OF BUTTERFLIES AND BULLETS: VIOLENT SPILLOVERS OF DOMESTIC DECISIONS

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Abstract

Should out of sight be out of mind? Are domestic decisions truly domestic? Or could they be wreaking havoc elsewhere, like the metaphorical butterfly of chaos theory that flaps its wings in one place and causes a hurricane in another? This research addresses this “butterfly effect” of domestic politics in International Relations, by exploring the mechanism through which the United States domestic decisions are flaps of butterfly wings that create hurricanes of bullets in Latin America and the Caribbean. I argue that U.S. deportation patterns and lax gun laws strengthen transnational organized crime in the region, thereby leading to higher levels of fatal violence. Through a mixed methods approach that combines regression analysis of all countries in the region between 2004 and 2017 with qualitative analysis of secondary sources and court cases in four case studies (Mexico, El Salvador, Jamaica, and Brazil), this thesis shows that indeed U.S. gun and deportee flows increase homicide rates in the region, though there is inter-country variation, due mainly to geography and differing gang characteristics. As such, the present research expands upon existing literature on interdependence, and brings to the forefront an often-overlooked transnational actor – organized crime. Moreover, it highlights the importance of international cooperation to solve traditionally domestic issues, in order to turn hurricanes of bullets into hurricanes of hope.
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Introduction

In the times of America First, U.S. policymakers seem very worried about all the violence foreign countries allegedly export to the United States and ignore the consequences their domestic policy decisions can have on others. But should out of sight be out of mind? Are domestic decisions truly domestic? Or could they be wreaking havoc elsewhere, like the metaphorical butterfly of chaos theory that flaps its wings in Brazil and causes a hurricane in Texas?¹ What if it was not a butterfly flapping its wings but rather U.S. policymakers deciding on deportations and gun laws in Washington, DC, causing not a hurricane, but thousands of homicides in Latin America and the Caribbean? This research addresses this “butterfly effect” of domestic politics in International Relations. It aims to explore the mechanism through which the U.S. is exporting violence to Latin America and the Caribbean by answering the following question: Do U.S. domestic policy decisions increase homicide rates in Latin America and the Caribbean? In this thesis, I argue that U.S. deportation patterns and lax gun laws strengthen transnational organized crime in the region, thereby leading to higher levels of fatal violence.

The literature on the influence of domestic politics in International Relations often addresses how domestic political systems and voting influence foreign policy decisions, looking at two-level games and the influence of regime type in the initiation of international conflicts.² Though some scholars have explored the international spillover effects of domestic policy, they have focused only on single issues or regions, such as Central American Gangs, deportations of

Jamaican nationals, or U.S. guns in Mexico.\footnote{Lainie Reisman, “Breaking the Vicious Cycle: Responding to Central American Youth Gang Violence,” \textit{SAIS Review of International Affairs} 26, no. 2 (September 14, 2006): 147–52, https://doi.org/10.1353/sais.2006.0041; Annmarie Barnes, “Displacing Danger: Managing Crime Through Deportation,” \textit{Journal of International Migration and Integration; Dordrecht} 10, no. 4 (November 2009): 431–45, http://dx.doi.org/10.1007/s12134-009-0107-y; Arindrajit Dube, Oeindrila Dube, and Omar Garcia-Ponce, “Cross-Border Spillover: U.S. Gun Laws and Violence in Mexico,” \textit{American Political Science Review} 107, no. 3 (August 2013): 397–417, https://doi.org/10.1017/S0003055413000178.} The present research would thus help fill this gap in the literature, since it explores U.S. decisions in regards to both gun laws and deportation policies and how they affect not one country but the entire region of Latin America and the Caribbean, broadening the scope of the existing research and increasing the sample size. Since transnational organized crime plays such an important role in violence in the region, it makes more sense to consider it as an interdependent system, as opposed to isolated country units.

Because it addresses one possible mechanism through which domestic politics are important in International Relations, the “butterfly effect”, the present research would also contribute to the overarching debate of whether domestic politics should even be considered an important factor at all. If the results are as expected, they would contradict the realist assumption that states’ non-foreign policy interactions are irrelevant. It could also contribute to the larger debate on cooperation. If domestic policy decisions by one state can indeed cause such negative spillover effects on another state, cooperating would appear to be the best solution, as states fighting for themselves would only create a vicious cycle of more unilateral decisions and even more spillovers, like many butterflies blowing hurricanes towards one another repeatedly. Thus, the liberal-institutionalist argument in favor of cooperation would gain more weight. Moreover, it expands on Keohane and Nye’s complex interdependence theory, which focuses on how countries are connected by more than foreign policy interactions per se, through interactions between commercial elites, for example, but which does not concern itself with domestic policy and its role,
as the authors themselves recognize. Thus, the present research could expand the idea by helping fill that gap.

