

Threats to Human Security and Migration in Guatemala

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Abstract

This study uses survey data gathered in Guatemala in 2006, 2008, 2010, and 2012 to investigate the effects of crime victimization, personal insecurity, family income, personal economic situation, and national economic situation on Guatemalans' intentions to migrate to another country. Findings from a logistic regression model suggest that Guatemalans who have been victims of crime and live in neighborhoods controlled by gangs are more likely to consider leaving for another country. The study also finds that a low total monthly household income and negative perceptions of the national economy increase intentions to migrate. Given these results, this study discusses important policy implications and offers suggestions for future research.

Keywords: Guatemala, crime victimization, personal insecurity, family income, personal economic situation, national economic situation, migration

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Introduction

From 1960 to 1996, Guatemala experienced a violent period of civil war between leftist insurgents and the Guatemalan army, which forced tens of thousands of Guatemalans to migrate to other countries. The war left almost 200,000 Guatemalans killed or disappeared (as cited in Chamargwala & Moran, 2008). Beginning in the 1970s when the Guatemalan Army began targeting the Mayan people in the western highlands—coupled with a massive earthquake in 1976—, thousands of Guatemalans left for neighboring Central American countries and the United States, including around 200,000 who fled to southern Mexico (Jonas, 2013). The number of Guatemalans who entered the United States legally and illegally rose from 13,785 in 1977 to 45,917 in 1989, decreasing to 22,081 in 1996 when the peace was signed (Jonas, 2013).

After the war, increasing criminal violence from the proliferation of gangs, drug-trafficking organizations, and other organized crime groups, and severe, ongoing socioeconomic problems have continued to force many Guatemalans to migrate to other countries, including the United States. In 2011, out of the 3.1 million Central Americans living in the United States, 850,900 (28 percent) were from Guatemala (Stoney & Batalova, 2013). Since 2013, the violence in Guatemala and Central America's Northern Triangle—i.e., Guatemala, El Salvador, and Honduras—has resulted in an exodus of thousands of unaccompanied minors fleeing for the United States (Renwick, 2015).

While migration as a result of political violence and repression is not a new phenomenon and has been previously studied in Latin America (see, Wood, Gibson, & Ribeiro, (2010), for discussion), empirical research on the effects of the more common and pervasive sources of personal insecurity in neighborhoods—as a result of increasing criminal activity—on migration

in Guatemala is lacking. While some scholars have empirically tested the relationship between violence and migration during the war years (e.g., Morrison & May, 1994), to the authors' best knowledge, no recent study has investigated the relationship between crime, insecurity, and migration in Guatemala after the civil war. Wood, Gibson, and Ribeiro (2010) investigated the effect of crime victimization on intentions to migrate in 17 Latin American countries; Hiskey, Malone, and Orcés (2014a) investigated whether crime victimization and insecurity drive intentions to migrate in Central America.

Moreover, despite widespread poverty and inequality in Guatemala, empirical research on the effects of economic factors—i.e., family income, personal economic situation, and national economic situation—on migration is lacking. In fact, in the last 30 years, migration in Guatemala has received little scholarly attention (Garni, 2010).

In an effort to contribute to the literature on migration in Guatemala, this study uses AmericasBarometer surveys of Guatemalan respondents gathered in 2006, 2008, 2010, and 2012 to answer the following research question: what are the effects of crime victimization, personal insecurity, family income, personal economic situation, and national economic situation on Guatemalans' intentions to migrate to another country? Given the lack of recent empirical research available, this study seeks to contribute to the academic understanding of migration in Guatemala. This investigation seeks to bridge the gap between increasing migration in the country and its systematic empirical investigation.

This study has important policy implications. While some scholars find that the money migrants send back home—i.e., remittances—contributes to economic growth and poverty reduction in some developing countries (e.g., Adams Jr. & Page, 2005; Calderón, Fajnzylber, &

Lopez, 2008), migration is negatively affecting community and economic development, as well as social and cultural outcomes in Guatemala (Taylor, Moran-Taylor, & Ruiz, 2006; Moran-Taylor, 2008). Guatemala is also losing crucial human talent as a result of migration. Further, Guatemala has become a remittance-dependent country, where such remittances are mainly used for consumption (Taylor et al., 2006) and seldom used for productive investment—or to benefit the community (Taylor et al., 2006). By empirically investigating the relationship between different threats to human security and migration in Guatemala, this study may provide evidence to inform national and transnational policy efforts—e.g., the Plan for the Alliance for Prosperity in the Northern Triangle funded by the U.S. government—aimed at reducing migration in the country.

