Dominica	0	0	0.11	0	0	0.03	0.03	0.06	0	5.92	-0
Dominican Republic	18.1	43.8	18.6	23.5	28.8	32.9	39.8	49.8	52	63.2	88.8
Ecuador	62.4	44.2	64.5	73.9	34	65.4	51.4	36	30.3	21.3	42.8
El Salvador	32.1	128	63.9	29.7	16.5	47	49.2	501	47.8	49.3	106
French Guiana	0	0	0.31	0	0	0	0	0	0	0	0
Grenada	0	0	1.98	0.01	1.06	1.45	0.01	-0	-0	0.02	0
Guadeloupe	0	0	0.58	0	0	0	0	0	0	14.2	0
Guatemala	67.2	77.1	71.8	65.3	45.5	63.2	104	80.7	108	113	165
Guyana	9.02	16.5	5.64	10.1	20	23	21.2	30.7	13.1	23.4	19.2
Haiti	82	82.2	61.1	67.6	126	223	210	206	306	371	1416
Honduras	36.8	51	32.6	41	29.3	284	84.2	56.8	63.5	24.7	102
Jamaica	18	27.6	14.2	10.2	20.1	62.2	33.9	31.7	20.8	25.9	35.9
Martinique	0	0	0	0	0	0	0	0	0	0.04	0
Mexico	26.1	32	57.7	38.7	14.2	91.4	168	71.7	82.7	431	624
Montserrat	1.23	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	0
Nicaragua	31.5	65.8	33.5	41.6	32.5	86.4	246	52.2	60.4	34.7	-14
Panama	12.9	9.91	16.8	11.2	9.14	17.6	26.6	23.9	11.6	28.2	34.2
Paraguay	8.19	14.6	13.4	9.14	14	12.9	49.6	16.5	14.6	56.2	36
Peru	193	191	304	72.9	63.3	170	325	107	150	146	194
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0
St. Kitts & Nevis	0	0	0	0	0	0.56	0	0	0	0	0
St. Barthelemy	0	0	0	0	0	0	-0	0	0	0	0
St. Lucia	0	0	0.02	0	0	-0	0	0.02	0.02	0	0
St. Martin	0	0	0	0	0	0	0	0	0	0	0
St. Vincent	0	0	0	0	0	0.03	0.05	0	0	0.08	0.2
Suriname	0.04	0.81	0.86	1.14	1.21	1.15	8.06	1.4	1.35	1.94	1.48
Trinidad & Tobago	0.4	1	0	0.03	2.33	0.21	0.04	1.41	0.75	1.02	0.35
Turks & Caicos Islands	0	0	0	0	0	0	0	0	0	0	0
Uruguay	1.76	0.12	0	0.04	0.47	0.61	0	0.57	0.66	0.97	0.56
US Virgin Islands	0	0	0	0	0	0	0	0	0	0	0
Venezuela	9.85	4.34	7.82	10.1	5.74	8.15	9.45	7.49	18.5	6.2	10.8