Furthermore, this research has a very tangible implication for the real world. A third of total homicides in the world happens in Latin America and the Caribbean, despite the region being home to less than 10% of the world population. Of those, 63% involve a firearm, while the world average is no higher than 35%. These numbers are alarming and seem to be worsening in recent years. If causal mechanisms for the high homicide rate can be identified, however, policymakers and regional organizations such as the Organization of American States can implement more effective interventions to lower this disproportionately high rate and reverse the dire situation.

In addition to that, the results of this research could be used to contradict the common North American conservative rhetoric that Latin America exports violence to the United States and turn it around completely, though that is unlikely to significantly influence the current administration. This research could also weaken nationalist inclinations more generally, since the key to dealing with transnational spillovers of domestic policies is interstate communication and coordination, the opposite of the isolationism “America First” represents. These changes in turn could foment stronger regional cooperation to deal with public security challenges and consequently minimize the loss of life in the region.

The remainder of this paper is organized as follows. The next section provides a review of the relevant literature, followed by an in-depth discussion of the research methods used in the analysis. The paper will then turn to a quantitative analysis of the correlation between U.S. gun laws and deportations decisions, on the one hand, and the homicide and firearm and gang-related

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6 Igarapé Institute.
homicide rates in Latin American and the Caribbean, on the other. To further explore the causation mechanism and to account for alternative explanations and the influence of geography, qualitative case-study analyses of Mexico, El Salvador, Brazil and Jamaica will be conducted. The paper will conclude with a discussion of implications and avenues of future study.
Literature Review

Criminal Violence in Latin America and the Caribbean

There has been extensive research that attempts to explain why Latin America is the most violent region in the world and the only one where criminal violence has increased in recent years when there is no officially declared war happening. In general, there appears to be a consensus among scholars that the causes are complex and multiple, but beyond that there is great disagreement whether Latin American and Caribbean violence is best understood through the lenses of socioeconomic causes, governance and power, or the war on drugs and war-like frameworks in general. In the paragraphs that follow, I address each of these explanations in turn.

Socioeconomic explanations of crime are not limited to Latin America and are perhaps one of the most intuitive. According to this logic, crime rises because poverty, inequality and lack of access to basic services render upward social mobility virtually impossible by legal means, which, consequently, makes crime attractive to underprivileged youth. Since Latin America is one of the most unequal regions in the world, it is thus not surprising that many have defended this explanation. A recent empirical study by Rivera, however, found that inequality and poverty are

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11 Imbusch, Misse, and Carrión, “Violence Research in Latin America and the Caribbean.”
not the socioeconomic causes that merit most attention, at least as it relates to violent crime in particular: educational attainment can act as a protective factor that reduces homicide rates, while a large youth population and a female workforce – related to fewer informal controls – can increase social violence.12

On the other hand, many scholars argue that socioeconomic factors are not sufficient to account for the disproportionate rate of violence in the region, and that any analysis is incomplete if one disregards the role that state power and governance can play. In the eyes of these scholars, the most interesting puzzle is not simply the existence of violence in Latin America and the Caribbean, but rather how such alarming levels of disorder can coexist with – and transform – an otherwise functioning democracy.13 Despite this agreement that considering state governance and power is key, there is a divide on the specificities of the problem. Some, like Arias, argue that the lack of state presence (“weak states”) creates a vacuum of power filled by criminal organizations.14 Others, like Cruz, on the other hand, contend that government institutions, especially law enforcement, are corrupt and generate and legitimize violence themselves when they either partner with criminals or employ “all-means-necessary” crime-fighting tactics.15 In either case, the main concern is the power of the state and its ability to either provide services to its citizens or be a protector rather than an attacker on its population. Therefore, solutions within this framework involve capacity-building and a more positive state presence in crime-controlled areas.

A third group of scholars looks at criminal violence in Latin America and the Caribbean through a conflict studies lens. This type of approach first started because of the U.S. War on Drugs

12 Rivera, “The Sources of Social Violence in Latin America.”
13 Arias, Criminal Enterprises and Governance in Latin America and the Caribbean.; Cruz, “State and Criminal Violence in Latin America.”
14 Arias, Criminal Enterprises and Governance in Latin America and the Caribbean.
15 Cruz, “State and Criminal Violence in Latin America.”
in the Nixon administration. Since illicit drugs and traffickers were perceived as the threat and the enemy, states and researchers adopted a war-based rhetoric when speaking of the issue.\textsuperscript{16} The War on Drugs is largely perceived to have failed its objectives, and some scholars, like Måsmela and Tickner, believe it might actually have led to the high rates of violence in the region today.\textsuperscript{17} Lessing, on the other hand, borrows from the war literature and rhetoric but believes the problem is much more complex. For him and others, this criminal war the region now faces has important distinctions from a conventional civil war, since the organized crime groups in general do not want to overthrow the government or create a new state.\textsuperscript{18} His logic does not dispute that this organized crime war is responsible for the violence, but it does implicate different solutions than the traditional military crackdown.