The paper proceeds as follows. First, it reviews relevant literature on migration; it also discusses crime, personal insecurity, economic factors, and migration in Guatemala. Next, it describes the data and methods employed. Further, it presents the results from the statistical analysis. Finally, the study concludes with a discussion of policy implications, limitations, and suggestions for future research.

Literature Review

Migration

The concept of migration is multidimensional and difficult to define (Arango, 1985). It involves crossing the boundaries of a political or administrative unit for certain period of time (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2016). Migration also involves the movement of refugees, displaced and uprooted people, and economic migrants (UNESCO, 2016).

Threats to Human Security

Human security refers to freedom from fear—e.g., violence—and freedom from want—e.g., economic suffering, poverty (United Nations Development Program [UNDP], 1994). It also refers to being safe from chronic threats and being protected from sudden and hurtful disruptions in daily life (UNDP, 1994). Threats to human security can be personal, economic, and political, among others. Personal security—i.e., physical safety from violence and crime (UNDP, 1994)—; economic security—i.e., an assured basic livelihood obtained from work and other resources and safety nets (UNDP, 1994)—; and political security can force people to migrate (Vietti & Scribner, 2013).

Economic Factors and Migration

According to neoclassical theory, migration takes place when people who seek to improve their well-being decide to move to a place where the expected rewards (e.g., income) from their labor will be higher than the ones they receive at home, in a manner that outweighs the expected costs associated with the move (Arango, 2000). Nevertheless, this is far from being the entire story (see, Hiskey et al., (2014b), for discussion). In fact, in their study of Mexican-U.S. migration, Massey and Espinosa (1997) found empirical evidence to suggest that the income differential between sending and receiving countries is not a major factor explaining migration (e.g., Massey & Espinosa, 1997).

According to the new economics of labor migration, people migrate not to maximize income, but as part of a family strategy aimed at diversifying sources of income to minimize threats to such income—e.g., unemployment, loss of income, low income, or fluctuations in the national economy (Arango, 2000; Massey & Espinosa, 1997). Consistent with the tenets of the

new economics of labor migration, Massey and Espinosa (1997) found the growing economic insecurity in Mexico resulting from “wrenching economic transformations” (p. 990) to be one of the main drivers of migration.

From the above discussion, one can say that economic factors play an important role in people’s migration intentions. For example, Wood, Gibson, and Ribeiro (2010) found people in Latin America who had a negative view of their personal economic situation to be more inclined to consider migrating to the United States. Hiskey and his colleagues (2014b) analyzed survey data from 22 Latin American countries for 2008 and found people who had a low income and a negative view of their individual economic situation to be more likely to consider migrating to another country. Hiskey and his colleagues (2014a) also found people in Central America who had a negative view of both their individual and the country’s economic situation to be more likely to consider leaving for another country.

Crime, Personal Insecurity, and Migration

Despite the aforementioned, it is important to keep in mind that people migrate for non-economic reasons as well. People migrate even if it means receiving less income, if the risk of being a victim of violence diminishes as a result (see, Engel & Ibáñez, 2007, for discussion). Similarly, people migrate when they do not feel secure. They may be more inclined to consider leaving when they do not feel safe walking down the street of their neighborhood (Hiskey et al., 2014b).

Empirical studies suggest that both crime victimization and insecurity have a positive impact on people’s migration intentions. Charles Wood and his colleagues (2010) found the probability of considering migration to be significantly higher for those individuals reporting that

they, or a family member, had been victims of crime. Hiskey and his colleagues (2014a) found crime victimization and perception of insecurity to have a positive impact on people's intentions to migrate.