**Table 14** Latin American total bilateral aid per program in millions of dollars.

Total Bilateral Aid per Program <i>in Millions of Dollars</i>												
Program	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Program Total
Tilte II	125.56	120.48	127.53	102.01	115.19	102.01	110.68	102.17	139.74	111.59	221.40	1,378.36
Title I	23.77	32.49	21.30	15.15	11.41	22.57	63.45	1.12	0.00	14.49	8.20	213.93
Peace Corps	20.50	32.46	36.70	35.92	31.35	31.46	34.84	37.17	35.22	47.55	42.11	385.28
OthrUSDA	0.00	0.00	0.00	0.85	0.57	0.75	0.50	0.41	0.54	0.88	3.24	7.74
OthrUSAID	9.73	72.74	156.10	49.23	70.96	115.89	57.16	108.73	98.92	100.18	544.89	1,384.52
OthrStateAid	3.80	3.88	5.66	4.74	0.06	0.41	13.93	19.84	16.08	15.64	17.42	101.47
OthrFoodAid	26.88	54.85	0.23	40.70	30.14	18.34	28.22	19.16	31.75	0.00	2.43	252.69
OthrActiveGrants	15.80	31.76	13.16	45.93	45.01	46.85	56.85	118.06	109.08	117.77	125.56	725.82
NonProlifAntiTerror	3.00	1.82	5.16	0.05	4.69	9.92	11.32	9.74	4.87	4.32	13.03	67.92
Narcotics Control	1,180.93	168.85	905.75	802.26	7.14	867.91	1,693.49	308.45	595.13	499.52	1,097.70	8,127.15
Millennium Challenge	0.00	0.00	0.00	0.00	0.00	216.71	215.83	472.55	42.17	38.10	-57.20	928.15
Migration & Refugee Assistance	9.50	10.46	6.77	13.89	0.13	2.81	8.73	6.87	17.00	16.56	18.26	111.00
Global HIV & AIDS	0.00	0.00	0.00	0.00	6.40	56.80	54.37	70.51	70.51	2.32	1.23	262.16
Global Health & Child Survival	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196.03	173.67	258.79	628.49
Food for Education	0.00	41.51	4.39	11.19	6.11	40.34	14.08	10.44	0.02	6.87	6.78	141.72
Economic Security Funds	266.50	233.96	168.19	83.29	105.04	135.92	111.01	105.84	375.78	464.34	566.05	2,615.93
Developmental Assistance	169.35	169.35	169.35	169.35	169.35	169.35	169.35	169.35	169.35	169.35	169.35	1,862.82
Child Heald & Survival	66.53	80.23	112.55	135.81	126.27	112.21	125.33	109.98	0.76	2.66	-0.56	871.76
DoD Security Assistance	0.00	0.00	0.00	0.00	0.00	0.02	4.15	0.12	0.37	1.49	423.82	429.97