It is indeed very promising to focus on the mechanisms through which organized crime is strengthened, since almost 60\% of known motivations of homicides in the region are gang/organized crime-related.\textsuperscript{19} However, focusing only on their drug-trafficking activities is not sufficient, as these organizations are not limited to that activity and some in fact are not involved in the transnational flow of drugs at all, but still are causing violence.\textsuperscript{20} The most promising avenue of research looks at the transnational factors that might be strengthening these groups, since domestic factors have already been explored at length, as mentioned above. Given the U.S. influence in the region, that would be a good starting point, but, unfortunately, the literature on violence has only explored in-depth the U.S. role as it pertains to its foreign policy on drugs, which

\textsuperscript{16} Måsmela and Tickner, “Desecuritizing the ‘War on Drugs.’”
\textsuperscript{17} Måsmela and Tickner.
\textsuperscript{18} Lessing, \textit{Making Peace in Drug Wars}.
is most certainly relevant, but nonetheless limiting. I aim to explore these alternative explanations, looking not to the explicit U.S. foreign policy towards Latin America and the Caribbean, but rather at the North American domestic policy decisions that inadvertently affect its Southern neighbors. First, however, we must look briefly to the field of transnational politics more broadly.

**Transnational Politics**

In general, all three main theories of International Relations have been exploring the influence of domestic politics for decades now, to varying degrees. However, these studies have focused mainly on the many different ways a country’s domestic political interests and institutions shape that same country’s behavior at the international level.\(^{21}\) This more traditional literature pays little attention to how a country’s domestic politics can influence the reality of third-countries, instead of their international interactions per se. More recently, researchers have started exploring this alternative avenue for research.

One such approach, as presented by Page, is more general and not restricted to the context of transnational politics, but still worth mentioning. Path dependence, as it is called, refers broadly to the idea that a small difference in the beginning of a path or along the way can alter the outcome substantially.\(^{22}\) This idea is very similar to the butterfly effect of chaos theory, but path dependence also concerns itself with how choices of the past limit current and future choices that are available to actors, since they create systems of organization or customs that are difficult to abandon.\(^{23}\) In the context of criminal violence in Latin America and the Caribbean, path dependence could

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\(^{23}\) Page.
explain why the region cannot reduce or even stabilize its homicide rate despite continued efforts, as if it was locked into one particular path. More specifically, the example here of a past decision that is both limiting an actor’s current decisions and leading to dire outcomes is the United States’ approach to gun laws. Because of the Second Amendment to its Constitution, it struggles to substantially restrict civilian gun ownership within its borders, as other countries have done. The resulting lax gun laws, in turn, are the flapping of wings of a deadly butterfly that ultimately kills thousands every year south of its border.

Another approach, strongly advanced by Gleditsch and Franzese and Hays, focuses on the interconnectedness of states in a region or cluster and is often referred to as the study of interdependence or diffusion. According to their logic, outcomes (e.g. conflict or peace) are not controlled by the actions of any one state, and instead depend on the decisions of others in the system, which resonates with the fact that other American states clearly cannot decide on U.S. gun laws or deportation policies. Gleditsch’s approach is the more theoretical one, and could be understood as a middle ground between focusing completely on domestic explanations to a country’s problem, and focusing on the world community as a whole, since it focuses on regions and how different areas create different systemic factors. Though his research mainly refers to interstate conflict or civil wars, it is not unreasonable to extrapolate it and hypothesize that, if regional conflict in general can be attributed at least in part to state interdependence, a pocket of

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26 Gleditsch, All International Politics Is Local.
criminal violence could also be created or worsened due to the connections states have with one another.

In a less abstract way, Franzese and Hays operationalize diffusion in five different ways: coercion, when a powerful actor forces others to follow similar paths; competition, when economic pressures are involved; learning, when states use others’ experiences to inform their decisions; emulation, which is more ritualistic; and migration, which involves direct entry of components from one state into another. For the purposes of the present research, the latter is the most interesting. According to the authors, migration processes of diffusion do indeed include the most-well know case of human migration, but they also include the entry of any material or product from abroad. Therefore, it could apply to both the deportation flows and the arms flows from the United States to Latin America and the Caribbean. In more epidemiologic terms, diffusion through migration can be understood as a process of contagion, except in this case the “disease” spreading in the hemisphere would be criminal violence.

Civil War/Terrorism

Another literature that bears striking similarities to that on criminal organizations is the one on civil war and terrorism more broadly. Though Lessing argues correctly that there are important distinctions between organized criminal groups and terrorists and civil war combatants, perhaps most importantly that the former do not have political goals, there are still important similarities between these processes that make it worth exploring them more in depth in the present study. Scholars of the topic seem to generally agree that civil wars and terrorism spread to other states, 

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27 Franzese and Hays, “Interdependence in Comparative Politics.”
28 Franzese and Hays.
29 Lessing, Making Peace in Drug Wars.
though there are many different hypothesized mechanisms that might be responsible for this diffusion, some of which are strikingly similar to the ones hypothesized in this paper.

