



# Political Corruption: An Explanation for Latin American Migration

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Political Corruption: An Explanation for Latin American Migration

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A Thesis in the Field of International Relations  
for the Degree of Master of Liberal Arts in Extension Studies

Harvard University

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## Abstract

This study examines the intricate relationship between political corruption and migration. While existing research focuses mostly on the economic determinants of emigration, this explores the often-understudied political aspects acting as push factors, particularly political corruption as a driver of emigration from Latin America. Using the gravity model with cross-sectional data on yearly migration and corruption patterns of 16 Latin American countries from 2012 to 2021, this analysis reveals a strong relationship between political corruption and migration patterns. The study distinguishes between non-immigrants (tourists, business travelers, and students), who sometimes overstay visas to become informal migrants, and unauthorized migrants apprehended by border patrol entering the United States. For both groups, an increase in corruption in the origin country is associated with increased emigration rates, though also being shaped by other factors like the minimum wage and GDP per capita. This study also introduces the concept of the “shock element” to the decision-making process to emigrate. Corruption scandals are a mechanism that incentivizes individuals to consider emigration. Individual-level survey data on the motives for emigration from Guatemala shows that corruption is a primary incentive, particularly corruption scandals within a given year explain migration patterns from the country.

Keywords: migration, corruption, corruption scandals

## Frontispiece



“Corruption Generates Migration”

Source: Prensa Comunitaria. Guatemala, June 5, 2021.

## Author's Biographical Sketch

Angelica Remache Lopez, born in Ecuador, embarked on her journey to understand the nuances of migration from an early age. Her article, “Migration: The Sole Solution for Despair,” published in the *Harvard Review of Latin America*, describes Angelica’s personal experience as she and her family emigrated to the United States. Exploring the complexity behind migration incentives, therefore, has been at the core of her academic interest.

In the United States, her trajectory has been shaped by interacting with the migrant community. Their stories, much like hers, echoed the harsh economic and political conditions in their home countries. This realization ignited a quest within her to understand the underlying forces driving such life-changing decisions.

Her academic journey started at the University of Wisconsin, where Angelica double majored in Economics and Political Science, graduating with the highest honors. She continued her education by pursuing a master’s degree at Harvard University, where, as a member of the Harvard Graduate Council, she co-founded the student-led Legal Aid program—aiming to provide underrepresented students with legal support, particularly on immigration matters.

Angelica hopes to continue her research on the politics of migration and to further support her community.

## Dedication

To my beloved parents, whose resilience and sacrifices provided me with the opportunity to begin my journey in higher education.

To the migrant community, whose stories resonate deeply within me, reminding me of our struggles and aspirations.

To my professors and mentors, who guided me along this journey, shaping my intellect and passion for understanding migration dynamics.

To the countless individuals I have met along the way; this thesis is dedicated to each of you. Your stories, struggles, and resilience have encouraged my academic pursuits.

Fuerza para mi comunidad migrante.

## Acknowledgments

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I am grateful to all my professors at Harvard, whose wisdom, encouragement, and scholarly insights have enriched my academic journey.

To the migrant community, I offer my sincere gratitude, for the impactful conversations and shared experiences that have deeply influenced my research.

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## Table of Contents

Frontispiece.....	iv
Author’s Biographical Sketch.....	v
Dedication.....	vi
Acknowledgments.....	vii
Table of Contents.....	viii
List of Tables.....	xii
List of Figures.....	xiii
Chapter I. Introduction.....	1
Chapter II. Literature Review.....	4
Corruption as a Direct Driver of Migration.....	5
Corruption as an Indirect Driver of Migration.....	6
Chapter III. Methodology.....	10
Basic Approach.....	10
Migration Categories.....	13
Non-immigrant Migration.....	13
Unauthorized Migration.....	13
Method.....	14
The Gravity Model.....	14
Data Sources.....	16
Chapter IV. Results and Analysis.....	18
Non-immigrant Flows from Latin America to the United States.....	18

Corruption Levels and Non-Immigrant Migration .....	19
Corruption in Latin American Countries .....	19
Corruption in the United States.....	20
Economic Factors and Non-Immigrant Migration.....	20
GDP per capita in Latin American Countries .....	20
GDP per capita in the United States .....	20
Geographical Distance and Non-Immigrant Migration .....	21
Unauthorized Migration from Latin America to the United States .....	21
Corruption in Latin American Countries .....	22
Corruption in the United States.....	22
Economic Factors and Unauthorized Migration .....	22
Geographical Distance .....	23
Robustness Analysis .....	23
Chapter V. Corruption and Migration Overview in Latin America.....	25
Corruption Scandals and Migration Trends among Latin American Countries ....	26
Non-Immigrant Flow and Corruption Scandals.....	26
Lava Jato Scandal: Uncovering a Web of Corruption .....	27
Regional Ramifications of Lava Jato .....	27
Brazil.....	29
Colombia.....	30
Panama.....	30
Peru .....	31
Unauthorized Migration and Corruption Scandals .....	32

From Lava Jato Scandal to Odebrecht Scandal .....	34
The Landmark Conviction .....	34
Panama Papers .....	34
El Salvador .....	36
Honduras .....	38
Guatemala .....	39
Chapter VI. The Case of Guatemala .....	41
Roots of Emigration .....	42
Considering Emigration .....	42
Potential Destination Country .....	42
Reasons for Considering Emigration .....	42
Insecurity .....	44
Hunger .....	45
Discrimination .....	46
Natural Disasters .....	46
Corruption as a Driver for Emigration in Guatemala .....	47
Corruption Perception in Guatemala .....	47
Gender Perceptions on Political Corruption .....	49
Understanding the Profile of Corruption-Driven Emigrants .....	50
Channels Used to Learn about Political News .....	54
Corruption Scandals as a Shock Element on Emigration Trends .....	57
Non-Immigrant Flow and Corruption Scandals .....	58
Unauthorized Migration Flow and Corruption Scandals .....	59

Chapter VII. Conclusion .....	61
Appendix 1.....	64
References.....	67

## List of Tables

Table 1. Total Number of Guatemalan Emigrants (2000 - 2020).....	41
Table 2. Amount of Corrupt Politicians in Guatemala. ....	49
Table 3. Major Corruption Scandals in Guatemala. ....	55
Table 4. Latin American countries involved with the Lava Jato scandal. ....	64

## List of Figures

Figure 1. Results of Regression: Non-Immigrant Flows in the United States .....	19
Figure 3. Non-Immigrant Flow to the United States from 16 Latin American countries. .	27
Figure 4. Non-Immigrant Flow in the United States, (2013) (2014) (2015). .....	28
Figure 5. Unauthorized Migration Flow in the United States from 16 Latin American countries. ....	32
Figure 6. Unauthorized Migration Flow in the United States, (2013) (2015) (2014). ....	36
Figure 7. Reasons for Considering Emigration from Guatemala (2019). ....	44
Figure 8. Perception of Corruption among Politicians in Guatemala. ....	48
Figure 9. Geographical Distribution of Corruption-Driven Emigrants .....	51
Figure 10. Education Level Distribution of Corruption-Driven Emigrants. ....	52
Figure 11. Occupational Distribution of Corruption-Driven Emigrants. ....	54
Figure 12. Regression Diagnostic: Non-Immigrant Flow and Corruption Scandals. ....	58
Figure 13. Regression Diagnostic: Unauthorized Migration Flow and Corruption Scandals. ....	59

## Chapter I.

### Introduction

Migration is one of the most pressing issues in Latin America. In 2019 alone, more than 37 million people were living outside their native countries, 70% of them living in the Global North (ECLAC, 2019). An ongoing debate has surrounded the causes of migration in the twenty-first century. While forced migration has been the result of several national economic and political causes, including lack of opportunities and lack of security, countries of origin are often characterized by high levels of corruption (Merkle et al. 2019), making this factor a key driver of migration.

This study will contribute to the literature on migration and corruption in three ways. First, by providing an empirical correlation between political corruption and migration in Latin America. Second, by producing a model to identify whether changes in political corruption affect the levels of migration from the region. Third, by introducing the concept of “shock element” to the decision-making process to migrate. The hypotheses are that (1) *ceteris paribus*, reducing levels of corruption in Latin American countries will reduce emigration rates and (2) *ceteris paribus*, corruption scandals are a “shock element” that incentivizes individuals to consider emigration.

In a survey conducted in 2019 by Statista, approximately one-third of the opinion leaders and journalists surveyed in Latin America said that corruption is “the most important problem their countries face” (Romero, 2019). Corruption, therefore, thrives in Latin America. A fact that has also been long-established by Transparency International’s

Corruption Perception Index (CPI), characterizing Latin America as one of the most corrupt regions around the world (Transparency International, 2019).

The Latin American CPI score is 43, which according to Transparency International indicates that more than 75% of the countries have a score lower than 43 (TI, 2020). This situation has predictable outcomes. Not only does the region face political corruption, but society also experiences the consequences of it on a daily basis.

For many, the immediate solution is to emigrate. Forced migration then becomes the only manner to change one's life, to provide for the family, and to access healthcare, education, housing, food, professional opportunities, and ultimately, to enable a better life. As of 2020, the International Organization on Migration reported Latin America as the region with the world's fastest-growing source of migrants abroad (IOM, 2020).

Extensive cross-national studies associate corruption with a wide range of factors. Such studies corroborate that corruption has become the common denominator in the Latin American region, helping to explain persistent inequality, slow economic growth, and massive social mobilizations (Morris, 1991). Corruption tends to be higher in nations at lower levels of socioeconomic development, with minimal political rights, lower levels of education, and weak or even non-existent political competition (Ades and Ditella, 1997; Brunetti and Weder, 1999; Baribor, 2021). Corruption also "lowers the rate of economic growth and investment and distorts public spending by diverting funds to sectors where the collection of bribes is easier" (Baribor, 2021), which weakens programs designed to help the poor and reduce inequality (Keefer and Knack, 1995; Mauro, 1995). Yet, there is a limited number of studies that focus on the link between corruption and migration in Latin America, specifically.



This study, therefore, aims to clarify the relationship between political corruption and migration. Chapter two will provide a review of existing literature, examining corruption as a direct and indirect driver of migration. Following this, chapters three and four will conduct a detailed empirical analysis through the gravity model, using a cross-sectional analysis with panel data from 16 Latin American countries from 2012 to 2021. Chapter five will offer a comprehensive overview of migration trends and corruption scandals in the Latin American region. Chapter six will develop a detailed case study of Guatemala. This, in order to provide a comprehensive analysis of how corruption influences emigration decisions.

## Chapter II.

### Literature Review

While existing research primarily explores the economic incentives driving migration in Latin America, there are political determinants, often under-studied, acting as push factors; I examine if political corruption is one of them. The complex relationship between corruption and migration has produced an ongoing debate among scholars and received increased attention from policymakers (Carling et al. 2015). The nexus between these two variables, however, continues to be relatively unexplored.

This study contributes to the literature by exploring how political corruption acts as a driver of emigration. There is minimal to no research on how corruption scandals—beyond underlying levels of corruption—are a mechanism that incentivizes individuals to consider emigration. Disentangling the layers of this relationship reveals that corruption scandals trigger distrust in the government, lack of confidence in the political system, and disbelief that progress and opportunities are possible, which become pivotal sentiments driving emigration decisions.

There have been studies on how corruption acts as a direct and indirect driver of migration (see the studies below); however, they focus widely on the effects of corruption on the job market and the economy, which have been shown to cause people to leave their home countries (Mauro, 1995). This study, on the other hand, focuses particularly on the political determinants of emigration—responding to the question of how corruption scandals influence individuals' decisions to emigrate.

## Corruption as a Direct Driver of Migration

Initial research on the direct relationship between migration and corruption focused mostly on corruption as a deterrent to immigration. Marie Poprawe (2015), for example, used bilateral migration data to test the hypothesis that corruption influences migration, arguing that high corruption discourages immigration and encourages emigration. The explanation given by Poprawe (2015) focuses on the idea that nations with high levels of corruption provide a less secure business environment and worse and more insecure working conditions. This may encourage individuals to move to countries with lower levels of corruption, thereby avoiding the economic and social costs associated with corruption.

Identifying that corruption leads to higher emigration rates has been crucial because most emigration is from developing to developed countries. Examining the differences among groups has also been imperative to understanding the causes of migration. Dimant et al. (2013) found that corruption affects net migration rates by using a panel of 111 countries from 1985 to 2000. This study examined the influence of corruption on emigration by dividing migrants into two groups: skilled migrants and average migrants. Each group responded differently. “Corruption,” according to Dimant et al. “tends to diminish the returns to education, which is particularly relevant to the better educated” (2013).

Cooray and Schneider (2014), however, find evidence that the relationship between corruption and migration is not only present among high-skilled workers, as Dimant et al. suggest, but it is also among non-high-skilled workers. Cooray and Schneider (2014) contribute to the debate by finding heterogeneous effects for different educational skill

groups of corruption on emigration, including those with high, medium, and low levels of education. Empirical results show that as corruption increases, the emigration rate of those with high levels of education also increases. The emigration rate of those with middle and low levels of education, however, increases at initial levels of corruption, and once reached, starts to decrease.

Corruption not only influences migration but also affects the labor market since it acts through two different channels, according to Ariu and Squicciarini (2013). First, it pushes skilled residents to other countries, where they can find jobs based on meritocratic criteria. Second, it discourages the entry of foreign talents, who would hardly have access to recommendations (Ariu and Squicciarini, 2013). This, in the short and long run, might induce a prolonged loss in human capital and vanish investments in education.