**Table 15** Political stability per Latin American country.

Latin American Political Stability Values											
Country_Territory	PSV00	PSV01	PSV02	PSV03	PSV04	PSV05	PSV06	PSV07	PSV08	PSV09	PSV10
Anguilla	79.33	-99	64.90	53.85	51.44	50.48	66.35	64.90	59.33	48.34	57.55
Antigua and Barbuda	67.31	-99	69.23	75.96	89.42	74.04	73.56	76.92	76.08	71.09	80.19
Argentina	48.08	-99	20.67	33.65	26.44	46.15	46.63	47.60	41.63	36.97	42.92
Aruba	100	-99	93.27	87.50	80.77	78.85	75.00	73.56	77.99	80.57	79.72
Bahamas	87.98	-99	79.81	72.60	78.37	79.33	74.52	72.12	72.73	77.73	83.96
Barbados	82.69	-99	81.73	79.81	89.90	87.98	78.85	86.54	88.04	87.20	87.74
Belize	50.00	-99	57.69	62.02	61.54	50.96	47.60	49.04	51.20	45.50	49.53
Bolivia	34.62	-99	30.29	22.12	23.56	18.27	22.60	19.23	22.49	27.49	30.19
Brazil	53.37	-99	55.29	41.35	36.06	38.46	36.06	31.73	34.45	50.71	47.17
British Virgin Islands	79.33	-99	64.90	53.85	51.44	50.48	66.35	64.90	59.33	48.34	57.55
Cayman Islands	67.31	-99	69.23	74.04	93.75	91.35	90.87	91.83	91.87	88.15	90.09
Chile	63.46	-99	82.21	70.19	71.15	73.56	64.90	58.65	58.85	67.30	69.81
Colombia	8.17	-99	2.88	0.96	2.40	2.88	4.81	6.73	5.74	5.21	8.49
Costa Rica	73.56	-99	80.77	64.42	68.75	67.31	68.27	68.27	57.42	65.88	70.28
Cuba	51.92	-99	48.56	54.33	58.65	58.65	60.10	59.62	62.20	56.40	56.60
Dominica	62.02	-99	62.98	67.31	81.73	75.48	79.81	77.40	80.38	70.14	83.49
Dominican Republic	44.23	-99	45.19	30.29	33.65	38.94	42.31	39.90	43.54	44.08	43.40
Ecuador	25.96	-99	22.12	20.19	21.15	23.08	21.63	20.19	20.57	22.75	25.94
El Salvador	56.25	-99	51.92	37.02	43.27	45.19	41.35	43.27	46.41	43.60	49.06
French Guiana	42.31	-99	51.44	55.29	53.85	55.29	48.56	45.19	47.85	53.55	52.36
Grenada	78.37	-99	74.52	77.40	77.40	59.13	59.62	58.17	58.37	59.24	64.62
Guadeloupe	71.63	-99	77.88	49.52	57.69	57.69	64.42	64.42	63.64	63.03	69.34
Guatemala	20.67	-99	19.23	23.56	20.67	21.63	24.52	21.15	21.05	18.48	19.81
Guyana	26.92	-99	25.00	29.33	27.40	32.69	23.56	26.92	24.88	25.12	31.13
Haiti	24.52	-99	13.46	10.58	3.85	4.81	10.58	10.10	10.05	16.59	16.51
Honduras	37.02	-99	35.10	31.73	30.77	25.96	25.96	29.33	27.75	33.18	26.89
Jamaica	49.52	-99	36.54	32.21	33.17	36.54	34.62	37.02	35.41	32.70	32.08
Martinique	71.63	-99	77.88	49.52	57.69	57.69	64.42	64.42	63.64	63.03	69.34
Mexico	36.54	-99	42.31	38.94	37.50	33.65	26.44	23.08	19.62	22.27	22.64
Montserrat	79.33	-99	64.90	53.85	51.44	50.48	66.35	64.90	59.33	48.34	57.55
Netherlands Antilles	100	-99	93.27	87.50	80.77	78.85	75.00	73.56	77.99	80.57	79.72
Nicaragua	39.42	-99	41.83	33.17	32.69	36.06	37.50	39.42	36.84	33.65	27.36
Panama	52.88	-99	52.88	44.23	49.04	39.90	43.75	41.83	40.67	46.45	42.45
Paraguay	15.87	-99	13.94	24.52	27.88	26.92	24.04	24.04	23.44	19.91	22.17
Peru	15.38	-99	18.27	14.90	18.75	18.75	22.12	22.12	17.70	13.74	16.98
Puerto Rico	53.85	-99	51.44	55.29	65.38	62.98	59.13	61.06	55.50	51.18	58.02
Saint Kitts and Nevis	-99	-99	-99	94.71	97.60	95.19	94.23	76.92	79.90	88.63	86.79
Saint Barthelemy	71.63	-99	77.88	49.52	57.69	57.69	64.42	64.42	63.64	63.03	69.34
Saint Lucia	87.02	-99	53.85	94.71	93.27	82.21	76.44	69.23	69.38	71.56	75.00
Saint Martin	71.63	-99	77.88	49.52	57.69	57.69	64.42	64.42	63.64	63.03	69.34
Saint Vincent and the Grenadines	87.02	-99	53.85	71.63	85.58	89.42	87.98	75.00	75.12	73.46	75.00
Suriname	50.48	-99	60.10	60.58	56.25	54.81	45.67	42.31	48.80	49.29	50.47
Trinidad and Tobago	46.63	-99	39.90	35.58	42.79	41.83	38.94	38.46	40.19	40.28	44.81
Turks and Caicos Islands	79.33	-99	64.90	53.85	51.44	50.48	66.35	64.90	59.33	48.34	57.55
Uruguay	76.44	-99	70.67	69.23	64.90	71.15	75.48	77.88	77.03	72.99	75.47
US Virgin Islands	79.81	-99	50.00	45.19	38.46	42.79	60.58	57.69	66.51	61.14	60.38
Venezuela	21.63	-99	12.50	12.50	9.62	13.94	13.46	12.50	11.48	12.32	11.79