Some might argue that these conflicts appear to spread between states not because of actual spreading processes but rather because contiguous states tend to share similar cultural or social characteristics that could have independently led them to the same outcome. Nevertheless, Buhaug and Gleditsch have shown that there is an independent effect of civil wars in one country in leading to civil wars in neighboring countries. Their findings also suggest that proximity to the civil war in question is not necessary for the violence to be contagious, as long as there are ties between the countries. Thus, it would still be possible for U.S. actions to influence violence as far away as South America, not simply in neighboring Mexico. One caveat of their study is that baseline characteristics of countries still do matter, since the authors show that wealthier and more established democratic states have a lower baseline risk of conflict. Nevertheless, in the Americas only Canada and the U.S. would have these protective factors, and they are outside of the empirical domain of Latin America and the Caribbean.

A number of studies focuses on how violence crosses borders, more specifically on the effect of refugee flows on the spreading of violence, be it through a new civil war in the receiving state or an interstate dispute between the receiving and sending state. According to these ideas, advanced by Salehyan, and Salehyan and Gleditsch, refugees can lead to the contagion of violence in two main ways. First, migration flows take more than people – who could be potential combatants – with them, they also involve the transfer of arms and ideology from one state to

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31 Buhaug and Gleditsch.
another, which facilitate conflict as well.\textsuperscript{33} Second, receiving states might decide to intervene in the conflict to avoid more negative effects, or sending states might try to follow and stop opposition across borders.\textsuperscript{34} In addition to that, rebels have an incentive to have transnational reach through networks, since the state is limited in its ability to act outside of its borders by the norms of sovereignty, and thus they would be virtually unreachable.\textsuperscript{35} Considering this, it is hardly surprising that cultural diasporas are also one of the main sources of financing for civil war combatants.\textsuperscript{36} While the outcomes of interest here are not exactly the same, neither are refugees the focus of the study, these theories can be applied to the flow of deportees from the United States to Latin America and the Caribbean. The first mechanism is more obvious, since deportees are also a type of international migration flow, and thus would lead to similar transfers. The second is less obvious, but the United States has tried many times in the past to intervene in the region to curb problems that lead to migration flows northward, which in turn lead to the deportee flows. These actions could be interpreted as both a receiving state intervening to stop externalities and as a sending state following the offenders across borders to stop them by targeting their organizations more generally.

Theories on the spreading of terrorist violence defend some of the same basic ideas but add one extra layer of analysis that is also useful to understanding criminal violence more generally. Midlarsky, Crenshaw, and Yoshida have explored the idea that terrorism first spreads in a region because indeed some countries may be facing some of the same challenges. However, later instances of contagion happen because of “socialized norms of nonviolent behavior […] [that] are

\begin{itemize}
\item Salehyan and Gleditsch, “Refugees and the Spread of Civil War.”
\item Salehyan, “The Externalities of Civil Strife.”
\end{itemize}
eroded by time and exposure to violence until violence becomes a routine and imitable process.”

Moreover, they hypothesize that contagion can be hierarchical in nature, i.e. violence spreads from more diplomatically important countries to lower-ranked countries. Both of these insights seem to also be present in Latin America and the Caribbean. In most places, violence has become an accepted part of life, seen as unavoidable. In fact, the region’s inhabitants feel the highest levels of fear and insecurity in the world. On the other hand, the mechanism hypothesized in this paper implies that the United States is the one exporting violence, which would fit the idea that “more important” countries are the sources of the contagion.

Unfortunately, there is not yet a significant number of comparable systematic studies addressing violence from organized crime groups in Latin America and the Caribbean. Instead, studies have been limited to a particular country and have focused on a single factor and not in the interaction between many of them. However, these scholars have explored the effects of deportation policies, gun laws and drug policy. They might differ on whether they call the effect spillovers, externalities or the balloon effect, but they all attempt to pinpoint a cause for the heightened levels of violence present in these countries and can inform the present study. We now explore these further.

**Deportees, guns and drugs**

In general, all research in this field of study accepts the assumption that no country is completely isolated, and that policy decisions implicitly and explicitly affect others in the system,

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38 Midlarsky, Crenshaw, and Yoshida, “Why Violence Spreads.”
which means only transnational solutions can properly solve the issue.\textsuperscript{40} Even though, as previously mentioned, no study has yet addressed interactions of different explanatory variables, most recognize this needs to change, which I attempt to do.\textsuperscript{41} Despite their similarities, these studies highlight different causes and use different research methods, and combining them can inform the present research in valuable ways.