While studies on the relationship between corruption and migration are relatively recent, a series of research had been conducted to determine how corruption may affect the macroeconomic situation of a country over the years (Mauro 1995; Méon and Sekkat 2005; Dreher and Gassebner 2013). Precisely the macroeconomic landscape of a nation is what defines the living conditions of its populations. If corruption disrupts the effective development of macroeconomic factors, the lives of many are to be influenced by the negative effects of corruption, provoking, in this way, migration.

### Corruption as an Indirect Driver of Migration

Corruption affects various sectors, including economic development and economic growth. When a nation's economy is hindered by corruption, it directly impacts households, jeopardizing their livelihoods and prompting individuals to consider emigration. The influence of corruption on economic development and economic growth

has been analyzed by numerous scholars. (Mauro 1995; Meon and Sekkat 2005; Dreher and Gassebner 2013). Mauro (1995) initiated this debate, arguing that “corruption is found to lower investment, thereby lowering economic growth.” Corruption is caused often by subsidies, price controls, trade restrictions, and foreign exchange allocation schemes, among others, showing that corruption obstructs growth by reducing investment.

Enhrlich and Lui (1999) provide a similar conclusion through equilibrium models of endogenous growth, arguing that “corruption has a negative effect on both growth and GDP per capita.” Svendsen (2003) supports Enhrlich and Lui’s thesis and concludes that less corrupt countries have high GDPs and low levels of trust are related to smaller GDPs per capita levels.

While Mauro (1995) argues that corruption decreases growth by decreasing both private and governmental investment, Meon and Sekkat (2005) claim that, unlike previous studies, corruption harms growth independently of its impact on investment. These impacts, however, differ depending on the quality of governance. “They tend to worsen when indicators of the quality of governance deteriorate,” they argue. This supports the “sand the wheels”<sup>1</sup> notion of corruption and contradicts the “grease on wheels”<sup>2</sup> view, which explains that corruption may help compensate for bad governance.

Contrarily, Dreher and Gassebner (2013) provide evidence that corruption may, in some way, increase growth, especially in highly regulated economies. They examined whether the impact of regulations on entrepreneurship is dependent on corruption, and

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<sup>1</sup> “Under the “sand the wheels” hypothesis, corruption is harmful to growth and investment and becomes increasingly detrimental as governance deteriorates” Meon and Sekkat (2005)

<sup>2</sup> “In a nutshell, the “grease the wheels” hypothesis states that graft may act as a trouble-saving device, thereby raising efficiency hence investment and, eventually growth.” Meon and Sekkat (2005)

after exploring 43 countries over 2003-2005, concluded that corruption facilitates firm entry in highly regulated economics—supporting, in this case, the “grease the wheels” hypothesis. This study maintained Meon and Weill (2010) findings on corruption, arguing that it can “foster growth in the presence of inefficient institutions.” After analyzing the interaction between aggregate efficiency, corruption, and other dimensions of governance for a panel of 69 countries, they found that “corruption is less detrimental to efficiency in countries where institutions are less effective” (2010). In some cases, it may even be “positively associated with efficiency in countries where institutions are extremely ineffective” (Meon and Weill, 2010).

Aidt et al. (2008), on the other hand, suggest that the relationship between corruption and growth is regime-specific. “In [a] regime with high-quality political institutions, corruption has a large negative impact on growth. In [a] regime with low-quality institutions, [conversely], corruption has no impact on growth.” Aidt et al. based their research on the foundations of Mendez and Sepulveda, who found that the relationship between corruption and growth is “non-monotonic and dependent on the political regime” (2006).

While the effect of corruption on the economy might seem to be dependent on the political regime, the economy is often an explanation for migration trends. Stanton Russell (1995) provides an overview of the five major approaches explaining migration, including neoclassical macroeconomic theory, neoclassical microeconomic theory, new economics of migration, dual labor market theory, and world systems theory. While some studies focus on the neoclassical micro and macroeconomic theories (Tunali, 2000;

Gallin, 2004), many other recent studies consider the political economy aspect of migration, which in many instances, is also influenced by corruption.

As recent scholarship begins to analyze the political aspects of migration, this study looks at how corruption scandals influence individuals' decisions to leave their home countries. It attempts to unravel the significance of corruption scandals on emigration decisions. These corruption scandals often come after anticorruption prosecutions, political instability, and political turnovers, among others. While it is challenging to measure corruption due to its often-inscrutable nature, corruption scandals tend to reveal tangible scenarios of corrupt acts. To explore the relationship between corruption and migration, this study will start with an empirical analysis of these variables to set a correlation among them in order to later examine individual data on corruption scandals and emigration decisions, which will facilitate a discussion on possible causation.

## Chapter III.

### Methodology

Migration is a multifaceted phenomenon influenced by a myriad of factors. Neoclassical migration theory posits individuals as rational actors who base their migration decisions on a thorough cost-benefit analysis (Lee, 1966; Todaro, 1969; Harris and Todaro, 2070) An extension of this theory, known as the Tiebout-Tullock hypothesis, contends that individuals are inclined to migrate to a community aligning with their preferences, which may include considerations of corruption levels (Tiebout, 1956; Tullock, 1971). As such, this study incorporates corruption as a crucial cost factor within its theoretical framework, corruption, defined as “the abuse of public office for private gain,”<sup>3</sup> particularly grand corruption—“the abuse of high-level power that benefits the few at the expense of the many and causes serious and widespread harm to individuals and society” (Transparency International, 2016).

### Basic Approach

Following the methodology presented by Bertocchi and Strozzi (2008) and Poprawe (2015) and redefining the model, this study considers the direct impact of corruption on migration decisions. Within this construct, all individuals are assumed to be identical and face the choice between remaining in the origin country, denoted as  $O$ , or relocating to a destination country, denoted as  $D$ .

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<sup>3</sup> “There is no agreement among anticorruption practitioners on a definition of corruption. Neither the UNCAC nor the OECD Anti-Bribery Corruption provides a definition of corruption. Rather, they define specific corrupt acts that should be criminalized. A more detailed discussion of the definition of corruption and its scope is also found at the World Bank website on “Helping Countries Combat Corruption” (OECD, 2020).



The utility function, denoted as  $\mu_i$ , captures an individual's well-being and satisfaction and is formulated as follows:

$$\mu_i = (1 - \theta) \log(C_i^O) + \theta \log(C_i^D)$$

Where  $C_i^O$  and  $C_i^D$  represent the levels of corruption perpetrated in the origin and destination countries, respectively. The utility function encapsulates the individual's preferences and trade-offs, with the parameter  $\theta$  ( $0 < \theta < 1$ ) signifying the weight an individual places on corruption levels.

In this context, individuals contemplate migration from the origin country  $O$  to the destination country  $D$  when the corruption levels are high in the country of origin. This decision is driven by the direct impact of corruption on an individual's quality of life and prospects for a better future.

Corruption also has an indirect impact on the decision to migrate. Following the same assumption that an individual has a choice between remaining in the origin country or leaving, and have a family to provide to, preferences are given by:

$$\mu_i = (1 - \theta) \log(x_i) + \theta \log(y_{i+1})$$

where  $x_i$  signifies individual consumption,  $y_{i+1}$  represents the resources to provide to their family, and  $\theta$  ( $0 < \theta < 1$ ).

The budget constraint  $x_i + b_{i+1} < y_i$  is in place. Given its satisfaction, the solution is:

$$x_i = (1 - \theta)y_i \quad b_{i+1} = 0$$

Deriving from these results, the indirect utility function can be expressed as:

$$\mu_i = \log(y_i) - \theta \log(1 - \theta) + \theta \log(\theta)$$

Here, individual utility is directly contingent on income  $y_i$ .

When faced with the decision of migration, each individual evaluates their prospective income in both the origin country and the destination country. Specifically, the incomes in these respective settings are defined as:

$$\text{Income in the origin country: } y_i^O = w_i^O - \theta c_i^O$$

$$\text{Income in the destination country: } y_i^D = w_i^D - \theta c_i^D - c^m$$

In these equations,  $w_i^O$ , represents the wage in the country of origin,  $w_i^D$ , wage if the individual relocates to the destination country,  $c_i^O$  and  $c_i^D$  signify the corruption levels in the country of origin and destination, respectively,  $\theta > 0$ , and  $c^m$  stands for the costs of moving. Corruption levels have a negative impact on the overall income since an individual might have to provide for basic services that the government would otherwise provide if not corrupt.

The cost of moving,  $c^m$  encapsulates various expenses, encompassing financial outlays associated with relocation costs. These costs ascend with greater geographical distance.

Consequently, an individual will opt to migrate to the destination country if the net benefits of moving, reflected in higher wages and reduced corruption levels, surpass the associated costs of relocation,  $c^m$ :

$$(w_i^O - w_i^D) - (\theta(c_i^O - c_i^D) - c^m) > 0$$

In essence, individuals embark on migrations from the country of origin to the country of destination, when gains from the move outweigh associated costs.

This model lays the theoretical groundwork for understanding how corruption levels, alongside income differentials and migration costs, influence the migration

decision-making process. It emphasizes the multifaceted nature of migration determinants and underscores the significance of corruption levels within this framework.

In addition to this basic approach, it is crucial to consider the distinction between migration categories, non-immigrant migration and unauthorized migration. This differentiation is pivotal in comprehending the various facets of migration patterns and their underlying drivers.

## Migration Categories

### Non-immigrant Migration

Non-immigrant migration encompasses individuals who move to a foreign country for purposes such as business ventures, tourism, or educational pursuits. These migrants typically adhere to legal channels and acquire the necessary documentation to enter and reside temporarily in the destination country. Their decision-making process is often influenced by factors beyond economic considerations, including cultural exchange, educational opportunities, or professional development. These migrants, sometimes, overstay their visas and become informal migrants. However, there is no data to verify the flow of non-immigrants who became informal migrants.

### Unauthorized Migration

Unauthorized migration, on the other hand, involves individuals who enter a foreign country without proper documentation or approval from immigration authorities. This category primarily comprises individuals who may be fleeing instability, economic hardship, corruption levels, or seeking better living conditions. Their migration decisions are often driven by a sense of urgency or necessity, and they may face significant challenges related to legal status and access to essential services.

Migration, thus, is the result of an opportunity-cost analysis from those who are considering migrating, whether it is for business, tourism, and education or due to instability, economic hardship, and corruption levels, among others.

## Method

This study aims to develop a comprehensive model that explains the relationship between corruption levels and migration flows from 16 Latin American countries to the United States during the period spanning from 2012 to 2021. Using the gravity model, this study seeks to provide valuable insights into how corruption in the countries of origin influences the patterns of migration, distinguishing between non-immigrants and unauthorized migrants.

### The Gravity Model

The gravity model draws its name from its conceptual similarity to Newton's law of universal gravitation, which suggests that the force between two objects is directly proportional to their masses and inversely proportional to the square of the distance between them. In the context of migration, the gravity model follows the same principle. Migration flows between two countries are directly proportional to their economic sizes and inversely proportional to some measure of "distance" between them, which may include factors such as geographical distance, cultural dissimilarity, language differences, or, as in this study, corruption levels. Geographical distance will also be included in this study, however.

Econometric Equations:

a. Non-Immigrant Migration

$$F_{ij}^{T/B/S} = \frac{G \cdot Y_i \cdot Y_j \cdot e^{-\beta_1 C_i - \beta_2 C_j} \cdot S_i}{D_{ij}} + \varepsilon_{ij}$$

Where:

$F_{ij}^{T/B/S}$  represents the flow of Non-Immigrants from country i to country j.

$Y_i, Y_j$  denote the economic sizes of the country of origin and destination, respectively, proxied by GDP per capita.

$C_i$  and  $C_j$  represent the corruption levels in the country of origin and destination, respectively, given by the Corruption Perception Index.

$S_i$  denotes the presence of corruption scandals in the countries of origin.

$D_{ij}$  accounts for the geographical distances between the country of origin and the destination country.

b. Unauthorized Migration

$$F_{ij}^U = \frac{G \cdot Y_i \cdot Y_j \cdot e^{-\beta_1 C_i - \beta_2 C_j} \cdot S_i}{D_{ij}} + \varepsilon_{ij}$$

Where:

$F_{ij}^U$  represents the flow of unauthorized migrants from country i to country j.

All other variables remain the same.

## Data Sources

Data on non-immigrants and unauthorized migrants has been collected from the Yearbook of Immigration Statistics for each year from 2012 to 2021 from the U.S. Department of Homeland Security (DHS), and it was then classified by country of citizenship. Non-immigrant admissions refer to arrivals of people who are authorized to stay in the United States for a limited time. Non-immigrants include people entering the United States lawfully for tourism, business, studies, or in some cases, to engage in cultural exchange programs. These were recorded via I-94 admissions. Unauthorized migrants, on the other hand, refer to “foreign nationals who are inadmissible, apprehended, removed, or returned for violating the Immigration and Nationality Act” (DHS). These actions occur at the borders of the United States or in the interior of the country. This data is recorded by U.S. Customs and Border Protection.

For the economic dimension, the Gross Domestic Product (GDP) per capita figures have been sourced from The World Bank, providing comprehensive coverage from 2012 to 2021.

The Corruption Perception Index, a pivotal metric in this study, has been procured from Transparency International. This index serves as a qualitative measure of corruption levels within nations, employing a scale ranging from 0 to 100. A higher score signifies a lower degree of corruption within a given country. It is imperative to underscore that, within the framework of our model, an elevated value on the Corruption Perception Index corresponds to a lower incidence of corruption.

Given the inherent subjectivity of the Corruption Perceptions Index (CPI), rooted in opinions on perceived corruption levels, notably criticized by many scholars (See

Treisman, 2007; Donchev and Ujhelyi, 2014; Jahedi and Mendez, 2014; Lin and Yu, 2020), a comprehensive examination of corruption scandals is needed. Unlike the CPI, which offers a measure of perceived corruption, corruption scandals represent concrete instances of corrupt practices, providing a more tangible and specific understanding of corruption events. These scandals serve to bolster the analytical foundation, offering a direct view into real-world manifestations of corruption. By scrutinizing corruption scandals in conjunction with the CPI, the multifaceted influence of corruption on migration dynamics becomes more apparent and comprehensible.