Threats to Human Security and Migration in Guatemala

Guatemala has been plagued with violence since colonial times. Acting on behalf of the Hispanic and European elite, the state has used its monopoly over the use of force to control the Mayan and mestizo majority (Morrison & May, 1994). Violence has been used “on the rural popular sector ... to force migration and thus manipulate the agricultural labor force and the system of land tenure” (Morris & May, 1994, p. 113). During Guatemala's civil war (1960-1996), according to the Commission for Historical Clarification and the Recovery of Historical Memory Project, almost 200,000 Guatemalans were killed or disappeared (as cited in Chamrabagwala & Moran, 2008). The political violence in Guatemala during this time forced over 400,000 Guatemalans to flee the country (Smith, 2006).

Today, Guatemala is one of the most violent countries in the world (Renwick, 2015). Since the signing of the Peace Accords in 1996, crime and violence in Guatemala have continued to increase as a result of the proliferation of drug cartels, gangs, and other criminal organizations. In 2012, the homicide rate in Guatemala was 40 homicides per 100,000 people, while in the United States was five (United Nations Office on Drugs and Crime [UNODC], 2013). In 2014, 17% of Guatemalans reported having been victims of crime—i.e., robbery, burglary, assault, fraud, blackmail, extortion, violent threats—in the previous year (Azpuru & Zechmeister, 2014).

While many Guatemalans are victims of crime, many more feel unsafe in their communities. In 2014, 59% reported feeling insecure in their neighborhood and 31% indicated that gangs affected their neighborhoods (Azpuru & Zechmeister, 2014).

Further, Guatemala is one of the poorest, most unequal countries in the Western hemisphere. In 2011, 54% of Guatemalans lived below the national poverty line (World Bank, 2016a) and thus were economically insecure. Also, as of 2011, 20% of the population accounted for 57% of overall consumption in Guatemala (World Bank, 2016b). Further, 2% of Guatemalans own 60% of the arable land (Taylor, 2005), and an increasing amount of jobs are insecure, unstable, part-time, and offer minimum wages and no social benefits (Jonas, 2013). Poverty and inequality of this kind set the conditions not only for violence to erupt, but also for migration in search for a better future to take place (Vietti & Scribner, 2013).

High levels of crime, violence, and poverty are some of the major factors contributing to migration in Guatemala (Kandel, Bruno, Meyer, Seelke, Taft-Morales, & Wasem, 2014). These conditions have resulted in an exodus of thousands of Guatemalans, particularly to the United States. According to data from the U.S. Census Bureau, in 2000, Guatemalans were 1.5% or 481,000 of the foreign-born population in the United States; in 2014, they were 2.2% or 916,000 (Migration Policy Institute, 2016). Recently, there has been an increasing number of unaccompanied minors who have arrived in the United States. From October 2013 to July 2015, almost 100,000 unaccompanied children fleeing the violence from Guatemala, El Salvador, and Honduras have arrived in the country (Renwick, 2015).

The Consequences of Migration in Guatemala

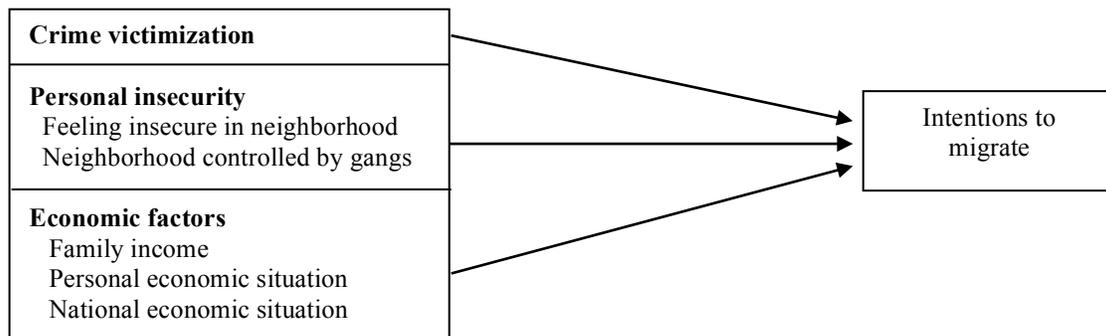
Despite the remittances Guatemalan migrants send back home, migration is negatively affecting Guatemala's community and economic development since remittances are being used for personal improvement and little money is being used for works that benefit the communities (Taylor et al., 2006). In addition, migration is contributing to the separation of Guatemalan families; this is resulting in negative social and cultural outcomes as a result of changing child rearing practices (Moran-Taylor, 2008). For example, when parents emigrate, this negatively affects boys, as they become involved in illegal activities—e.g., drugs, substance abuse, juvenile delinquency, and gangs; it also affects girls, as without close supervision, many of them become single mothers very early in life (Moran-Taylor, 2008). Further, when parents migrate, their children's academic performance dramatically declines (Moran-Taylor, 2008).