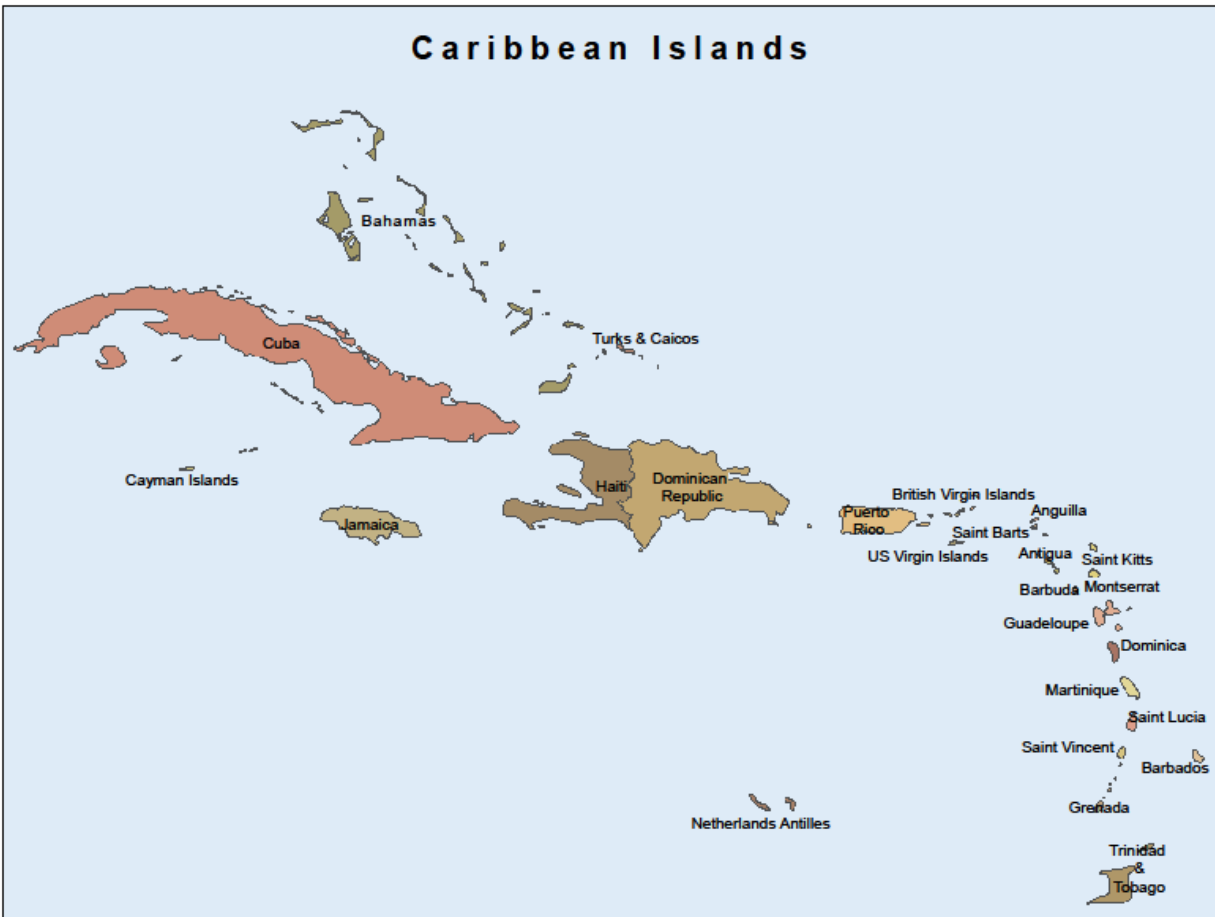
### Appendix 3 Reference Maps



**Figure 4** Countries in the Mexico and Central American sub-region of Latin America.



**Figure 5** Countries in the South American sub-region of Latin America.



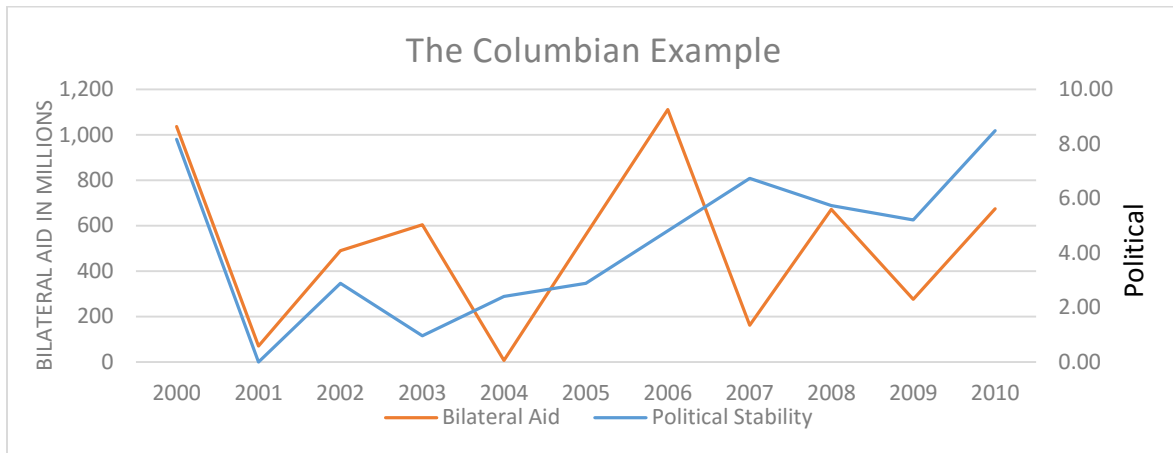
**Figure 6** Countries in the Caribbean sub-region of Latin America.

## **Appendix 4**

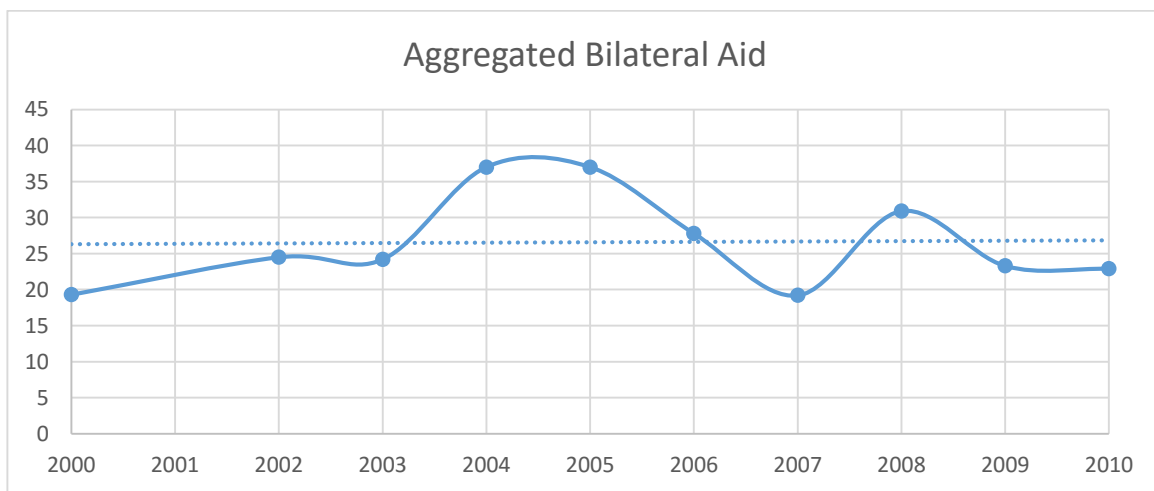
### **List of Abbreviations**

NARC	Narcotics Control	GHIV	Global HIV and AIDS
NP	Non-Proliferation/Anti-Terrorism	OFA	Other Food Aid
DOD	Department of Defense	T1	Title 1
ESS	Emergency Security Assistance	T2	Title 2
PC	Peace Corps	F4ED	Food for Education
DEV	Developmental Assistance	OAG	Other Active Grants
MRA	Migration and Refugee Assistance	OAID	Other USAID
MCC	Millennium Challenge Corporation	OUSD	Other USDA
CHS	Child Health and Safety	OSA	Other State Assistance
GH	Global Health		