The presence or absence of corruption scandals is captured through a binary variable. This variable serves to determine whether a given year witnessed the occurrence of a corruption scandal or not. A rigorous qualitative examination of media outlets and newspapers from each year and across every country has been undertaken to ascertain the presence or absence of corruption scandals across the 16 Latin American countries.

## Chapter IV.

### Results and Analysis

The models show a strong correlation between corruption levels and migration flows; however, correlation does not necessarily imply causation. These models are rather indicators of trends between the levels of corruption in Latin American countries and the number of immigrants from these countries entering the United States. This empirical analysis helps link these two variables at a regional level to later understand individual data at a country level suggesting that corruption scandals affect emigration decisions.

#### Non-immigrant Flows from Latin America to the United States

The model's overall fit is statistically significant ( $F(6, 153) = 10.36, p < 0.001$ ) with an R-squared of 0.289, indicating that the included variables collectively explain approximately 28.9% of the variance in non-immigrant migration flows.



### Regression Diagnostic Plots: Non-Immigrants

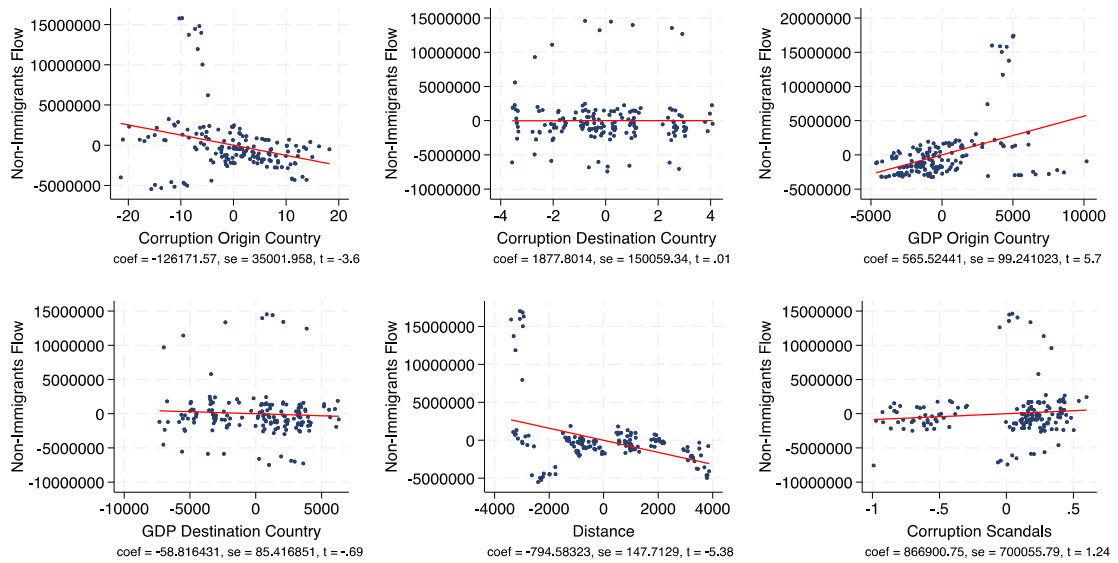


Figure 1. Results of Regression: Non-Immigrant Flows in the United States

### Corruption Levels and Non-Immigrant Migration

#### Corruption in Latin American Countries

The substantial negative coefficient of -126,171.6 ( $t = -3.60$ ,  $p < 0.001$ ) for origin countries highlights its significant impact on non-immigrant migration flows. This implies that for each one-unit increase in the Corruption Perception Index (lower corruption) in the origin country, non-immigrant migration to the United States is expected to decrease by 126,172 individuals. Therefore, lower levels of corruption in the origin country are associated with lower flows of non-immigrant migrants to the United States. This suggests that individuals may be less inclined to leave a country for travel, business, or study when the country has lower corruption levels.

### Corruption in the United States

The coefficient for corruption in the destination country is 18,778 ( $t = 0.13$ ,  $p = 0.897$ ), indicating a statistically insignificant relationship. This suggests that a one-unit increase in corruption levels in the destination country does not have a significant impact on non-immigrant migration flows. Migrants' decisions, thus seem to be more influenced by conditions in their country of origin.

### Economic Factors and Non-Immigrant Migration

#### GDP per capita in Latin American Countries

The positive coefficient of 565.52 ( $t = 5.7$ ,  $p < 0.001$ ) for the origin country's GDP signifies that for each one-unit increase in the GDP of the origin country, non-immigrant migration to the United States is expected to increase by 565.52 individuals. This implies that individuals from countries with higher GDP per capita are more likely to engage in non-immigrant migration to the United States. It suggests that economic opportunities in the origin country significantly impact the decision to engage in non-immigrant migration. In other words, with an increase in GDP per capita, there is an increase in individuals visiting the United States for tourism, business, and studies.

#### GDP per capita in the United States

The coefficient for destination country GDP is -58.81 ( $t = -0.69$ ,  $p = 0.469$ ). Although negative, it is statistically insignificant, indicating that a one-unit increase in the GDP of the destination country does not have a significant impact on non-immigrant migration flows. This suggests that migrants' decisions are more strongly influenced by economic conditions in their country of origin.

## Geographical Distance and Non-Immigrant Migration

The inverse relationship indicated by the coefficient of  $-794.58$  ( $t = -5.4$ ,  $p < 0.001$ ) for distance underlines its substantial impact on non-immigrant migration. This implies that for each one-unit increase in geographical distance between the originating country and the United States, the flow of non-immigrant migrants is expected to decrease by 795 individuals. This highlights the role of physical proximity in influencing migration patterns.

## Unauthorized Migration from Latin America to the United States

The model demonstrates a substantial degree of explanatory power, with an R-squared value of 0.3254, indicating that approximately 32.54% of the variance in unauthorized migrants can be accounted for by the included variables.

### Regression Diagnostic Plots: Unauthorized Migrants

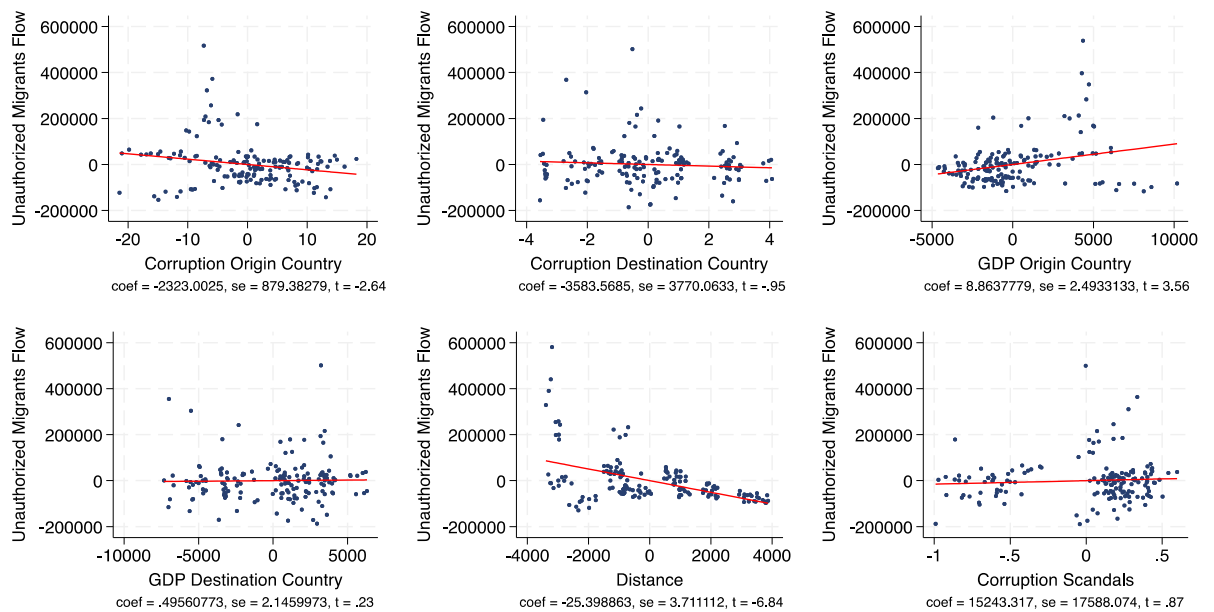


Figure 2. Results of Regression: Unauthorized Migration Flow in the United States.

### Corruption in Latin American Countries

The coefficient for corruption in Latin American countries is -2323.00 (p-value < 0.01), indicating that a one-unit increase in the Corruption Perception Index (lower corruption) in the country of origin is associated with a decrease of approximately 2223 unauthorized migrant apprehensions. This suggests that lower levels of corruption in the origin country may serve as a deterrent to unauthorized migration; hence, individuals may be less inclined to attempt unauthorized migration.

### Corruption in the United States

Corruption in the United States, on the other hand, exhibits a coefficient of -3583.57 (p-value > 0.05), suggesting that corruption levels in the destination country do not significantly impact unauthorized migrant apprehensions. This finding may indicate that migrants may be less influenced by corruption levels in the destination country compared to other factors.

### Economic Factors and Unauthorized Migration

An increase in GDP per capita in the origin country by one unit is associated with an increase of approximately 8.86 unauthorized migrant apprehensions (p-value < 0.01). Similarly, an increase in GDP per capita in the destination country by one unit corresponds to an increase of approximately 9 unauthorized migrant apprehensions, though this relationship is not statistically significant (p-value > 0.05).

Having explored the relationship between unauthorized migration and GDP per capita, it became evident that for a more precise understanding of the economic drivers influencing potential unauthorized migrants, a tailored approach was required. This led to the consideration of minimum wage as a crucial economic indicator. This data was

retrieved from the International Labor Organization (ILO). Unlike GDP per capita, which provides a broader economic overview, minimum wage directly addresses the income levels of individuals, a factor particularly pertinent for those contemplating unauthorized migration.

The results revealed a statistically significant negative relationship between the minimum wage and the number of unauthorized migrants. Specifically, for each one-unit increase in the minimum wage, there was a corresponding decrease in the number of unauthorized migrants by approximately 314 individuals (Coefficient: -313.8994,  $t = -4.65$ ,  $p < 0.001$ ). This suggests that higher minimum wages may act as a deterrent to unauthorized migration, potentially indicating that improved economic conditions in the home country reduce the incentive to emigrate informally.

#### Geographical Distance

Geographical distance emerges as a significant determinant of unauthorized migrant apprehensions. The coefficient of -25.40 ( $p\text{-value} < 0.01$ ) implies that a one-unit increase in distance is associated with a decrease of approximately 25 unauthorized migrant apprehensions. This suggests that migrants are less likely to attempt unauthorized migration to countries that are geographically farther away.

#### Robustness Analysis

To ensure the reliability of the findings, a series of robustness checks were performed on the regression model. Specifically, a robust regression approach was employed to account for potential heteroscedasticity in the error terms, which mitigated the impact of unequal variance and improved the accuracy of the coefficients.

Additionally, a sensitivity analysis was conducted, testing alternative model specifications, including variations of certain variables. This step allowed for the assessment of the consistency of the results across different model specifications, reaffirming the robustness of the conclusions.

Bootstrapping, a resampling technique, was also utilized to estimate the sampling distribution of the regression coefficients, generating confidence intervals through repeated resampling of the data. This approach further supported the stability of the results.

The outcomes of these robustness checks consistently upheld the primary findings of the analysis, which show a strong correlation between corruption levels and migration flows. These robustness checks reinforce confidence in the validity of these results. Correlation, however, does not equal causation. While the results, at a regional level, show that corruption and migration are correlated, this part of the study does not attempt to indicate that corruption drives migration. It rather sets a preliminary relationship between these two variables to continue exploring their relationship at a country and individual level in the next chapters.

## Chapter V.

### Corruption and Migration Overview in Latin America

While in the model, corruption scandals do not appear to have a statistically significant impact on both nonimmigrant and unauthorized migration, it is crucial and at the core of this study to recognize the influence of such scandals in migration. Corruption scandals were treated as a binary indicator, capturing the presence or absence of corruption scandals in a given year. However, it's important to note that in many instances, corruption scandals were prevalent every year across several of the studied countries. This binary treatment, therefore, may not capture the impact of scandals on migration over time.

Considering this, further examination of specific years is appropriate. By exploring years where notable spikes or deviations in migration coincide with significant corruption scandals, we can gain a more comprehensive understanding of how these events may have influenced migration patterns. This refined analysis will allow for a more nuanced assessment of the relationship between corruption scandals and migration, potentially revealing subtleties that the initial model may not have captured.

In fact, in recent years, Latin America has been no stranger to high-profile corruption scandals that have reverberated through both incumbent and former governments. Notable cases such as Lava Jato, a vast corruption investigation spanning several countries, Odebrecht's intricate web of bribery and kickbacks, the FIFA Scandal that implicated prominent government figures, as well as the exposures brought to light by the Panama and Pandora Papers, which revealed a network of offshore financial

dealings, have had far-reaching ramifications on the region's political and economic landscape.

These scandals have not only had immediate consequences but have also significantly shaped the decision-making processes of individuals within affected countries, particularly when it comes to migration. This section will explore both non-immigrant flow and unauthorized migrant flow in the United States with respect to corruption scandals in Latin America.

### Corruption Scandals and Migration Trends among Latin American Countries

#### Non-Immigrant Flow and Corruption Scandals

Figure 3 provides a chronological depiction of the number of non-immigrants entering the United States from 2012 to 2021. One notable observation is the substantial surge in migrants from 2012 to 2014 and from 2017 to 2018 and 2019, coinciding with the eruption of the Lava Jato scandal and with 13 presidents and former presidents sued for corruption, respectively.