Theoretical Framework

Despite existing research on violence and migration during Guatemala's 36-year civil war, to the best knowledge of the authors, no recent study has investigated the relationship between crime victimization, personal insecurity and migration in the country after the war. Moreover, no recent empirical studies have been found on the relationship between economic factors, such as family income, personal economic situation, and national economic situation, and migration in Guatemala. The existing studies have focused on Latin America (e.g., Woods et al., 2010; Hiskey et al., 2014b) and Central America (e.g., Hiskey et al., 2014a) in general and have not investigated these relationships specifically in Guatemala. This study seeks to bridge the gap between increasing migration in the country and its lack of empirical investigation. It

also seeks to provide evidence to inform policy efforts aimed at reducing migration in Guatemala. The proposed theory is depicted in Figure 1.

Figure 1. Intentions to Migrate in Guatemala Framework



As Figure 1 shows, this study emphasizes personal and economic threats to human security in Guatemala: crime victimization, personal insecurity, family income, personal economic situation, and national economic situation. Specifically, this study assumes that Guatemalans will consider migrating to another country to reduce threats to their family income, which result from a bad personal economic situation, low family wages, and a bad macroeconomic situation in the country. Thus, Guatemalans will not consider migrating simply because the expected benefits (i.e., income) of doing so may outweigh the costs. Guatemalans will consider leaving in order to diversify their family income, thereby better handling those risk factors affecting their family's economic well-being. This study also assumes that Guatemalans will consider migrating to another country for non-economic reasons as well. That is, they will consider leaving their country, if they have been victims of crime or feel insecure in their neighborhoods, even if the costs of migration outweigh the economic benefits.

Hypotheses

Based on the literature reviewed and the objectives of this study, five hypotheses are developed to test for the effects of crime victimization, personal insecurity, family income, personal economic situation, and national economic situation on Guatemalans' intentions to migrate to another country.

Hypothesis 1: Guatemalans with a low family income are more likely to consider migrating to another country.

Hypothesis 2: Guatemalans who perceive their personal economic situation to be bad are more likely to consider migrating to another country.

Hypothesis 3: Guatemalans who perceive the national economic situation to be bad are more likely to consider migrating to another country.

Hypothesis 4: Guatemalans who have been victims of crime are more likely to consider migrating to another country.

Hypothesis 5: Guatemalans who feel insecure in their neighborhoods are more likely to consider migrating to another country.

Methods

Data

To examine the relationship between crime victimization and personal and economic security on Guatemalans' intentions to migrate, this study uses survey data for Guatemala from 2006 to 2012. The data come from the AmericasBarometer survey by the Latin American Public Opinion Project (LAPOP). The survey was first conducted in 2004 in 11 Latin American

countries. It “is an effort by LAPOP to measure democratic values and behaviors in the Americas using national probability samples of voting-age adults” (Seligson, 2006, p. x).

In Guatemala, the AmericasBarometer continues to be conducted biennially since 2004. Each survey year, a stratified random sample is developed “using a multi-stage probability design (with quotas at the household level ...), and [is] stratified by major regions in the country, size of municipality and by urban and rural areas within municipalities” (LAPOP, 2012). The goal is to represent the composition of the adult Guatemalan population as reported in the most recent national census.

The AmericasBarometer consists of approximately 97 questions. Since 2004, some of these questions have varied. A significant change occurred in 2006 when LAPOP added a few survey items and reconstructed the wording and coding of others. Since one of this study’s primary interest, personal economic situation, is not measured in 2004 and 2014, the study period is limited to 2006-2012. The data for the four surveys were combined yielding 2,962 total valid observations, which were included in the analysis.