## Appendix 5

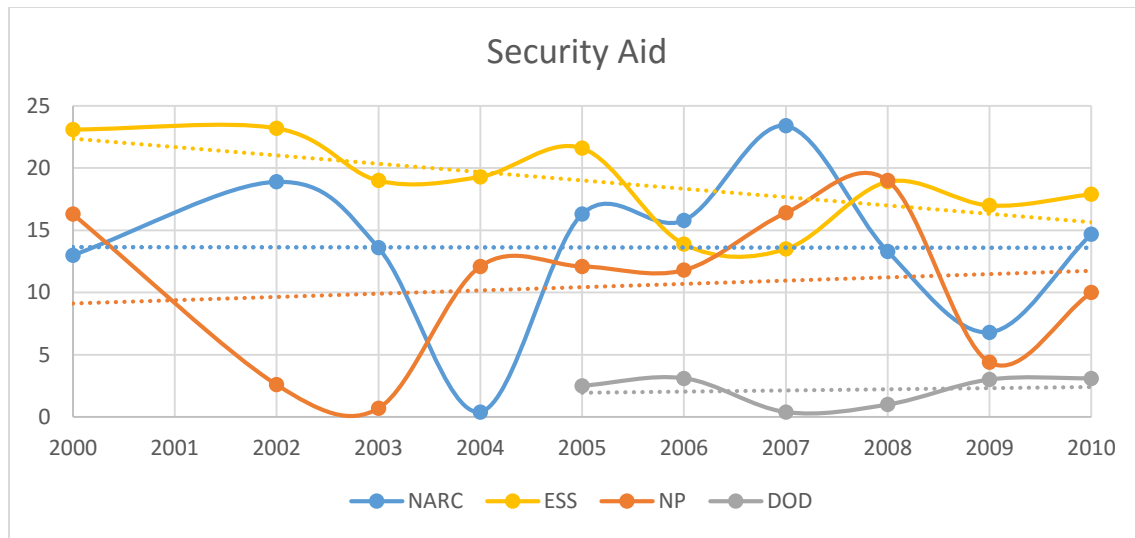


**Figure 7** The Columbian example illustrates the interactions between increases in bilateral aid and political stability over the 2000-2010 decade.