This phenomenon prompts the introduction of a new analytical framework: the 'response to shocks.' This framework suggests that major corruption scandals can act as a "shock element," triggering a cascade of socio-political responses, which in turn can influence migration patterns—notably during the year that the corruption scandal occurs. While correlation does not imply causation, this increase in migration may be indicative of a complex interplay of socio-political factors, including the impact of corruption.



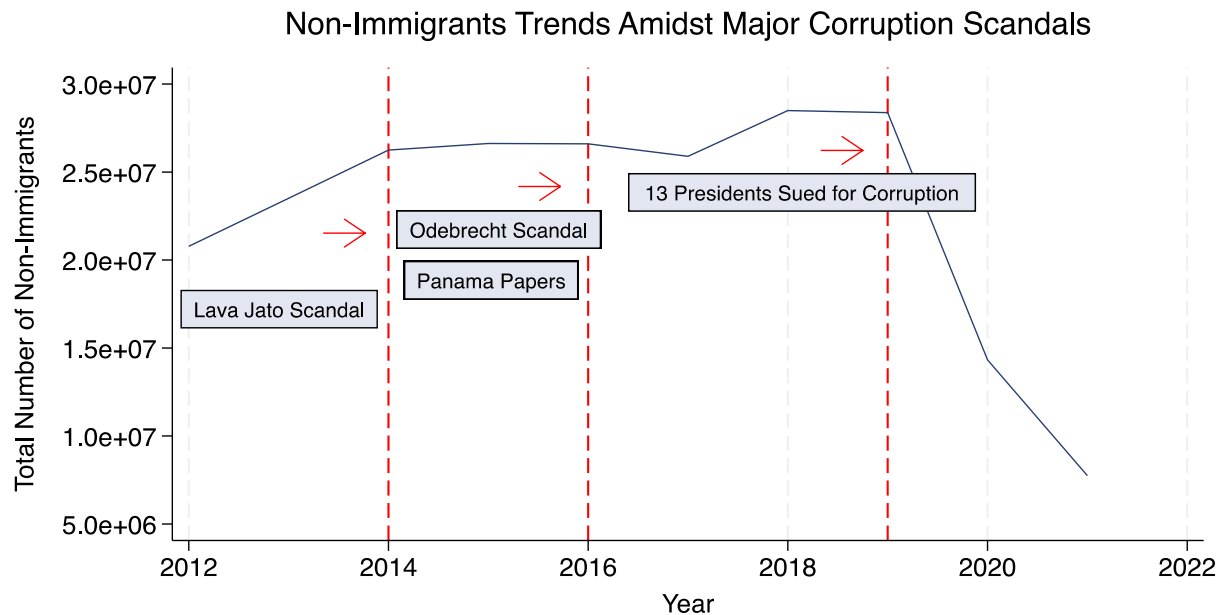


Figure 3. Non-Immigrant Flow to the United States from 16 Latin American countries.

### Lava Jato Scandal: Uncovering a Web of Corruption

The Lava Jato (Car Wash) investigation, Brazil’s largest-ever corruption probe, began in 2014 with a focus on money laundering. However, it swiftly unraveled a widespread network of corruption that permeated the highest echelons of Brazil’s government and extended to prominent companies like Petroleo Brasileiro (Petrobras) and the now-renamed Novonor—formerly Odebrecht. The scandal revealed a pattern of bribery in exchange for lucrative contracts, both domestically and internationally.

### Regional Ramifications of Lava Jato

The repercussions of the Lava Jato investigation were not confined to Brazil alone. This far-reaching probe reverberated across more than a dozen countries, implicating individuals and entities in a web of graft that spanned Latin America; including countries such as Argentina, Bolivia, Brazil, Colombia, Ecuador, El Salvador,

Guatemala, Mexico, Panama, Paraguay, and Peru. The fallout included nearly 280 convictions and the restitution of approximately \$800 million to Brazilian state coffers (Department of Justice, 2016). Furthermore, it catalyzed parallel investigations worldwide, with 41 countries formally seeking legal cooperation from Brazilian authorities.

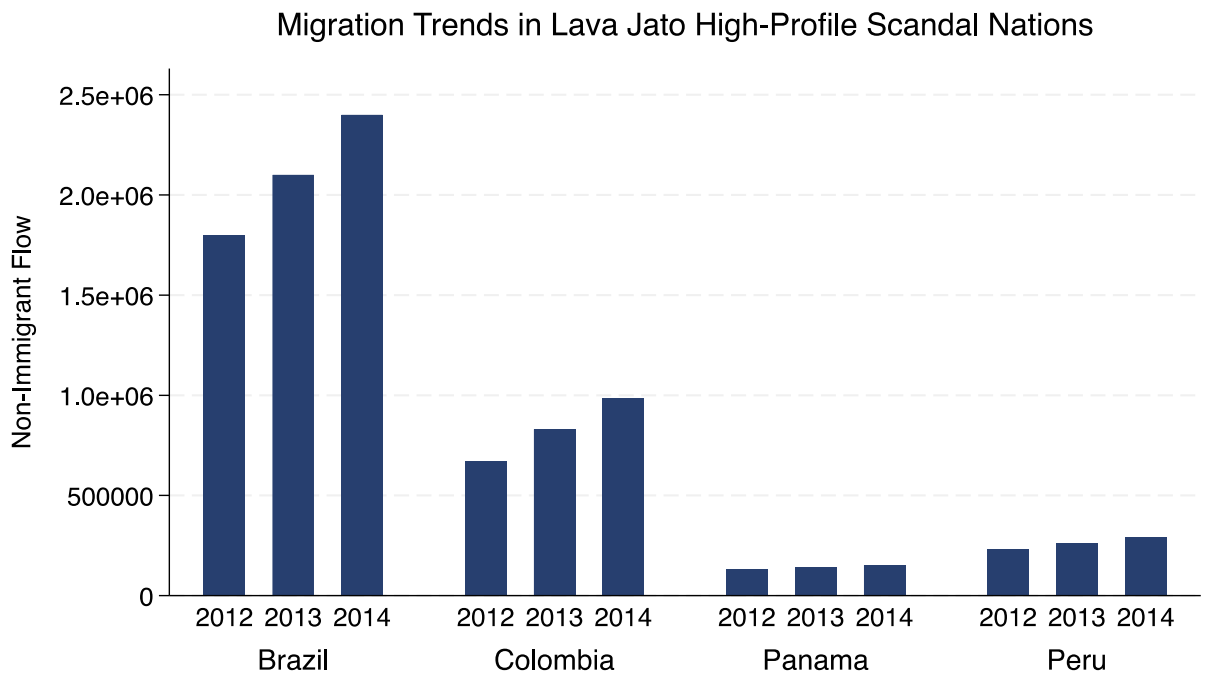


Figure 4. Non-Immigrant Flow in the United States, (2013) (2014) (2015).

Between 2012 and 2014, there was a notable surge in non-immigrant flows to the United States from Brazil, Colombia, Panama, and Peru (Figure 4). This increase coincided with a turbulent period characterized by a high-profile corruption scandal, Lava Jato. This event not only eroded public trust but also left a mark on migration patterns, with many individuals from these countries seeking opportunities in the United States (See Appendix 1 for detailed information about all countries).

## Brazil

The surge in non-immigrant flows from Brazil between 2012 and 2014 coincided with the seismic impact of the Lava Jato scandal, a corruption investigation of unprecedented scale. President Luiz Inacio Lula da Silva (2003-2010) faced damning allegations and subsequent conviction, leading to his imprisonment. Due to evidence of bias in his case, Lula's convictions were later annulled. President Dilma Rousseff (2016-2018), although not directly implicated, saw her presidency shadowed by the Lava Jato scandal, which played a significant role in her impeachment proceedings.

The following administration under President Michel Temer (2016-2018) also faced corruption allegations. President Temer himself was arrested on multiple occasions and subjected to intensive investigation (New York Times, 2017). The highest levels of government were not immune, as Eduardo Cunha, the President of the Chamber of Deputies, ultimately faced conviction and imprisonment (Al Jazeera, 2017). Further complicating matters, prominent figures like Governor Sergio Cabral and campaign strategist Joao Santana were also ensnared in the scandal (AP News, 2018).

This period of intense political turbulence and corruption significantly eroded public trust and confidence in the government. The substantial increase in non-immigrant flows from Brazil during this period, as indicated by the data, underscores the impact of the Lava Jato scandal on migration patterns. In 2012, approximately 1.8 million Brazilians sought opportunities in the United States, a number that increased to 2.1 million in 2013 and further to 2.4 million in 2014.

## Colombia

In Colombia, the surge in non-immigrant flows mirrored the country's own battle with the reverberations of the Lava Jato scandal. President Juan Manuel Santos (2010-2018), while not directly implicated, faced scrutiny as investigations unveiled illegal campaign funding (Reuters, 2017). This revelation not only impacted the political landscape but likely contributed to a sense of disillusionment and mistrust among citizens.

Key figures in the transportation and infrastructure sectors, such as Vice-Minister Gabriel Garcia Morales and Infrastructure Chief Luis Fernando Andrade, were entangled in the scandal (Reuters, 2017). Additionally, senators Otto Nicolas Bula and Bernardo Miguel Elias Vidal faced convictions and imprisonment. Campaign manager Roberto Prieto also found himself in legal proceedings (RCN, 2021).

The political uncertainty and compromised integrity of the government may have influenced Colombians to seek greater stability and opportunities beyond their borders, resulting in the observed increase in migration flows. The data supports this trend, with the number of Colombian migrants to the United States rising from approximately 669,392 in 2012 to 830,891 in 2013 and 985,073 in 2014.

## Panama

Panama, too, grappled with the repercussions of the Lava Jato scandal, which deeply impacted its political and economic landscape. Presidents Ricardo Martinelli (2009-2014) and Juan Carlos Varela (2014-2019) came under intense scrutiny and investigation (Insight Crime, 2019). Additionally, key figures in the government, including Finance Minister Frank De Lima (Newsroom Panama, 2017) and Public Works

Minister Jaime Ford, faced arrests and charges (France 24, 2017). The scandal even extended to the highest levels of power, with Presidency Minister Demetrio Papadimitriou finding himself arrested and charged (U.S. Department of State, 2018).

The scandal reached beyond political leaders, as the sons of President Martinelli, Luis Enrique Martinelli Linares and Ricardo Alberto Martinelli Linares, faced arrests and charges in the U.S., with pending extradition cases (Reuters, 2020).

The resulting political instability and economic uncertainty likely played a pivotal role in prompting many Panamanians to explore opportunities abroad, as reflected in the increased migration flows to the United States, from approximately 132,615 in 2012 to 153,115 in 2014.

## Peru

In Peru, a succession of presidents found themselves embroiled in the Lava Jato scandal, creating a climate of intense political turmoil. President Alejandro Toledo (2001-2006), imprisoned in the U.S. and later placed under house arrest, faced extradition proceedings (CourtHouse News, 2020). Tragically, President Alan Garcia (1985-1990, 2006-2011) chose to end his own life as authorities sought his arrest (The Economist, 2019). President Ollanta Humala (2011-2016) faced imprisonment, with legal proceedings ongoing (Andina, 2018). President Pedro Pablo Kuczynski (2016-2018) resigned prior to impeachment and later found himself imprisoned, subsequently placed under house arrest (Al Jazeera, 2018). President Martin Vizcarra (2018-2020) was investigated and ultimately ousted following allegations tied to Odebrecht (The Economist, 2020).

The extensive reach of the Lava Jato scandal within the highest levels of government undoubtedly contributed to a sense of political instability and economic uncertainty. This climate may have motivated many Peruvians to seek more promising opportunities abroad, leading to the observable increase in non-immigrant flows during this period. The data reveals this trend, with the number of non-immigrants from Peru to the United States growing from approximately 231,103 in 2012 to 292,752 in 2014.

### Unauthorized Migration and Corruption Scandals

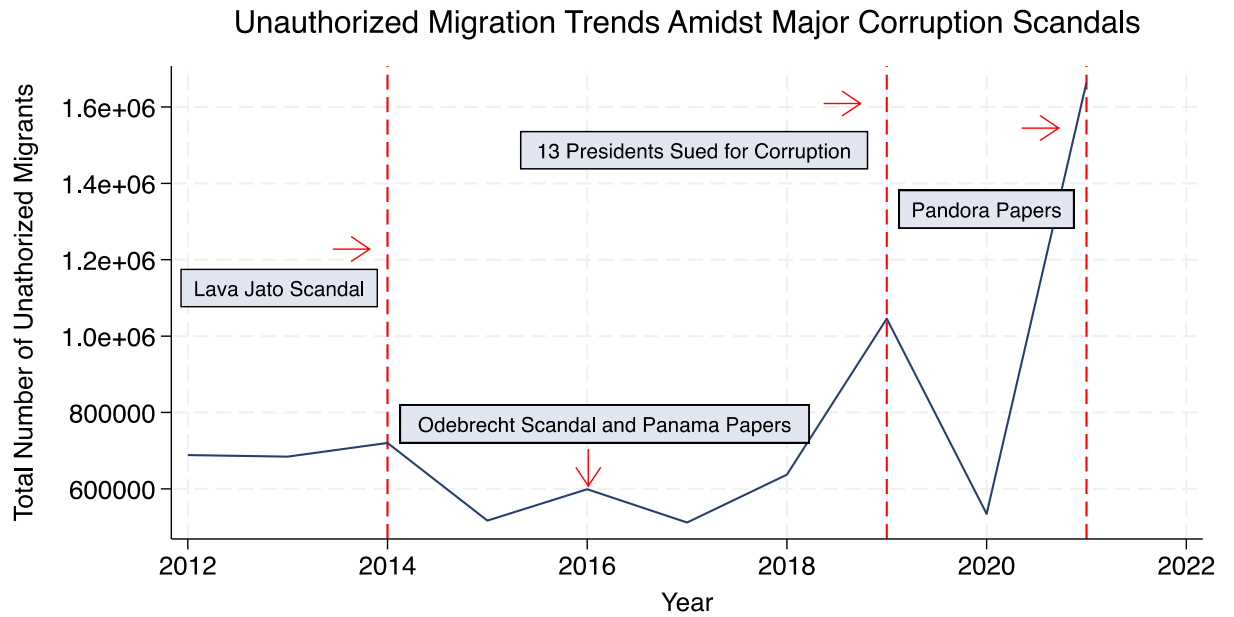


Figure 5. Unauthorized Migration Flow in the United States from 16 Latin American countries.