Measures

Dependent Variable

For the dependent variable, *intentions to migrate*, a two-category measure was used that distinguished among the participants who had intentions to migrate and those who had no intentions to migrate. The dependent variable was constructed from the answer to the question: “Do you have intentions to leave for another country to live or work in the next three years?” The dependent variable was coded as “no” = 0, “yes” = 1.

This measure is limited as it only measures intentions to migrate, not actual migration. In many cases, such intentions do not translate into actual migration, as such decision depends on many factors, including the costs associated with moving, future crime rates, and economic conditions in the destination country, among other things (Hiskey et al., 2014b; Wood et al., 2010).

Independent Variables

The AmericasBarometer surveys included measures of crime victimization, insecurity, economic and political factors, migration network, and socio-demographic variables that in previous research have been found to affect people's intentions to migrate. Twenty one (28 if one counts the items used to compute the index variables) of these measures were used in this study.

Crime Victimization

Crime victimization was measured as an individual's response to the question: "Have you been a victim of any act of crime in the past 12 months?" The answers were used in the analysis as a dummy variable "no" = 0, "yes" = 1.

Personal Insecurity

Two variables were used to measure personal insecurity: *feeling insecure in neighborhood* constructed from the question: "Speaking about the place or neighborhood where you live, and thinking about the possibility of being a victim of assault or robbery, do you feel very safe, somewhat safe, somewhat unsafe or very unsafe?" and coded as "not safe" = 2, "safe" = 1; and *neighborhood controlled by gangs*, which was derived from the question: "To what extent do you think your neighborhood is affected by gangs? Would you say a lot, somewhat, a

little or none?” coded as “a lot” = 1, “somewhat” = 2, “a little” = 3, “none” = 4. The reference category was “none.”

Economic Factors

The following three variables were used to assess the impact of economic factors on intentions to migrate: *total monthly household income* measured as the total monthly household income in thirds in 2006-2012: “low” = 1, “moderate” = 2, “high” = 3. “High” was used as a reference category. *Personal economic situation* was derived from the question: “How would you describe your overall economic situation?” Participants answered this question as “good” = 1, “bad” = 2, “neither good, nor bad” = 3 (reference category). *National economic situation* was an individual’s response to the following question: “How would you describe the country’s economic situation? Would you say that it is very good, good, neither good nor bad, bad or very bad?” Answers were coded as “good” = 1, “bad” = 2, “neither good, nor bad” = 3 (reference category).

Political Controls

Prior research has shown that political factors analyzed in this study affect people’s intentions to migrate. Corruption victimization, government efficacy, degree of democracy, and satisfaction with democracy have been found to increase the likelihood that people will consider migrating to another country (Hiskey et al., 2014b).

Corruption Victimization

The AmericasBarometer data collected in Guatemala for the 2006-2012 years contained information on two variables that were used in this study to measure corruption victimization. Answers to the following questions were used: “Has a police officer asked you for a bribe in the

last twelve months?” coded as “no” = 0, “yes” = 1; and “In the last twelve months, did any government employee ask you for a bribe?” also coded as “no” = 0, “yes” = 1.

Government Efficacy

To assess the impact of perceived government efficacy on intentions to migrate, a summary index variable was developed by combining the following four questions: “To what extent would you say the current administration fights poverty?”; “To what extent would you say the current administration promotes and protects democratic principles?”; “To what extent would you say the current administration combats government corruption?”; and “To what extent would you say the current administration improves citizen safety?” Answers to each of these questions were coded from “(not) at all” = 1 to “a lot” = 7.

Degree of Democracy

The answers to the following five questions were combined to produce a degree of democracy summary index variable: “To what extent do you think the courts in Guatemala guarantee a fair trial?”; “To what extent do you respect the political institutions of Guatemala?”; “To what extent do you think that citizens’ basic rights are well protected by the political system of Guatemala?”; “To what extent do you feel proud of living under the political system of Guatemala?”; and “To what extent do you think that one should support the political system of Guatemala?” Survey participants answered each of these questions from “(not) at all” = 1 to “a lot” = 7.