Deportations – and immigration in general – may be a very controversial theme at this moment due to the Trump administration’s policies, but they have been a policy to deal with criminal non-citizens for decades now, not only in the United States, but also in Canada, which is otherwise known for more open immigration policies.\textsuperscript{42} The basic idea behind deporting criminals back to their countries of origin is that theoretically they would cease to be a threat to that country’s security. In practice, however, deportation policies have been having the opposite effect, and are in fact promoting the expansion of organized crime networks, in a vicious-cycle that ultimately brings the violence back to the deporting country – and spreads it throughout the continent.\textsuperscript{43}

Studies on the consequences of deportation have used legal cases and congressional reports,\textsuperscript{44} regression analysis of crime statistics as part of a natural experiment,\textsuperscript{45} and interviews with deportees.\textsuperscript{46} In all cases, results have shown that increased deportations are associated with higher crime rates in the countries receiving deportees, and one study, by Blake, has successfully

\textsuperscript{40} Reisman, “Breaking the Vicious Cycle.”
\textsuperscript{41} Reisman.
\textsuperscript{43} Reisman, “Breaking the Vicious Cycle”; Temple, “The Merry-Go-Round of Youth Gangs.”
\textsuperscript{44} Temple, “The Merry-Go-Round of Youth Gangs.”
\textsuperscript{46} Barnes, “Displacing Danger.”
used a natural experiment to dispel simultaneity concerns. Unfortunately, no studies have used the gang-related homicide rate available from the UNODC, only the overall homicide rate, though results should still hold as organized crime is responsible for a significant percentage of overall homicides in the region. Moreover, qualitative analyses of the South American case are lacking, as it has been included in the quantitative panel regression, but specific studies have focused on either Central America or the Caribbean.

Since, as mentioned previously, a disproportionate number of homicides in Latin America and the Caribbean are committed with the use of firearms, we now turn to studies addressing the effect of U.S. gun laws on crime. Much has been written on the topic, but nothing relating to spillovers from the United States to Latin America and the Caribbean in its entirety, only to Mexico or between states within the United States itself. Nevertheless, this line of research indicates that there is definitely a link between guns and increasing violence, and it is likely to apply to the rest of the region as well.

At the level of international spillovers, there have been reports on how arms diffuse in Central America, but the most significant contribution has been a study conducted by Dube, Dube, and García-Ponce. These researchers conducted a natural experiment that successfully

51 Muggah and Aguirre Tobón, “Citizen Security in Latin America Facts and Figures.”
52 Dube, Dube, and Garcia-Ponce, “Cross-Border Spillover.”
linked changes in U.S. gun laws with increased supply of large weapons and in turn with increased violence in Mexican states near the border.\textsuperscript{55} In addition to that, the authors found that this effect is mediated by political factors of the state in question, among which they include the presence of drug cartels, which seem to heighten the effect.\textsuperscript{56} Thus, not only does their study show that indeed U.S. gun laws matter outside of its borders, but it also shows that organized crime is an important element of the process. It therefore seems to indicate that this avenue of research is a promising one. It is also worth broadening the scope of this research, by including all independent countries in Latin America and the Caribbean, which the present study will do. Considering countries other Mexico will allow me to address whether geographic proximity plays a role in the intensity of the spillover effect, and whether different cultural practices might affect the outcome as well.

The bulk of the literature on the effect of gun laws, however, is at the domestic level. More generally, Cook and Ludwig have shown that increased gun ownership leads to higher homicide rates, which debunks the common belief that more guns could keep populations safe.\textsuperscript{57} These results are quite robust and were recently replicated and further advanced by the authors in response to a critique.\textsuperscript{58} Regarding spillovers specifically, scholars have focused on how differing gun laws between states have created gun flows from states with less strict laws to those with more strict laws, using firearm tracing data for guns recovered in connection with crime investigations.\textsuperscript{59} Despite the fact that these studies do not focus on the homicide rate per se, but rather on any crime for which a firearm is recovered, their logic can still be applied on the international level to argue that firearms flow from states with laxer gun laws (i.e. the United States) to the rest of the region.

\textsuperscript{55} Dube, Dube, and Garcia-Ponce, “Cross-Border Spillover.”
\textsuperscript{56} Dube, Dube, and Garcia-Ponce.
\textsuperscript{59} Knight, “State Gun Policy and Cross-State Externalities”; Coates and Pearson-Merkowitzz, “Policy Spillover and Gun Migration.”
Finally, because criminal organizations in Latin America and the Caribbean are often involved with drug trafficking, we turn briefly to the literature on this topic. As Naranjo rightly points out, while the drug market is global, law enforcement actions are still highly uncoordinated. Because of that, actions by one government to crackdown on drug trafficking ultimately lead not to the extinction of the problem, but rather to its displacement elsewhere, in what is known as the balloon effect. These ideas fit well with a model of crime based on outsourcing, which predicts that uncoordinated stricter enforcement in one jurisdiction will create incentives for criminal organizations to change locations. To be sure, these ideas translate very well to the realm of organized crime more generally, and, though not as straightforward, both deportation policies and gun laws could be viewed as attempts to curb crime in the United States. The former, at least theoretically, removes threats from U.S. territory, while the latter would, again theoretically, allow citizens to have guns to use in self-defense. In practice, both policies simply displace crime, in an effect very similar to the balloon. They are flaps of butterfly wings, creating a deadly hurricane of bullets.