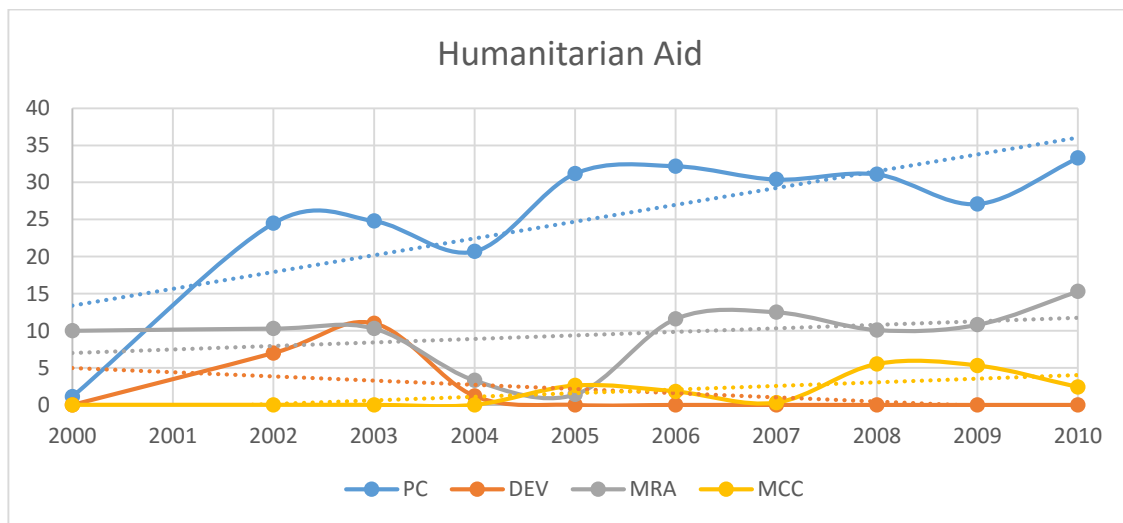


**Figure 8** Trend of aggregated bilateral aid, 2000-2010. Coefficients of determination were charted (solid line) to display the overall trend (dashed line) of U.S. bilateral aid and political stability in Latin America.