Satisfaction with Democracy

The variable satisfaction with democracy was derived from the question: “In general, would you say that you are very satisfied, satisfied, dissatisfied or very dissatisfied with the way democracy works in Guatemala?” Answers were coded as “dissatisfied” = 0, “satisfied” = 1.

Migration Network Control

Previous studies have found that the presence of a migration network, in the form of having close relatives living in another country, increases the likelihood of migration as it reduces its costs (e.g., Hiskey et al., 2014a, 2014b; Massey & Espinosa, 1997). Therefore, this study measured migration network as an individual’s response to the following question: “Do you have close relatives who used to live in this household and are now living abroad?” Responses were coded as “yes, in the United States only” = 1, “yes, in the United States and in other countries” = 2, “yes, in other countries (not in the United States)” = 3, “no” = 4 (reference category).

Socio-Demographic Controls

The analysis controlled for a respondent’s background characteristics, including age, gender, ethnicity, marital status, education, region of residence (geographic location), and urban/rural area of residence. The definitions and mean values of all the explanatory variables that describe the respondents from Guatemala in the AmericasBarometer survey are reported in Table 1.

Table 1. Variables. Sample Means and Standard Deviations for the Model (n = 2,962)

Variables	Measurement	Mean	SD
Crime Victimization	no = 0, yes = 1	0.20	0.40
Personal Insecurity			
Feeling insecure in neighborhood	safe = 1, not safe = 2	1.36	0.48
Neighborhood controlled by gangs	a lot = 1, somewhat = 2, a little = 3, none = 4 (reference)	3.0	1.04
Economic Factors			
Total monthly household income	no income = 0, low = 1, moderate = 2, high = 3 (reference)	1.16	0.51
Personal economic situation	good = 1, bad = 2, neither good nor bad = 3 (reference)	2.40	0.75
National economic situation	good = 1, bad = 2, neither good nor bad = 3 (reference)	2.28	0.61
Political Controls			
Corruption victimization			
Police officer asked for a bribe	no = 0, yes = 1	0.14	0.34
Government employee asked for a bribe	no = 0, yes = 1	0.05	0.21
Government efficacy index		13.83	6.09
Degree of democracy index		20.21	6.41
Satisfaction with democracy	dissatisfied = 0, satisfied = 1	3.23	1.28
Migration network	yes, in the US only = 1, yes, in the US and other countries = 2, yes, in other countries, not in the US = 3, no = 4 (reference)	2.57	1.73
Socio-Demographic Controls			
Age		38.12	15.11
Ethnicity	Ladino (White) = 2, Indigena (Indigenous) = 3, Garifuna (Black) = 4, Other = 7 (reference)	2.92	0.57
Gender	1 = men, 2 = women	1.5	0.50
Marital status	married = 1 (reference), single = 2, common law marriage = 3, divorced = 4, separated = 5, widowed = 6	1.92	1.25
Education	years	6.76	4.74
Region of residence	Metropolitan area = 201 (reference) Southwest = 202 Northwest = 203 Southeast = 204 Northeast = 205 South = 206	203.10	1.59
Urban residence	rural = 0, urban = 1	0.47	0.50

Analysis

A binomial logistic regression model was used for this study's analysis. The model included four years of the AmericasBarometer survey. The respondents who did not have intentions to migrate were the reference category for the model. Therefore, the model produced the effects of the independent variables on intentions to migrate versus intentions to stay in Guatemala. All the independent and control variables were simultaneously included in the regression. The odds ratios of intentions to migrate in Guatemala are shown in Table 2 to present a more intuitive interpretation of the results.

Results

As shown in Table 2, the result in the model confirmed *Hypotheses 1* and *3*, while failed to provide evidence for *Hypothesis 2*. That is, having a low total monthly household income increases the odds of intentions to migrate by a factor of 2.239 ($p < .1$), compared to having a high total monthly household income. This is consistent with the findings by Hiskey et al. (2014b). Perceiving the economic situation of the nation as good was found to reduce intentions to migrate by a factor 0.586 ($p < .05$). This is consistent with the findings by Hiskey et al. (2014a). Perceived personal economic situation had no statistically significant impact on intentions to migrate.