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Theoretical Framework: Deadly Butterflies

As mentioned in previous sections, scholars have offered many different explanations for why Latin America and the Caribbean have war-like levels of violence in the absence of an officially declared war. The literature has stressed poverty and inequality, large youth populations, weak governance, and the War on Drugs and other military crackdowns, as causes for the high homicide rate in the region, but none of these explanations is completely satisfactory. First, if poverty alone was enough to drive homicide rates to such astronomical levels, other regions of the world should be experiencing higher levels of violence than Latin America and the Caribbean since it is not the poorest region of the world. Neither is inequality enough to account for the high rates of homicide. It is indeed quite high in the region, but once again there are countries elsewhere with higher GINI coefficients that do not exhibit such high violence rates, suggesting this is not a sufficient factor. Second, the proportion of youth 15-24-years-old among the general population is also not enough to explain the homicide rates, especially considering that the region is not home to the largest share of this age group, and even if it were, the region’s populations are in an ageing trend, and thus crime should be decreasing or at least stabilizing, neither of which has happened. Weak governance and corruption most likely do indeed play a role,

63 Imbusch, Misse, and Carrión, “Violence Research in Latin America and the Caribbean.”
64 Rivera, “The Sources of Social Violence in Latin America.”
65 Arias, Criminal Enterprises and Governance in Latin America and the Caribbean.
66 Lessing, Making Peace in Drug Wars; Masmela and Tickner, “Desecuritizing the ‘War on Drugs.’”
but the direction of the relationship between these factors and violence remains unclear as of now, since some scholars believe they increase violence both by state forces and criminal organizations,\textsuperscript{70} and others argue that they instead lead to bribery pacts between these two groups that instead may decrease violence.\textsuperscript{71} Finally, the War on Drugs and military crackdowns were indeed influential in the region in the past, but homicide rates remain high – and indeed continue to rise – long after these tactics were abandoned.\textsuperscript{72}

Since none of the main explanations mentioned seem to accurately account for the continued rise of the homicide rate in Latin America and the Caribbean, an alternative explanation is needed. I hypothesize that U.S. domestic policy decisions have unintended consequences that ultimately raise the homicide rate in Latin America and the Caribbean. Considering organized crime is responsible for at least a third of all homicides in the region, it is further hypothesized that it mediates this relationship.\textsuperscript{73} In other words, domestic policy decisions made by the United States strengthen organized crime, which then has increased power to inflict violence. For the purposes of this analysis, organized crime is understood to also include gangs, since that is how statistics are computed in the region.\textsuperscript{74}

The first assumption of this model is that the U.S. domestic policy decisions are taken without intention to directly interfere with criminal organizations in other countries. This is what differentiates this butterfly effect from the balloon effect addressed by scholars of drug trafficking, such as Mora and Naranjo, as the focus here is not on explicit foreign policy and direct intervention.

\textsuperscript{70} Cruz, “State and Criminal Violence in Latin America”; Arias, \textit{Criminal Enterprises and Governance in Latin America and the Caribbean}.
\textsuperscript{71} Lessing, \textit{Making Peace in Drug Wars}.
\textsuperscript{73} Muggah and Aguirre Tobón, “Citizen Security in Latin America Facts and Figures.”
\textsuperscript{74} Muggah and Aguirre Tobón, 8.
in one country of the region.\textsuperscript{75} Here, the effects are not as immediate or obvious as when one squeezes one side of a balloon and the other swells up. Here, decisions in Washington, DC are made as quietly as a butterfly flaps its wings, and direct links are not as evident. It is easy to see decisions on deportations and gun laws center on purely domestic concerns. For the former, debates always center around how Latino immigrants bring crime to the United States, more explicitly in the current president’s administration, but before then as well.\textsuperscript{76} The idea is to remove “foreigners who pose a threat to national or border security or to public safety”, in a “out of sight, out of mind” approach.\textsuperscript{77} For the latter, debates are highly influenced by lobbyists, most notably the National Rifle Association, on one side, and by the increasing number of school shootings, on the other.\textsuperscript{78} It is clear that debates are about (North) American lives and safety, not about the lives of all citizens of the Americas.

The second assumption of this model is that an increased influx of people and firearms is beneficial for organized crime. When it comes to human capital, criminal organizations can benefit in one of two ways. First, they are always in need of more low-level recruits, since \textit{mano dura} policies mean the risk of imprisonment is substantial, and, though chiefs can command their organizations from within prison, foot soldiers are still needed to carry out decisions.\textsuperscript{79} These new recruits could be newly arrived deportees that may not even have a violent criminal record, but will struggle to integrate into the society of a country they may not have seen in years. Second, criminal organizations benefit from the new skills and contacts criminal deportees acquire by being

\textsuperscript{75} see Naranjo, “Spillover Effects of Domestic Law Enforcement Policies”; also Mora, “Victims of the balloon effect.”