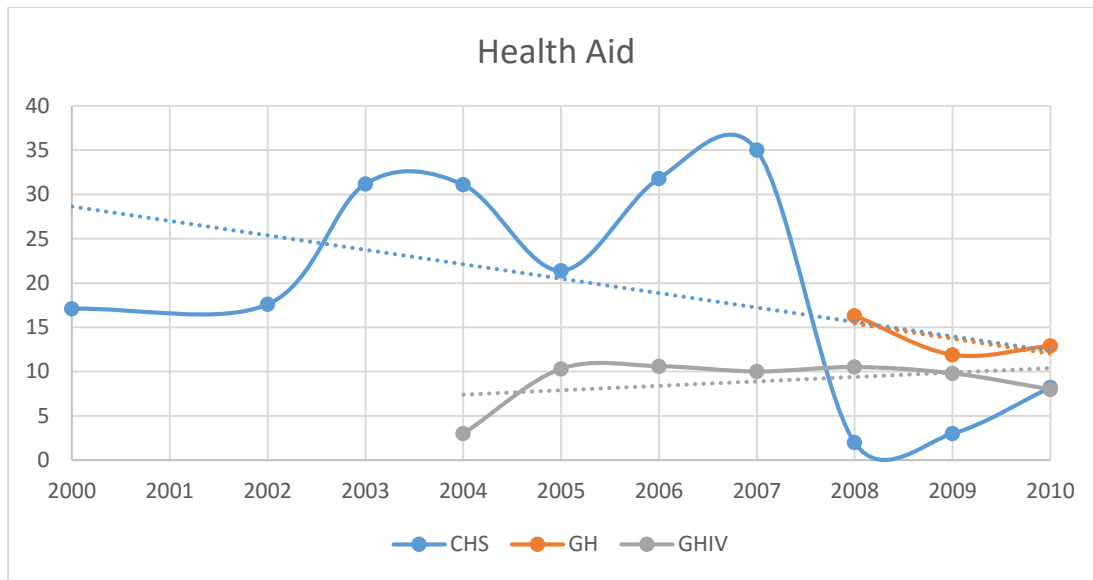




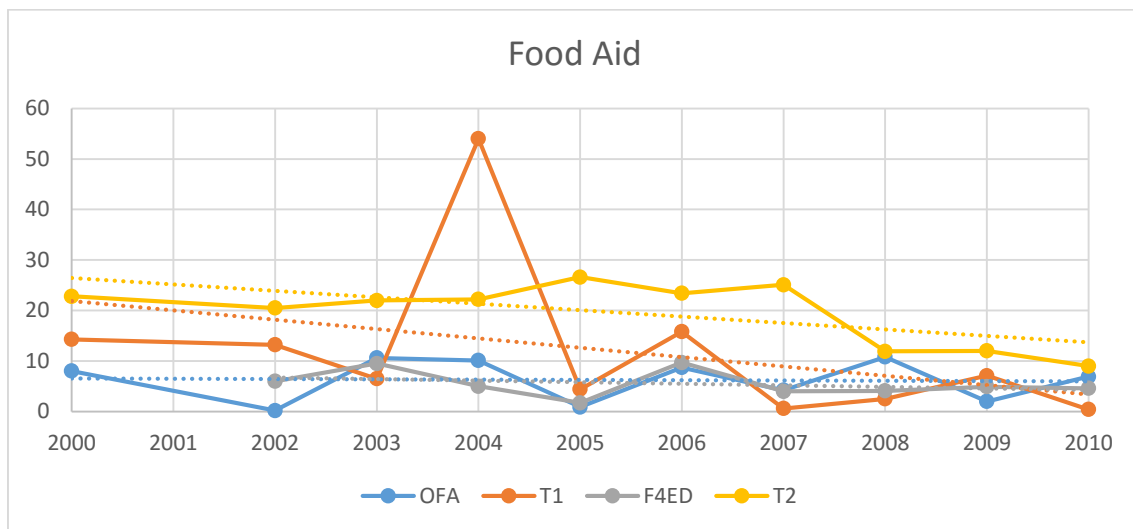
**Figure 9** Trend of security aid, 2000-2010. Coefficients of determination were charted (solid line) to display the overall trend (dashed line) of security aid and political stability in Latin America.



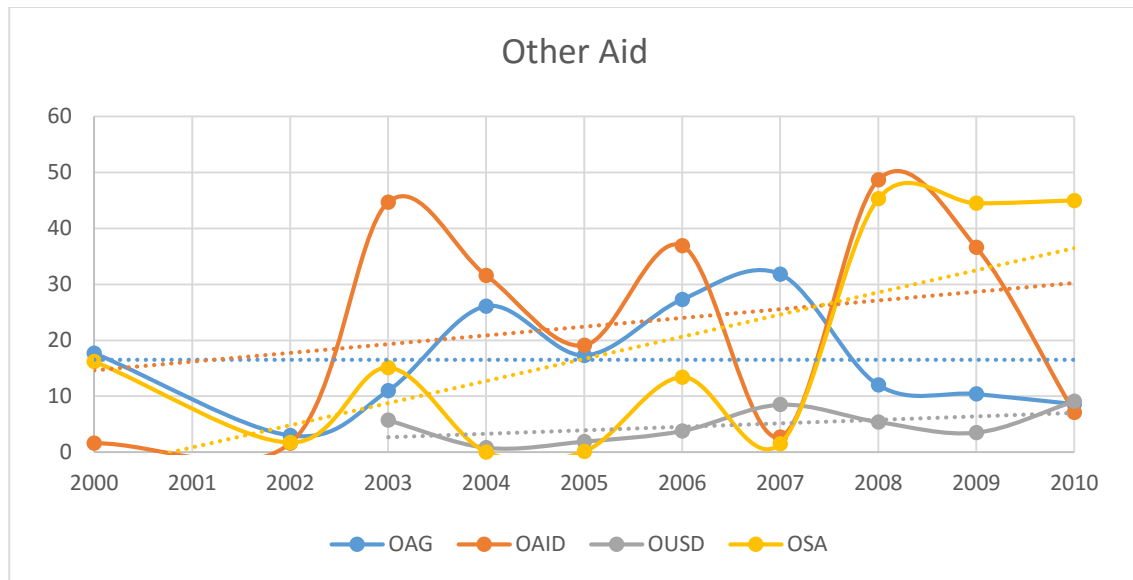
**Figure 10** Trend of humanitarian aid, 2000-2010. Coefficients of determination were charted (solid line) to display the overall trend (dashed line) of humanitarian aid and political stability in Latin America.



**Figure 11** Trend of health aid, 2000-2010. Coefficients of determination were charted (solid line) to display the overall trend (dashed line) of health aid and political stability in Latin America.



**Figure 12** Trend of food aid, 2000-2010. Coefficients of determination were charted (solid line) to display the overall trend (dashed line) of food aid and political stability in Latin America.



**Figure 13** Trend of other aid, 2000-2010. Coefficients of determination were charted (solid line) to display the overall trend (dashed line) of other aid and political stability in Latin America.