Also, the results in the model lend support to *Hypotheses 4* and *5*. Being a victim of crime increases the odds of intentions to migrate by a factor of 1.366 ($p < .05$), compared to not being a crime victim. Living in a neighborhood affected by gangs a lot increases the odds of intentions to migrate by a factor of 1.976 ($p < .001$), compared to living in a neighborhood that is not affected by gangs at all. These results are consistent with previous findings in the literature

suggesting that crime and insecurity are positively related to intentions to migrate (Wood et al., 2010; Hiskey et al., 2014a). Feeling unsafe in the neighborhood was not found to have a statistically significant impact on intentions to migrate.

In addition to the hypothesized effects, this study examined the impact of political factors, migration network, and socio-demographic controls on intentions to migrate. The results for political factors are as follows. Having been asked for a bribe by a government official increases the odds of intentions to migrate by a factor of 1.554 ($p < .05$). This is consistent with previous findings suggesting that people who experience corruption are more likely to consider leaving for another country (Hiskey et al., 2014b). The study did not find a statistically significant association between being asked for a bribe by police officer and intentions to migrate. Additionally, perceived government efficacy (measured as an index variable) to fight poverty, government corruption, improve citizen safety, and promote and protect democratic principles, as well as degree of democracy (measured as an index variable), and satisfaction with democracy did not have a statistically significant impact on intentions to migrate.

The results for migration network are as follows. Having close relatives abroad increases the odds of intentions to migrate by a factor of 3.443 ($p < .001$) if relatives live in other countries (not in the United States); by a factor of 2.414 ($p < .001$) if relatives live in the United States (only); and by a factor of 1.768 ($p < .05$) if relatives live in the United States and in other countries. This is consistent with previous findings highlighting the essential role that migration networks play in people's migration decisions (e.g., Hiskey et al., 2014a, 2014b; Massey & Espinosa, 1997).

People who were interviewed in 2008 [odds 1.704 ($p < .001$)] were more likely to consider migrating, compared to those who were interviewed in 2006. This suggests that the world economic crisis had a significant impact on intentions to migrate. The other two years (2010 and 2012) in the data set had no impact on intentions to migrate.

Last, the results for the socio-demographic controls are as follows. Each additional year of age decreases the odds of intentions to migrate by a factor of 0.967 ($p < .001$). Being female, compared to being male reduces to odds of migration intentions by a factor of 0.703 ($p < .01$). Being Ladino (White), compared to belonging to other ethnicities, reduces the odds of intentions to migrate by a factor 0.683 ($p < .01$). Being single or divorced increases the odds of intentions to migrate by a factor 1.629 ($p < .001$) and 2.966 ($p < .05$), respectively, compared to being married. Being a resident of the northwest of the country increases the odds of migration intentions by a factor of 1.334 ($p < .1$), compared to being a resident of the metropolitan area. Living in regions other than the northwest and the metropolitan area is not statistically associated with intentions to migrate. Education and living in an urban or rural area were not statistically associated with intentions to migrate.

Table 2. Logistic Regression Results. Odds Ratios (n = 2,962)

Variables	Intentions to Migrate (Odds Ratio)
Crime Victimization	1.366*
Personal Insecurity	
Feeling insecure in neighborhood	1.101
Neighborhood controlled by gangs (a lot)	1.976***
Economic Factors	
Total monthly household income (low)	2.239†
Personal economic situation (good)	0.803
Personal economic situation (bad)	0.969
National economic situation (good)	0.586**
National economic situation (bad)	1.048
Political Controls	
Corruption Victimization	
Police officer asked for a bribe	1.141
Government employee asked for a bribe	1.554*
Government efficacy index	1.016
Degree of democracy index	1.006
Satisfaction with democracy	0.880
Migration network	
Yes, in the U.S. only	2.414***
Yes, in the U.S. and other countries	1.768**
Yes, in other countries (not in the U.S.)	3.443***
Socio-Demographic Controls	
Age	0.967 ***
Ethnicity	
Ladino (White)	0.683†
Indigena (Indigenous)	0.791
Garifuna (Black)	0.739
Gender	0.703**
Marital status	
Single	1.629***
Common law marriage	1.203
Divorced	2.966**
Separated	1.571
Widowed	0.504
Education	1.003
Region of residence	
Southwest	0.745
Northwest	1.334†
Southeast	0.851
Northeast	1.149
South	0.797
Urban residence	0.860
Year 2008 (reference 2006)	1.704***
Year 2010 (reference 2006)	1.317
Year 2012 (reference 2006)	1.359
Nagelkerke pseudo R square	0.174

† p < .1, *p < .05; **p < .01; ***p < .001.