Figure 5 illustrates the number of unauthorized migrant flows into the United States from 2012 to 2021. Notably, in 2014 there was an increase in unauthorized migrants. Following this, 2016 witnessed another notable surge in unauthorized migration, with a subsequent reduction in 2017. The year 2019 saw a significant rise once more, reaching higher levels than in previous years.

A compelling observation is the correlation between the years of highest migrant influx and prominent corruption scandals. In 2014, coinciding with the highest influx of unauthorized migrants, Brazil grappled with the far-reaching Lava Jato scandal. Similarly, in 2016, the revelation of the Odebrecht, Panama Papers, and FIFA scandals reverberated regionally, influencing migration trends. The year 2019, marked by yet another surge in unauthorized migrants, was a period of significant political upheaval, with 13 presidents across various countries facing corruption charges. This phenomenon might be attributed to the 'response to shocks' concept, in which corruption scandals act as a 'shock element' that may influence emigration decisions.

In 2021, the graph indicates a sharp and dramatic spike in unauthorized migration, which may be attributed to multiple factors. While the Pandora Papers revelations occurred this year, the unprecedented impact of the COVID-19 pandemic on global economies and migration patterns cannot be overlooked. It is imperative to acknowledge that this surge may be a complex interplay of multiple factors, including the socio-economic repercussions of the pandemic.

## From Lava Jato Scandal to Odebrecht Scandal

In 2014, the revelation of the Lava Jato scandal set the stage for an even more profound revelation—the Odebrecht scandal. Often overshadowed by the more widely recognized Lava Jato investigation, this is a scandal that resulted in the incrimination of high-level figures around the Latin American region. The litany of public construction projects linked to Odebrecht in the region is seemingly endless: metro lines in Venezuela, an ambitious irrigation system in Peru, a billion-dollar port in Cuba, hydroelectric dams in Panama, trams in Colombia, and the Olympic venues in Brazil itself.

### The Landmark Conviction

In December 2016, the U.S. Department of Justice handed down a landmark fine of 3.5 billion dollars to Odebrecht, following the confessions of several of its executives. The company's CEO, Marcelo Odebrecht, received a 19-year prison sentence in Brazil. The judgment revealed that between 2001 and 2006, the company had disbursed approximately 788 million dollars in bribes, entangled in over 100 projects across twelve countries. This revelation not only shattered the façade of a reputable multinational corporation but laid bare a web of systemic corruption that had infiltrated the highest levels of politics in multiple Latin American countries, including Argentina, Colombia, Ecuador, El Salvador, Guatemala, Brazil, Mexico, Panama, Peru, and Venezuela, and others (see Appendix 1 for more detailed information about the countries involved).

### Panama Papers

Following the seismic revelations of the Odebrecht scandal in 2016, another scandal emerged: the Panama Papers. This monumental data breach came under the scrutiny of the International Consortium of Investigative Journalists (ICIJ) in conjunction



with the German periodical *Süddeutsche Zeitung*. A total of 2.6 terabytes of data, corresponding to 11.5 million documents, originated from the Panamanian legal establishment Mossack Fonseca—the firm specialized in the creation of offshore corporate establishments (ICIJ, 2018).

The ICIJ's comprehensive expose unveiled an extensive narrative, encompassing a temporal span of nearly four decades, from 1977 to the end of 2015. Within this compendium of documents lay the offshore financial imprints of over 140 politicians, public figures, and officials. Among their ranks were a dozen presently active global leaders, including leaders from countries such as Argentina, Brazil, Chile, Colombia, Ecuador, Honduras, Mexico, Panama, Peru, Uruguay, and Venezuela

Panama Papers laid bare a world where foreign bank accounts, though not inherently illegal, served as conduits to create shell companies and evade taxes. In the political arena, the creation and sale of companies through tax havens can be perceived as corrupt for compelling reasons as it often entails a deliberate effort to conceal financial interests and transactions. When politicians or public officials resort to offshore entities, their true financial holdings and potential conflicts of interest tend to be imprecise, undermining transparency and accountability—the cornerstones of ethical governance.

Both the Odebrecht scandal and the Panama Papers were extended to a global level in which most Latin American countries were involved. Figure 6 shows distinct unauthorized migration trends to the United States from people coming from the Northern Triangle, El Salvador, Guatemala, and Honduras. In 2014, there was an increase in the number of unauthorized migrants, followed by a decline in 2015, and yet another significant spike in 2016. Notably, these peaks in migration align with periods of

heightened political turmoil marked by major corruption scandals. This common factor explains the link between corruption scandals and migration dynamics in these countries.

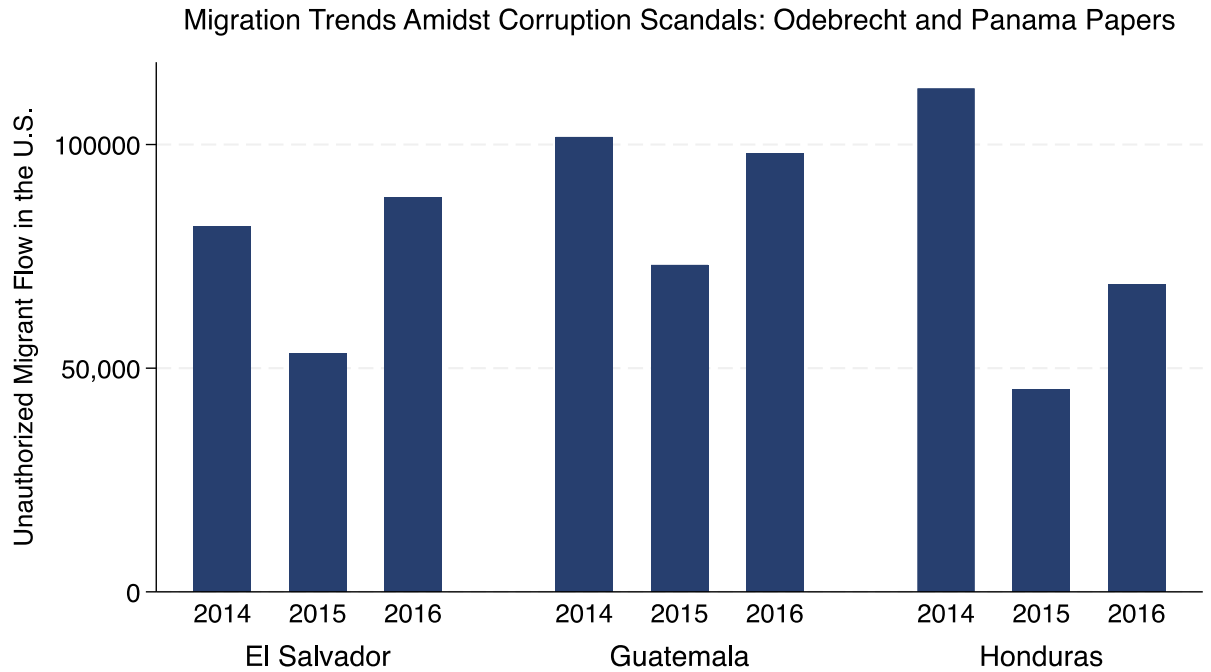


Figure 6. Unauthorized Migration Flow in the United States, (2013) (2015) (2014).

El Salvador

In El Salvador, the reverberations of the Odebrecht scandal have left an indelible mark on the political landscape. Former First Lady of El Salvador, Vanda Pignato, a Brazilian and long-time militant of the Workers’ Party (PT), reportedly served as an intermediary in securing approximately 3.5 million reales (equivalent to roughly \$1.5 million) of illicit funds (AP News, 2018). According to whistleblowers, this sum was provided by Odebrecht and funneled to the publicist Joao Santana, who spearheaded the campaign that propelled Mauricio Funes to power in 2009 (CNN, 2017).

President Funes (2009 to 2014) now faces extensive investigations for alleged embezzlement amounting to \$351 million. Odebrecht's involvement is suspected in disbursing between \$1 to \$3 million to Funes during his 2009 presidential campaign. Additionally, Funes, currently residing in Honduras, is under scrutiny for purportedly offering financial inducements to deputies in the Legislative Assembly to secure favorable votes during his tenure (Reuters, 2016).

In the years spanning from 2014 to 2016, El Salvador experienced significant fluctuations in migration patterns to the United States. Notably, these shifts corresponded with key corruption scandals that unfolded in the region, shedding light on potential connections between political upheaval and migration trends.

In 2014, El Salvador witnessed a notable surge in unauthorized migrant flows to the United States, with a recorded total of 81,651. This surge coincided with the revelations of the Lava Jato scandal. The extensive reach that this scandal had in El Salvador contributed to a sense of political instability and economic uncertainty within El Salvador. As a result, individuals may have sought greater stability and opportunities abroad, potentially leading to the observed increase in unauthorized migration during this period.

The subsequent year, 2015, saw a significant decline in unauthorized migrant flows from El Salvador to the United States, with unauthorized migrants dropping to 53,336. During this year, there is no records of corruption scandals in the country.

In 2016, however, unauthorized migration from El Salvador surged once again, with 88,097 apprehensions. This increase in migration coincided with the revelation of the Odebrecht scandal, a corruption affair that directly implicated El Salvador. This

scandal, involving illicit payments to high-level politicians and officials, likely further eroded public trust and confidence in the government. The resulting climate of instability and economic uncertainty may have motivated many Salvadorans to seek more promising opportunities abroad, contributing to the observed increase in unauthorized migration during this period.

### Honduras

Like the Odebrecht Scandal, the Panama Papers also influenced the political and economic landscape of several countries, including Honduras. Jaime Rosenthal, one of Honduras' wealthiest businessmen and former vice president of the country faced investigations for tax evasion, and in early 2016, the United States sought his extradition on charges of money laundering, echoing the broader reverberations of the Panama Papers scandal (Department of Justice, 2017).

Pandora Papers revealed that the Rosenthal family has linkages to an offshore company that owned an aircraft seized in Guatemala as part of an investigation into the family's money laundering activities.

During the same year, President Rafael Callejas (1990-1994) confessed his involvement with the FIFA Bribes corruption scandal, related to Concacaf, the governing body for soccer in Central America, during his tenure overseeing Honduran football (The New York Times, 2016).

Within this complex scenario of corruption allegations and investigations, migration patterns from Honduras to the United States undergo nuanced fluctuations. The year 2014 witnessed a substantial surge in unauthorized migrant apprehensions, totaling 112,530. This spike coincided with heightened scrutiny of financial activities and

potential illicit practices involving high-profile individuals in the wake of the Lava Jato scandal.

The following years, 2015 and 2016 witnessed shifts in migration patterns. A discernible decline in unauthorized migration to 45,228 in 2015 suggests a potential response to a momentary reduction of major corruption scandals. However, in 2016, unauthorized migration from Honduras increased once again with 68,778 unauthorized migrants.

### Guatemala

The repercussions of the Odebrecht scandal have also left marks on Guatemala's political and economic landscape. The Brazilian construction giant, Odebrecht, faced allegations of using bribes to secure lucrative contracts in Guatemala. In 2016, "company executives admitted to making illicit payments to secure a Guatemalan highway contract in 2012" (Reuters, 2018). A joint investigation by Brazilian and Guatemalan prosecutors, in collaboration with the U.N.-backed International Commission Against Impunity in Guatemala (CICIG), revealed startling details about ex-infrastructure minister Alejandro Sinibaldi's involvement. Sinibaldi, who has been a fugitive since mid-2016, was found to have agreed to receive \$19.5 million in exchange for facilitating Odebrecht's acquisition of a \$300 million contract (Reuters, 2018).

Turning to migration trends, the years from 2014 to 2016 witnessed notable shifts in unauthorized migrant flows from Guatemala to the United States. In 2014, totaling 101,695. This surge in migration coincided with the revelations surrounding the Odebrecht scandal and its implications for the nation. In 2015, the number dropped to 73,111, However, in 2016, unauthorized migration from Guatemala to the United States

surged once again, with 97,967 unauthorized migrants. This increase is correlated with the ongoing repercussions of the Odebrecht scandal, which continued to reverberate throughout the nation.

The findings of migration trends with respect to corruption scandals including those involving Lava Jato, Odebrecht, Panama Papers, FIFA, and other national corruption scandals explain a correlation between migration and corruption. The surge in migration from 2012 to 2021 raises pertinent questions about the complex interplay between governance, economic opportunity, and individuals' pursuit of stability and prosperity. Corruption scandals in the Northern Triangle can be considered a 'shock element' that might have contributed to the increase in migration. It is, therefore, essential to explore this phenomenon at an individual level in the next chapter.