\textsuperscript{77} Preston.


\textsuperscript{79} UNODC, “Transnational Organized Crime in Central America and the Caribbean.”
members of a gang and having been imprisoned in the US. The benefit of firearm transfers is more straightforward, since guns make it easier to commit crimes, by increasing the ability of these groups to inflict harm. This, in turn, makes it easier to control and extort local populations and can deter state forces from engaging in order to avoid casualties from the crossfire.

In this model, U.S. domestic policy decisions that stress deportations and relax gun controls are flaps of the butterfly’s wings. The number of homicides in Latin America and the Caribbean is the hurricane. In-between the two, organized crime is the wind that already existed but is strengthened with each flap of the butterfly’s wings, until it is strong enough to form and fuel the hurricane. Thus, there is a dose-response relationship, as the more the butterfly flaps its wings, the stronger the wind, and consequently the stronger the hurricane. In other words, deportation policies and gun laws are hypothesized to interact with each other to increase the strength of criminal groups, and countries that are affected by both deportee and arms flows should present higher homicide rates than those that have either one or the other. This would be the case because a large inflow of guns with no accompanying large inflow of deportees means there would be a surplus of weapons with no additional gang members to yield them and use them for violence. Conversely, a large inflow of returned nationals with no accompanying inflow of new firearms should not substantially affect the homicidal violence of gangs, as if there is a shortage of guns, new recruits will not be the ones to receive them. In other words, guns with no one to yield them sit idly by in a stockpile, and gang members with no guns to yield are limited in the impact they would have in the number of lives they can take.

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80 Blake, “Using Changes in U.S. Immigration Laws to Estimate the Effect of Deportations on Crime in Latin America and the Caribbean.”
81 Lessing, Making Peace in Drug Wars.
Research Design

Hypotheses

To test this theory, the following hypotheses will be considered:

- H1: *Increased deportation and gun flows from the United States will strengthen organized crime in Latin America and the Caribbean*
- H2: *Strengthened organized crime will increase the homicide rates in the region.*
- H3: *Increased deportation and gun flows from the United States will increase homicide rates in Latin America and the Caribbean*
- H4: *Lax gun laws across the United States will increase the gun flows between the country and Latin America and the Caribbean*
- H5: *Effects will be stronger in countries affected by both deportee and arms flows*

Methods: Quantitative Analysis

Due to the nature of these hypotheses, a mixed methods approach will be employed. First, I will run an ordinary least squares (OLS) regression with time-lagged independent variables and country-fixed effects to test the relationship between deportation and gun flows from the United States on the one hand, and homicide rates in Latin America and the Caribbean, on the other. The dataset will include all 33 countries of the region, for the years 2004-2017. This time limit has been chosen to avoid confounding with intended actions by the U.S. during the War on Drugs. To be fair, U.S. intervention did not simply halt as 2002 began, but 9/11 did mean that U.S. foreign policy was focused elsewhere in the Middle East and the War on Terror, and thus Latin America

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82 U.S. or European territories will be excluded from the analysis.
and the Caribbean were neglected. It is not a perfect proxy, but time constraints are currently the best way to control for this variable. Furthermore, the years 2002, 2003 and 2018 are not included in the timeframe because there is no data available on U.S. deportations prior to 2003, and no homicide rate data for 2018.

Variables

For this portion of the analysis, there will be three dependent variables. First, I will test for the effect of the explanatory variables on the overall homicide rate for the region, obtained from the UNODC Statistics database. Then, I will run a second analysis considering the firearm-related homicide rate, since the flow of arms is an independent variable and should have its strongest effect on this rate. The data for this aspect is considerably incomplete in the UNODC dataset, and therefore I will combine it with estimates from the Global Burden of Disease (GBD) study of the Institute for Health Metrics and Evaluation (IHME) of the University of Washington.

Finally, my third analysis will focus on the organized crime/gang-related homicide rate, obtained from the same source, though there is a significant number of missing values. I expect these three rates to be highly correlated, but wish to test for them separately due to the data limitations of the gang and firearm-related rates, since almost half of homicides in the region have unknown motivations, and health data estimations have definitional limitations.

85 United Nations, “UNODC Statistics Online.”
Regarding the independent variables, there will be four models: one considering only deportations, another considering only firearms, a third considering both, in order to test for interaction effects, and a fourth also considering both, but with addition effects. The number of deportees by nationality for the years 2003-2017 will be obtained from Syracuse’s TRAC.\footnote{TRAC Reports, “Latest Data: Immigration and Customs Enforcement Removals,” TRAC Immigration, 2018, http://trac.syr.edu/phptools/immigration/remove/.} Unfortunately, ICE’s system of classifying gang members is faulty, so measuring the effect of deportees who are gang members as opposed to non-gang members may not be possible. I expect both flows of criminal and non-criminal deportees to strengthen organized crime, but through different pathways that will be explored in the qualitative part of the thesis.