Conclusion

This study uses AmericasBarometer survey data gathered in Guatemala in 2006, 2008, 2010, and 2012 to investigate the effects of crime victimization, personal insecurity, family income, personal economic situation, and national economic situation on Guatemalans' intentions to migrate to another country. The findings suggest that crime, insecurity, and low income increase intentions to migrate in Guatemala. Also, the study finds that Guatemalans who perceive that the national economy is doing well are less likely to consider migrating. These results are consistent with previous findings on migration in Latin America (e.g., Wood et al., 2010; Hiskey et al., 2014b) and Central America (e.g., Hiskey et al., 2014a).

The findings in this study have important policy implications. First, it is fundamental to strengthen law enforcement and judicial institutions in Guatemala to address the problems of crime and insecurity. As previously mentioned, Guatemala is one of the most violent countries in the world (Renwick, 2015). Gangs and other criminal organizations continue to gain a foothold in neighborhoods throughout the country. Crime and violence (e.g., robberies, assaults, extortions, kidnappings, assassinations, and other street crimes) are ubiquitous in Guatemala. The results in this study suggest that Guatemalans who have been victims of crime and who feel insecure in their neighborhoods (i.e., live in neighborhoods controlled by gangs) are more likely to consider migrating to another country. Without strong law enforcement and judicial institutions, crime and insecurity in Guatemala will continue to increase, driving Guatemalans away from their homes.

Second, it is crucial to improve economic conditions in Guatemala. As part of this, it is important that the rule of law be guaranteed in the country. This will help attract investment,

which in turn will contribute to strengthen the national economy and increase wages. As the results in this study suggest, Guatemalans with a low total monthly household income are more likely to consider migrating to another country. Also, Guatemalans who perceived that the national economy is doing well are less likely to consider leaving their country. Without a strong economy and competitive wages, the levels of unemployment, underemployment, and income inequality in the country will increase; this is likely to result in further migration.

Improving economic conditions in Guatemala will have spillover effects. With a strong economy and competitive wages, unemployment and underemployment in the country will go down. As a result, the Guatemalan government will have more financial resources to serve the population, including investing more in education, health, and other basic services, which will help address poverty and inequality in the country. Doing so is important as these social problems have been found to contribute to high levels of crime (e.g., Briceño-León, 2005; Soares, 2004).

Last, it is important that the U.S. government continues to support policy efforts aimed at addressing crime, insecurity, improving economic conditions, and addressing the problem of corruption in Guatemala. The results in this study suggest that Guatemalans who have been victims of corruption are more likely to consider leaving for another country. Also, as previously mentioned, this study finds that crime victimization, insecurity, low income, and a weak economy increase migration intentions among Guatemalans. Considering that the United States continues to be the leading destination of Central American migrants, including Guatemalans (Zong & Batalova, 2015), it is important that the U.S. government continues to support policy efforts, such as the Plan for the Alliance for Prosperity in the Northern Triangle, aimed at

addressing structural issues in Guatemala that contribute to migration. For Fiscal Year 2016, the White House (2016) announced that it would provide up to \$750 million to implement the plan.

While important, the conclusions in this study need to be taken with caution as some issues remain to be addressed. Above all, given the limitations in the data, this study only measured intentions to migrate, not actual migration. It is clear that in some instances such intentions will not translate into actual migration. Future studies could measure actual rates of migration in Guatemala. Also, one of the main explanatory variables in this study, national economic situation, is a measure of respondents' perceptions of Guatemala's economic situation. Future studies may use objective measures of national economic indicators, such as interest rate, unemployment, inflation rate, and rate of change in foreign direct investment, among others.

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