## Chapter VI.

### The Case of Guatemala

In recent decades, emigration has emerged as an immediate response and external escape valve to Guatemala's internal challenges. This trend traces its roots back to Guatemala's 36-year-long civil war, spanning from 1960 to 1996, a period marked by substantial emigration flow in the 80s and 90s. More recently, in the post-war era, international emigration remained a prevalent strategy, propelled by Guatemala's persistent and profound socioeconomic issues, political corruption, and the presence of a fragile state grappling with limited capacity and resources for internal problem resolution. This interplay of historical, socio-economic, and geopolitical factors has significantly shaped the migratory patterns of Guatemalans in recent times.

Table 1. Total Number of Guatemalan Emigrants (2000 - 2020).

Year	Men	Women	Total	Percentage
2020	676.642	691.789	1.368.431	7,61%
2015	557.854	560.261	1.118.115	6,88%
2010	463.621	461.277	924.898	6,32%
2005	375.251	361.464	736.715	5,63%
2000	297.854	284.942	582.796	5,00%

From 2000 to 2020, there has been a significant increase in the number of emigrants—doubling the figures, in which women represent 50.55% of the number of emigrants, and men the 49,45%, totaling 7,61% of the Guatemalan population.

## Roots of Emigration

In examining the roots of emigration from Guatemala, it is imperative to use a methodology that captures the multifaceted dynamics at play. This analysis draws upon data sourced from the Latin American Public Opinion Project (LAPOP) at Vanderbilt University, leveraging the extensive reach of their 2019 AmericasBarometer survey—a project that used a national probability sample design of voting-age adults, with a total of 1,596 participants involving in face-to-face interviews conducted in Spanish. This provides a contemporaneous snapshot of the sentiment on the socioeconomic and political landscape in Guatemala.

## Considering Emigration

This survey offers revealing insights into the aspirations and intentions of Guatemalans with regard to emigration. A significant 20% of the participants, expressed their inclination to leave the country and relocate permanently. This statistic underscores the magnitude of the emigration contemplation, signifying that as many as 2 out of every 10 Guatemalans are potentially considering emigration.

## Potential Destination Country

Among participants expressing intentions to emigrate, a clear preference emerged for the United States as their top destination. An overwhelming majority, constituting 85% of respondents, identified the United States as their desired country for potential relocation, while the remaining 15% expressed interest for Mexico.

## Reasons for Considering Emigration

Scholars suggest that behind the accelerated migration from Guatemala, several factors contributed to the decision-making process to migrate. Smith (2006) indicates that



reasons for emigration have changed in Guatemala over the years. He found that reasons for emigration shifted from asylum-seeking in the 1900s—during the civil war—to a quest for economic prosperity—after the conflict ended. Recent studies claim that in the last two decades, there are several reasons for considering emigration, including pervasive social violence (Jonas, 2013), poverty (Barre, 2011), environmental disasters (Bolanos-Guerra, 2021), and femicide and violence against women (Asakura and Torres Falcon, 2013). Yet, political corruption has not been studied independently as a reason for emigration in Guatemala.

In this survey, participants suggested several reasons for considering emigration. Nearly 80 percent of them mentioned economic hardship as the main reason for emigration. Others mentioned insecurity, corruption, hunger, discrimination, and natural disasters to be the main reasons for emigration—in order of relevance (See Figure 7).

Reasons for Considering Emigration from Guatemala (2019)

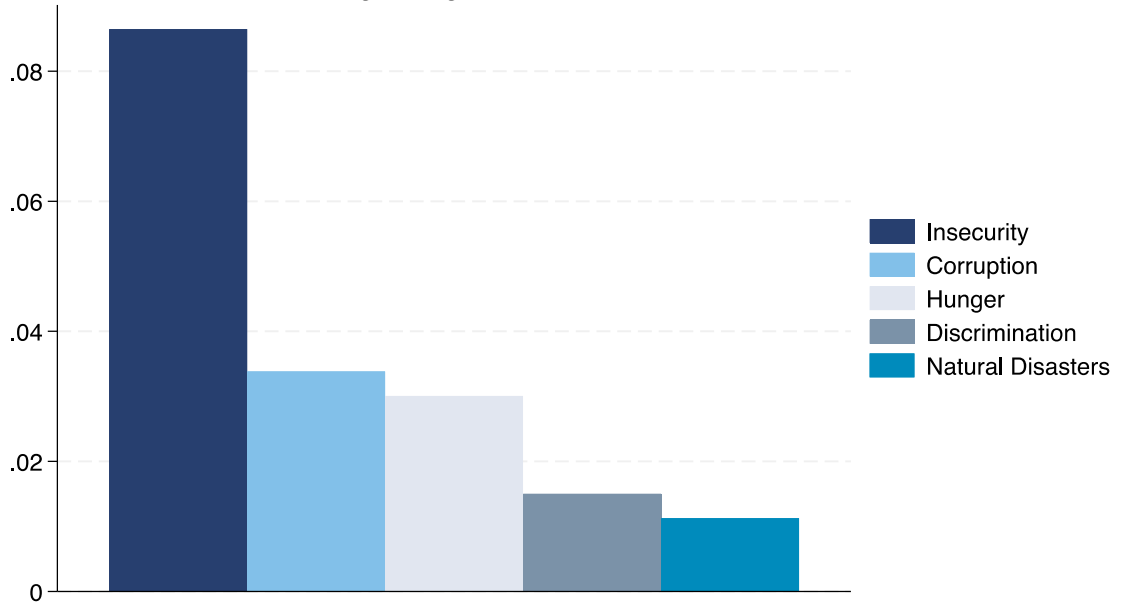


Figure 7. Reasons for Considering Emigration from Guatemala (2019).

### Insecurity

Insecurity is reportedly a reason for emigration from Guatemala—a country with a complex and enduring history of organized crime. In the aftermath of the civil war, a transformation in the nature of violence occurred, characterized by the proliferation of gangs and transnational drug trafficking. Guatemala still stands among the world’s most violence-ridden countries, with an alarming level of impunity perpetuating its cycle of insecurity and brutality. Urban areas, in particular, with gangs responsible for a substantial portion of the violence. According to a 2017 report, these groups account for a staggering 41% of homicides in the nation (Dudley, 2017). The epicenter of this gang-related violence is primarily concentrated in the department of Guatemala, the country’s principal urban heart. At the forefront of this menace are the “Mara Salvatrucha” and

“Barrio 18,” two highly influential gangs financing their operations through extortion and drug trade. Their violence, stemming from territorial disputes, clashes with law enforcement, and acts of reprisal against witnesses or non-compliance, further contribute to the pervasive sense of insecurity.

The detrimental consequences of crime and violence in Guatemala have been far-reaching. They breed a climate of instability, significant financial burdens, and psychological repercussions that often lead to considering emigration. Additionally, the prevalence of crime and violence creates fertile ground for corruption within public spheres, fostering an environment where impunity thrives. This, in turn, engenders widespread mistrust in the justice system and its associated institutions.

### Hunger

Chronic malnutrition has been a sensitive problem in Guatemala. The enduring issue of hunger in this country stands as a pivotal determinant in migration decisions. “In Guatemala, 49.8% of children suffer from chronic malnutrition,” (USAID, 2023) equating to one in every two children. This alarming statistic places Guatemala at the forefront of Latin America and sixth globally in terms of child malnutrition. These figures reveal a dire situation for youth, further compounded by an infant mortality rate of 3.4%. Chronic malnutrition emerges as the foremost challenge, with direct implications for the health and well-being of the youngest population. Leading causes of infant mortality include pneumonia and acute diarrheal diseases, with a significant 54% of these cases associated, to some degree, with malnutrition—these cases are more prominent within the rural and indigenous communities (UNICEF, 2020).

## Discrimination

Discrimination constitutes a deeply ingrained issue within Guatemala, and as reported by participants, one of the main reasons to emigrate. Discrimination has persisted mainly against indigenous communities, including the Maya, Xinka, and Garífuna. These communities face systemic inequality and exclusion, stemming from prevailing racism and structural discrimination. Throughout history, being indigenous in Guatemala has carried negative societal connotations, relegating them to an extremely unequal hierarchical relationship (CIDH Guatemala, 2019). This discrimination manifests in the lack of respect for and enforcement of their human rights, consequently subjecting them to conditions of poverty and extreme poverty.

The structural challenges stemming from colonization have impeded the path to recognizing indigenous peoples as collective rights-holders, hindering the full realization of their rights. In a report by the Organization of American States (OAS), 75% of the indigenous population lives in poverty and there has been a staggering 400% increase in femicide rates among indigenous women from 2000 to 2010. As a response, many consider emigrating from Guatemala (OAS, 2020).

## Natural Disasters

Natural disasters have significantly contributed to considering emigration from Guatemala. Hurricane Mitch in 1998 caused extensive damage, with estimated losses of \$5 billion. In 2010, the eruption of the Pacaya volcano and Tropical Storm Agatha led to evacuations and agricultural losses, reducing the GDP by about 0.5%. In 2022, Tropical Storm Julia affected 1.3 million Guatemalans. At a macro level, these incidents impacted the country's economic momentum, while at a micro level, they affected the purchasing

power of thousands of families, particularly those reliant on agriculture for their livelihoods. These events may incentivize emigration as a means of seeking more secure living conditions.

### Corruption as a Driver for Emigration in Guatemala

Corruption is one of the main reasons for considering emigration—the second highest reason—as reported by participants. This translates to a common sentiment of perceiving high levels of corruption in the country and seeking a response to alleviate the situation, which in most cases is emigration. This individual data confirms the hypothesis that corruption influences emigration decisions. Guatemala’s Corruption Perception Index reinforces this perception, consistently ranking among the lowest in the region. In fact, the index recorded its highest value, indicating lower corruption levels, at 33, which was still lower than the regional average in 2012, and its lowest, signifying a more corrupt environment, at 24 in 2022.

### Corruption Perception in Guatemala

Participants of the 2019 AmericasBarometer survey also reported their perception of corruption levels within the political sphere. Figure 8 shows the perceived levels of corruption among politicians. Nearly half of the participants indicate that corruption is very spread among politicians and less than 10 percent believe that corruption is not widespread at all.

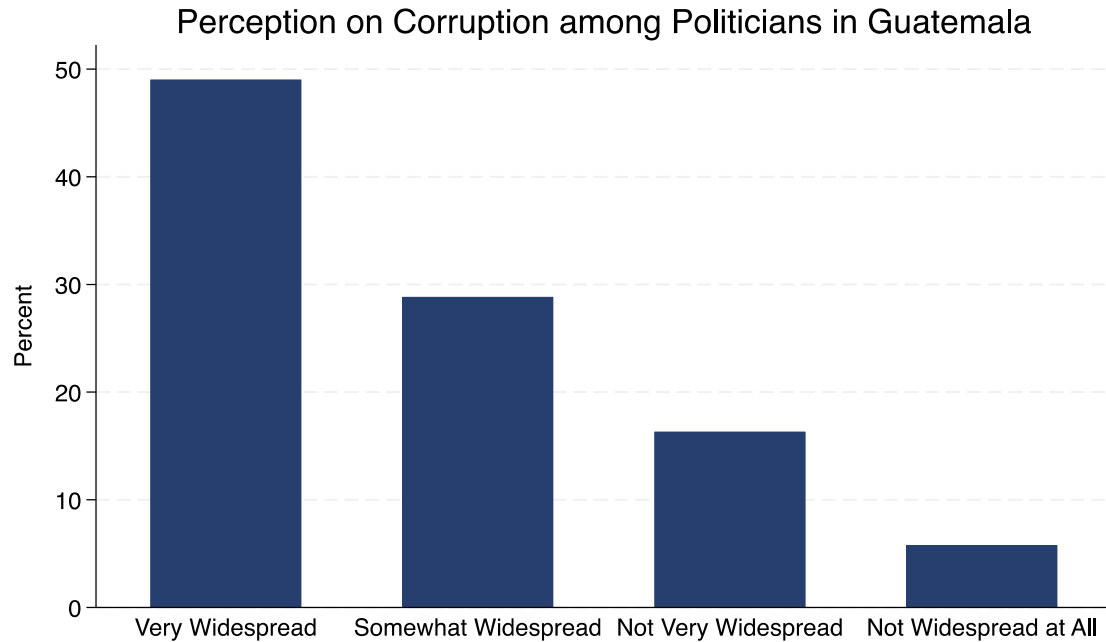


Figure 8. Perception of Corruption among Politicians in Guatemala.

More specifically, Table 2 presents data on the perceived prevalence of the number of corrupt politicians in Guatemala. Less than 3 percent of respondents believe that there are no corrupt politicians within the political landscape. Conversely, the majority, nearly 90 percent claim that more than half of the politicians are corrupt. From this, 40 percent, particularly, assert a prevailing sentiment that *all* politicians are corrupt; signifying that 9 out of 10 Guatemalans believe that more than half of politicians in the country are corrupt. This profound skepticism regarding political integrity carries far-reaching implications for the functioning of democratic institutions and civic engagement. When such a prevalent belief system contends that every political representative is tainted by corruption, it engenders an atmosphere wherein public trust in governmental institutions is notably deficient. This precipitous decline in trust not only

constitutes a substantial challenge to the efficacy of governance but also demonstrates that people do not expect an efficient government; thus, participants reported corruption to be one of the main reasons to consider emigrating.

Table 2. Amount of Corrupt Politicians in Guatemala.

Amount of Corrupt Politicians in Guatemala	Percent	Cumulative
None	2.32	2.32
Less than half of them	8.43	10.75
Half of them	20.97	31.73
More than half of them	31.82	63.54
All	36.46	100.00

#### Gender Perceptions on Political Corruption

Given the prevailing perception that the vast majority of politicians are corrupt, the survey also offers data on gender differentials in corrupt practices, which provides a critical lens to analyze societal perceptions regarding the correlation between gender and corrupt practices. An overwhelming majority, approximately 83%, assert that both genders are equally prone to engaging in corrupt behavior. This perspective reflects a discerning awareness of the nuanced nature of corruption, recognizing that it is not exclusive to any particular gender. However, it is noteworthy that a substantial minority, constituting 15 percent of participants, assert a perceived gender bias, positing that males exhibit a greater proclivity towards corrupt conduct. Conversely, only one percent of respondents express that women are more disposed to engage in corrupt activities. These varying viewpoints underscore the complexity of societal perceptions concerning gender

and corruption. Such nuanced perspectives hold relevance for the broader discourse on gender dynamics in the political sphere—where women are still underrepresented.

### Understanding the Profile of Corruption-Driven Emigrants

#### Geographical Distribution

An analysis of the demographics among respondents indicating corruption as their primary motive for emigration reveals an intriguing disparity between urban and rural origins. Nearly 80 percent of participants attributing corruption as their main incentive for emigration are from Guatemala’s rural areas, while only 20 percent stem from urban sectors (See Figure 9). This notable disproportion underscores the divergent impact of corruption across different sectors of the country, with rural regions significantly bearing the brunt. Such a significant representation from rural areas suggests that the prevalence of corruption affects these regions, compelling individuals to cite corruption as their primary motivation for seeking emigration. Further analysis is required to assess whether corruption scandals at the national level affect disproportionately to rural communities or if their experience of political corruption is linked directly to the local governments.



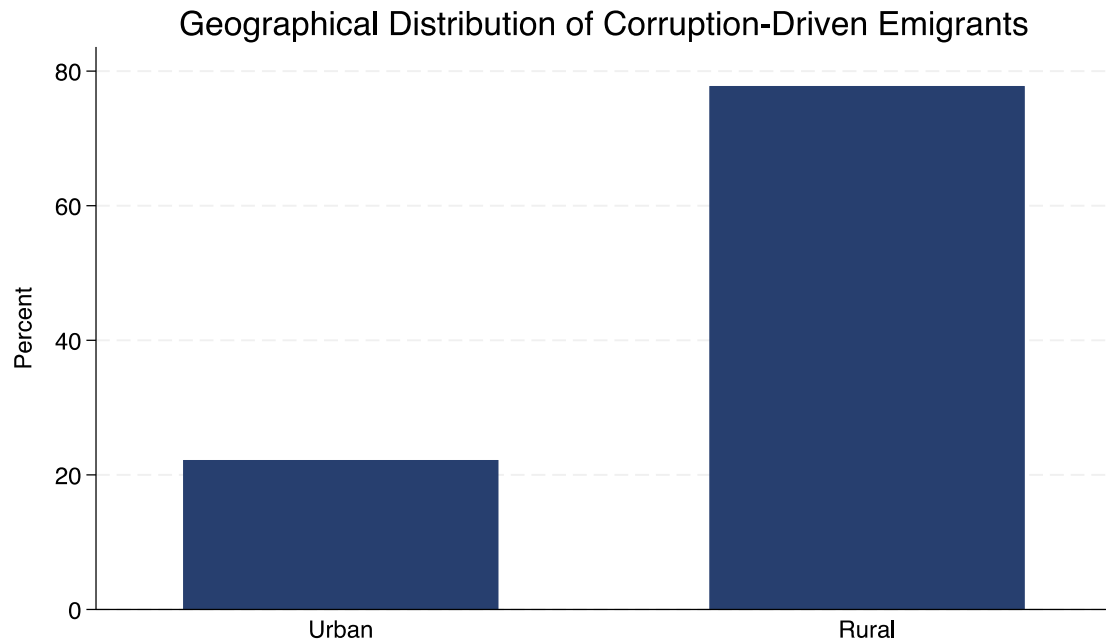


Figure 9. Geographical Distribution of Corruption-Driven Emigrants

#### Educational Distribution

In examining the education levels among respondents who identified corruption as their primary motivation for emigration, a visible pattern emerges. Approximately 30 percent completed their education at the elementary school level, while nearly half, comprising around 50 percent, attained a high school diploma, and more than 20 percent possess some level of college education. None of them, however, graduated from college (See Figure 10). This educational profile suggests that those citing corruption as their main incentive for emigration generally have attained a certain level of education. The most prevalent group comprises individuals who completed high school, signifying a critical juncture where post-graduation sentiments might intertwine with the impact of corruption. It appears that upon completing high school, there might be a prevalent

sentiment among these individuals that, due to corruption, they perceive a dearth of opportunities in Guatemala. This perception of limited prospects could influence their decision to seek opportunities elsewhere. Even among those with some college-level education, the prevalent sentiment of corruption hindering opportunities may contribute to their consideration of emigration. The correlation between educational attainment and the perception of widespread corruption fosters a prevailing sense of discouragement among individuals concerning the lack of opportunities and uncertain future in their home country.

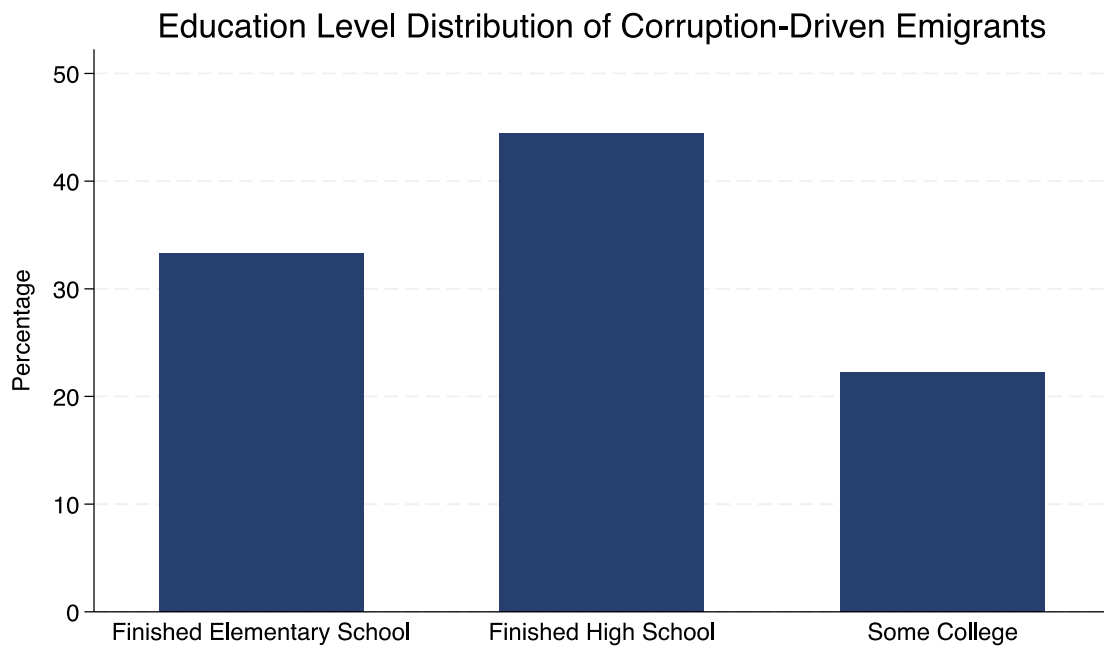


Figure 10. Education Level Distribution of Corruption-Driven Emigrants

## Occupational Distribution

Analyzing the occupational distribution among respondents who identified corruption as their primary motivation for emigration reveals an intriguing pattern: none of the participants were unemployed at the time of the survey. However, all of them reported to be from middle to low-income families. Nearly 70 percent were employed in either the public or private sector, while approximately 20 percent were occupied with home responsibilities, and the remaining 10 percent were students (See Figure 11). This distinctive observation suggests that economic incentives might not be the predominant driving force behind their decision to emigrate. Instead, these individuals seem to prioritize the impact of corruption as a crucial factor compelling them to consider leaving Guatemala. This trend underscores the perceived influence of corruption as a significant variable influencing emigration decisions, outweighing purely economic considerations. Moreover, the diverse range of occupations, including public servants, informal employees, business owners, and others highlights the complexity of motivations driving emigration, with the perceived impact of corruption emerging as a dominant and pervasive factor shaping decisions across various occupational groups.

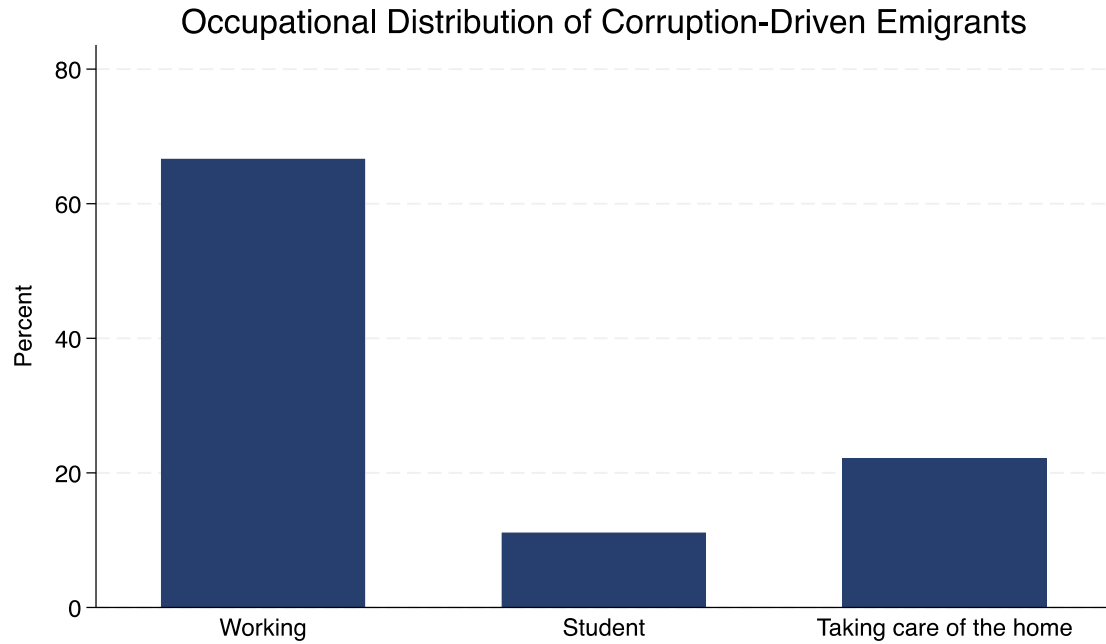


Figure 11. Occupational Distribution of Corruption-Driven Emigrants.

Channels Used to Learn about Political News

Participants claim the usage of TV as their main outlet for receiving political news, seconded by WhatsApp—a widely used social media around Latin America, radio, and newspapers. The following table contains information on Corruption Scandals around Guatemala collected via these outlets.

Table 3. Major Corruption Scandals in Guatemala.

Year	Entity/Politician	Corruption Case
2014	Alfonso Portillo Cabrera, Former President of Guatemala Ministries of State Public Officers	Admits guilt for receiving \$2.5 million from Taiwan in exchange for diplomatic recognition. 32 administrative sanctions were issued for mishandling of funds (TI, 2014). 137 embezzlement trials opened (Office of the Attorney General)
2015	Roxana Baldetti, Former Vice President Otto Perez Molina, Former President	Sent to prison for “La Linea” corruption scandal. Bribery system and customs fraud. Resigned after corruption scandal “La Linea”
2016	Five Ministers; Manuel Lopez, Mauricio Lopez, Alejandro Sinibaldi, Erick Archila, Ulises Anzuelo.	Odebrecht Scandal, received 17.9M in bribes.
2017	Jimmy Morales, President	Investigated for Odebrecht Scandal
2018	Jimmy Morales, President	Dissolves operations of the CICIG (The International Commission against Impunity in Guatemala)

Year	Entity/Politician	Corruption Case
	Alvaro Colom Caballeros, Former President along with nine Ministers of State	Transurbano Corruption Scandal, Public Transit, Embezzlement.
2019	Nineteen public officers were charged and detained	Ministry of Health, Embezzlement 17M
	Sandra Torres, Former First Lady	Electoral Fraud, Embezzlement
	Jimmy Morales, President	Investigated for receiving bribes, 250mil
	Marroquin de Morales, First Lady	

Table 3 provides a comprehensive overview of major corruption scandals that have faced Guatemala. The year 2014 witnessed a major corruption scandal, initiating nearly 200 trials against embezzlement cases. The subsequent year, 2015, marked a pivotal moment in Guatemalan politics, as Jimmy Morales assumed the presidency, campaigning on a platform committed to combating corruption after both the President and Vice President stepped down amidst a corruption scandal.

In 2016, Guatemala once again found itself embroiled in corruption cases, leading to the incarceration of five ministers, who were revealed to have received a staggering 17.9 million dollars in bribes during the Odebrecht scandal. The year 2017 saw an ongoing investigation into the President's involvement in the Odebrecht scandal, although conclusive evidence of his participation remained elusive. Subsequently, the years 2018

and 2019 proved to be particularly challenging for Guatemala. The sole institution dedicated to combating corruption was disbanded by President Jimmy Morales—who was accused of corruption. During this period, a former president and nine ministers were charged with embezzlement related to a public transit project. In 2019, 19 members of the Ministry of Health were also charged with embezzlement.

These events collectively underscore the gravity of the corruption challenges faced by Guatemala, a nation deeply affected by both regional and domestic corruption scandals, each carrying significant consequences for its governance and societal well-being. In fact, the palpable discontent surrounding corruption was seen in a recent incident in 2020, when thousands of people set the building of Congress on fire while protesting against corruption and budget cuts in front of the National Palace in Guatemala City (The Guardian, 2020). Protestors had posters with messages such as “Where is the money?” “Corrupt Politicians must Leave” (El Mundo, 2020), and in another protest in 2021, where the message was “Corruption Generates Migration” (Prensa Comunitaria, 2021).

#### Corruption Scandals as a Shock Element on Emigration Trends

Following these series of corruption scandals, individuals may consider emigration as a means to secure stability and economic opportunities elsewhere—as reported by survey respondents. The diminishing trust in governmental institutions, coupled with the economic uncertainties linked to corruption, significantly influences migration decisions. This correlation is corroborated by Figure 12 and 13, the regression diagnostic graphs, which shows a clear correlation between the frequency of corruption scandals and emigration rates, implying that an increase in corruption scandals as a

‘shock element’ corresponds with a rise in emigration during the year the scandal occurred. This empirical evidence emphasizes the substantial impact of corruption on migration trends.

### Non-Immigrant Flow and Corruption Scandals

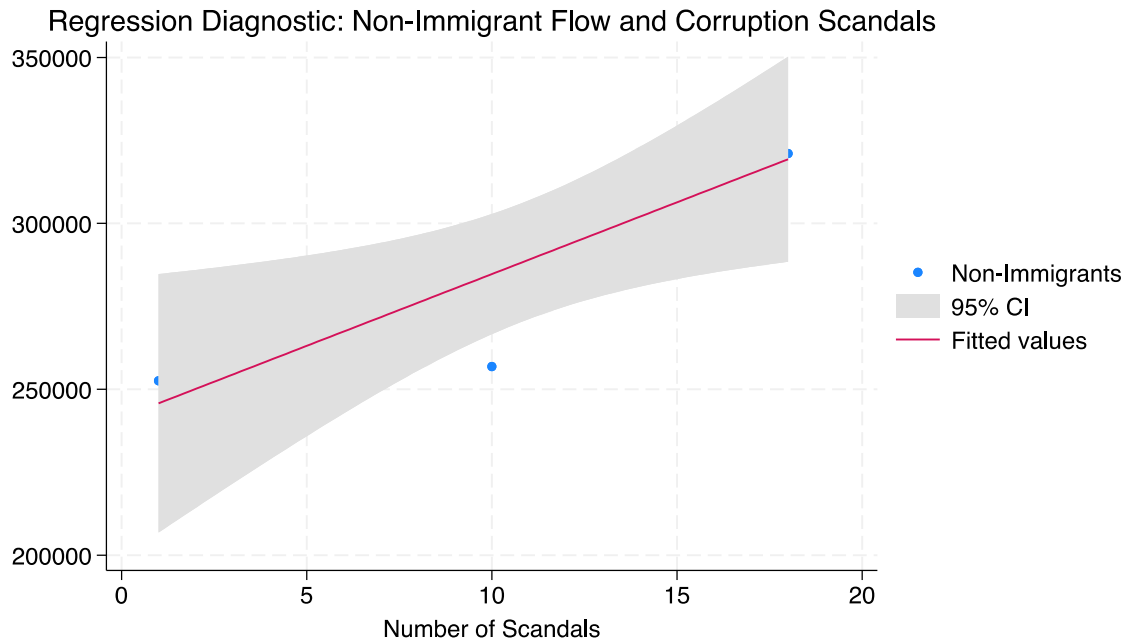


Figure 12. Regression Diagnostic: Non-Immigrant Flow and Corruption Scandals.

Figure 12 indicates a statistically significant relationship between the number of non-immigrant migrants from Guatemala to the United States and the variable representing corruption scandals in Guatemala. The coefficient of 4,325.78 ( $t = 3.41$ ,  $p = 0.027$ ) suggests a strong positive association. For each additional unit increase in corruption scandals, the estimated influx of non-immigrant migrants increases by around 4,326 individuals.



## Unauthorized Migration Flow and Corruption Scandals

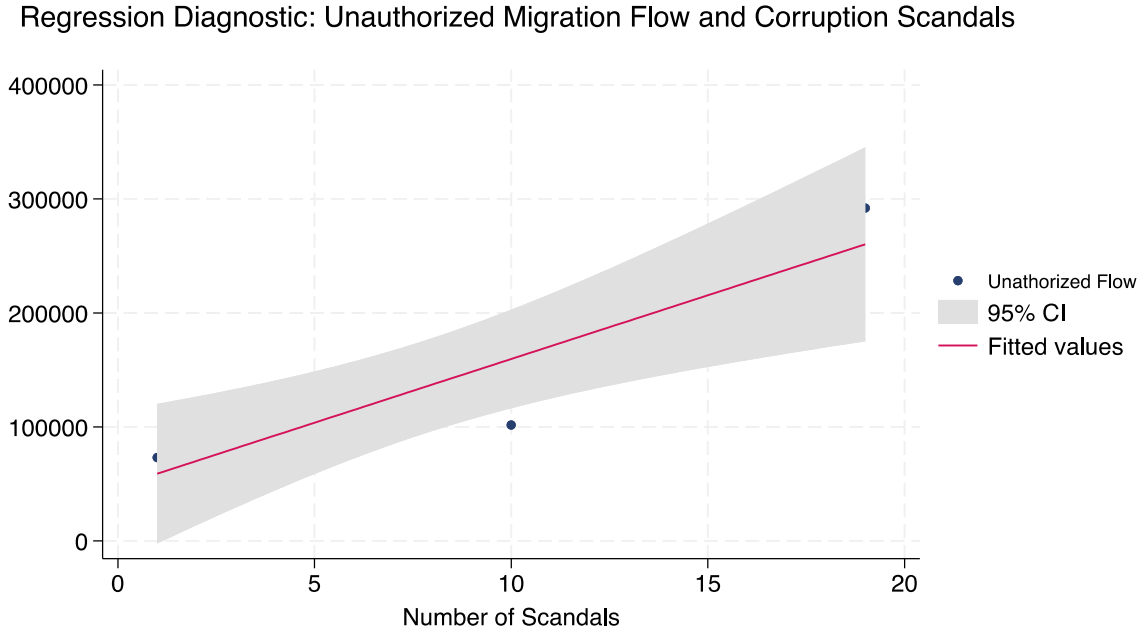


Figure 13. Regression Diagnostic: Unauthorized Migration Flow and Corruption Scandals.

The regression analysis demonstrates a positive relationship between the number of unauthorized migrants coming to the United States from Guatemala and the number of corruption scandals. For each incremental increase in the occurrences of corruption scandals, there is an expected rise in the number of unauthorized migrants. This correlation, indicated by the coefficient of 11,182.45 ( $t = 4.64$ ,  $p = 0.010$ ), suggests a notable association wherein a higher incidence of corruption scandals in Guatemala is linked with an increase in the influx of unauthorized migrants to the United States.

The case of Guatemala has explained that corruption is a driver of migration and that corruption scandals act as a “shock element” that weighs on an individual’s decision to emigrate. Participants reported that one of the main reasons for them to be considering emigration is corruption, and as such have indicated that corruption is widely spread among politicians—which was proven with each major scandal presented; where the Executive, Legislative, and Judicial were involved with corruption.

## Chapter VII.

### Conclusion

This study provides an in-depth analysis of the intricate dynamics between political corruption and migration in Latin America. It advances a nuanced understanding of how corruption influences emigration patterns. Empirical evidence confirms the hypotheses, highlighting the pivotal role played by corruption in shaping migration decisions.

In the first part of this study, distinctive trends among two different migrant categories are shown. Non-immigrants, encompassing tourists, business travelers, and students, display an increased tendency to emigrate in response to heightened corruption levels and improved GDP per capita in their country of origin, highlighting the significance of economic and governance determinants. This trend aligns with the behavior of individuals from relatively higher income brackets who seek opportunities abroad, particularly in the United States. These individuals are more inclined to migrate when economic conditions, including GDP per capita, improve in their country of origin. Additionally, the presence of corruption acts as a catalyst, pushing them towards seeking opportunities abroad where governance and economic conditions may be more favorable.

Conversely, unauthorized migrants, predominantly hailing from medium to low-income backgrounds, exhibit a distinct set of migration determinants. For this group, a reduction in corruption levels and an increase in minimum wage serve as deterrents to emigration. This finding highlights the importance of economic stability and improved working conditions in their decision-making process. Unauthorized migrants are more

likely to remain in their home country when economic, social, and political conditions show signs of improvement, rendering emigration less compelling.

Demographic proximity is also relevant in emigration decisions. Both non-immigrants and unauthorized migrants exhibit a diminished inclination to emigrate as the distance between their country of origin and the desired destination decreases, underscoring the importance of geographical factors in migration decision-making.

A key contribution of this study lies in the second part of this study with the introduction of the “shock element” concept into migration decision-making. Corruption scandals act as a mechanism that prompts individuals to seriously consider emigration. Across Latin America, prominent corruption scandals such as the far-reaching Lava Jato, the Odebrecht revelations, the Panama Papers exposé, and the FIFA Scandal, have served as potent catalysts for migration surges. These scandals, regional in scope, have played a pivotal role in shaping migration trends. Countries embroiled in these crises experienced increases in emigration levels within the year in which the corruption scandal occurred, underscoring the direct influence of corruption on individuals’ decisions to seek opportunities abroad.

The case study of Guatemala further exemplifies this phenomenon, with internal corruption cases exacerbating emigration pressures. Individual-level survey data on the motives for migration help to show the important role of corruption scandals, in driving migration patterns. There is a common profile for respondents indicating corruption as their primary motive for emigration. It seems that political corruption has heightened effects that ultimately drive emigration decisions on working people from rural areas,

with some level of formal education, mostly high school graduates. For these demographics, corruption scandals are a strong incentive for emigration.

Future avenues of research in order to understand this relationship can include focus groups of individuals with intentions to migrate; individual interviews, and in-depth media analysis. Given that the main challenge in this study has been measuring corruption scandals, additional data needs to be collected to continue to strengthen the hypothesis, and further analysis is required to navigate the individual subnational levels of corruption and its effects on residents.

This study has explored the tension between corruption and migration, marking a significant step in understanding their complex relationship. While this is the first attempt to measure how corruption scandals influence emigration decisions, this study lays the groundwork for future research. It might particularly serve as a base for studies on how anti-corruption measures could potentially bolster migration decisions in the short term, given the revelation of numerous corruption scandals. In the long term, however, after having reduced corruption levels and scandals due to anti-corruption practices, emigration decisions driven by corruption might be reduced.

Appendix 1.

Table 4. Latin American countries involved with the Lava Jato scandal.

Country	President Incumbent	Political Figures
Argentina		Planning Minister Julio de Vido (charged, indicted again, at least one case ongoing) Energy Secretary Daniel Cameron (charged, case ongoing) Intelligence Chief Gustavo Arribas (investigated)
Bolivia	President Carlos Mesa (implicated, investigated)  President Eduardo Rodriguez Veltze (implicated, investigated)	Energy Minister Carlos Morales (arrested, charged)
Brazil	President Luiz Inacio Lula da Silva (convicted, imprisoned, convictions annulled, bias found in case)  President Dilma Rousseff (Lava Jato figured in impeachment, though not personally implicated)  President Michel Temer (arrested more than once, investigated)	Chamber of Deputies President Eduardo Cunha (convicted, imprisoned)  Governor Sergio Cabral (convicted, imprisoned)  Campaign strategist Joao Santana (convicted)
Chile		
Colombia	President Juan Manuel Santos (investigated by Congress, admitted campaign received illegal funds, accused again)	Transportation Vice-Minister Gabriel Garcia Morales (fined, imprisoned, later placed under house arrest)  Infrastructure chief Luis Fernando Andrade (resigned, investigated, charged)

Country	President Incumbent	Political Figures
		Senator Otto Nicolas Bula Bula (convicted, imprisoned, later placed under house arrest)
		Senator Bernardo Miguel Elias Vidal (convicted, imprisoned)
		Campaign manager Roberto Prieto (imprisoned)
Costa Rica		
Ecuador	President Rafael Correa (investigated, convicted for “psychic influence”)	Vice President Jorge Glas (convicted, imprisoned, stripped of office, released in August 2023)
		Transport and Public Works Minister Maria de los Angeles Duarte (convicted, living in Argentine embassy)
El Salvador	President Mauricio Funes (investigated, living in Nicaragua)	First Lady Regina Canas (sentenced to prison)
Guatemala		Infrastructure Minister Alejandro Sinibaldi (case ongoing)
		Presidential candidate Manuel Baldizon (arrested, imprisoned in U.S.)
Honduras		
Mexico	President Carlos Salinas de Gortari (accused)	Senator Jorge Luis Lavalle Maury (investigated, placed in preventive detention)
	President Felipe Calderon (accused, investigated)	
	President Enrique Pena Nieto (accused, investigated)	
Nicaragua		
Panama	President Ricardo Martinelli (investigated, charged in Spain)	Finance Minister Frank De Lima (investigated, charged)
	President Juan Carlos Varela (charged)	Public Works Minister Jaime Ford (arrested, charged, released on bail)

Country	President Incumbent	Political Figures
		<p>Presidency Minister Demetrio Papadimitriu (arrested, charged, released on bail)</p> <p>Luis Enrique Martinelli Linares, son of President Martinelli (arrested, charged in U.S., facing extradition)</p> <p>Ricardo Alberto Martinelli Linares, son of President Martinelli (arrested, charged in U.S., facing extradition)</p>
Paraguay	President Horacio Cartes (charged, extradition requested by Brazil)	
Peru	<p>President Alejandro Toledo (imprisoned in the U.S., later placed under house arrest, facing extradition)</p> <p>President Alan Garcia (died by suicide as authorities sought his arrest)</p> <p>President Ollanta Humala (imprisoned, case ongoing)</p> <p>President Pedro Pablo Kuczynski (resigned before impeachment, imprisoned, later placed under house arrest)</p> <p>President Martin Vizcarra (investigated, ousted following allegations tied to Odebrecht)</p>	Politician Keiko Fujimori (detained twice, running for president)
Uruguay		



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