For gun flows, I will use Small Arms Trade data from the Norwegian Initiative on Small Arms Transfers (NISAT) from the Peace Research Institute of Oslo (PRIO).\footnote{Bureau of Alcohol, Tobacco, Firearms and Explosives, “Data & Statistics,” 2018, https://www.atf.gov/resource-center/data-statistics; Norwegian Initiative on Small Arms Transfers (NISAT), “Small Arms Trade Database,” accessed December 16, 2019, http://nisat.prio.org/Trade-Database/.} The NISAT dataset records official sales, not illegal arms trafficking, which is not an ideal measure of the arms flow of interest. However, it will provide an approximation of the volume of weapons being transferred and would account for government weapons transfers that are later diverted to organized crime, which is not uncommon in the region.\footnote{Rachel Stohl and Doug Tuttle, “The Small Arms Trade in Latin America,” NACLA, March 6, 2008, https://nacla.org/article/small-arms-trade-latin-america.} Moreover, it is the best proxy currently available, and, if anything, using it will provide a lower bound for the effect, since it underestimates the number of criminal guns. This choice was made because both ATF and UNODC firearm tracing data have too many missing country-years to be used for an analysis of the entire region during the time period of interest.
Following Salehyan, both of these independent variables will be time-lagged by a year, since reverse causality is a significant concern here.\textsuperscript{91} As Blake states on his own study – though he solves this issue with a natural experiment instead – increased crime in a country could lead to increased migration towards the United States, which in turn would increase the number of deportations.\textsuperscript{92} Guaranteeing that the deportation data being used is from a year before the homicide rates should avoid that problem, though it is not a perfect solution.

Since there is evidence indicating that wealthier countries have a lower baseline risk for conflict in general,\textsuperscript{93} country GDP per capita will be used as a control variable.\textsuperscript{94} In addition to that, the Corruption Perception Index (CPI) for each country will also be included,\textsuperscript{95} since Lessing has argued that when corruption is rampant, organized crime will negotiate bribes with the police and thus violence could be reduced or at least controlled.\textsuperscript{96} This variable can also serve as a proxy for the strength of the democracy in a country, since the abundance of missing values precludes the use of Polity IV scores from the Center for Systemic Peace to this end, but more democratic countries tend to have lower violence rates and thus this variable should be considered. Therefore, the CPI could have a relationship with the independent variable that goes in either direction.

Moreover, since being male and young are generally factors associated with higher crime in the Criminology literature,\textsuperscript{97} the population percentages for 15-24-year old males from the World Bank will also be included.\textsuperscript{98} Finally, the pooling version of the model will also include dummy

\textsuperscript{91} Salehyan, “The Externalities of Civil Strife.”
\textsuperscript{92} Blake, “Using Changes in U.S. Immigration Laws to Estimate the Effect of Deportations on Crime in Latin America and the Caribbean.”
\textsuperscript{93} Buhaug and Gleditsch, “Contagion or Confusion?”
\textsuperscript{96} Lessing, \textit{Making Peace in Drug Wars}.
\textsuperscript{97} Mc Evoy and Hideg, “Global Violent Deaths 2017.”
\textsuperscript{98} World Bank, “World Bank Open Data.”
variables for each of the regions, Central America, Caribbean, and South America, to account for the variable of geography and by extension the proximity to the United States.

**Methods: Qualitative Analysis**

The qualitative portion of the analysis will consist of process tracing in four case studies selected by the method of similarity, using secondary sources, including scholarly and news articles for the deportee chapter, and court documents of federal weapons trafficking cases for the gun chapter. The secondary sources for the first chapter were chosen because of their inclusion of interviews and/or surveys with deportees themselves, which provides a first-hand account of the situation. For the second chapter, I chose to consider cases prosecuted in U.S. courts in order to guarantee that the firearm flows involved that country. The intention of these two chapters is to address the intermediate link between the U.S. domestic decisions and the homicide rates in Latin America and the Caribbean, namely organized crime. This proves necessary because measuring organized crime strength is complex. Due to regional variation, in some places strength could mean holding territory, while in others it would simply be the volume of drug transactions. No quantitative model could account for all of this variation without excluding important details. Finally, each of the four countries is from one of the four regions, so as to explore more in-depth how geography can moderate the effects.

The first case study is Mexico, in a unique position as the only representative of North America in the dataset and the only to share a land border with the United States. This subsection is based on 6 different court cases, but the main one here will be that of Carlson et al. (2018, Texas
Western District), which exemplifies the involvement of U.S. citizens in these types of schemes.  

I expect the effects of both independent variables to be much stronger in Mexico due to its proximity to the source of the flows, which eases the transfer of weapons and people. Moreover, its proximity to the United States means it is also subject to more direct intervention that can act as a confounder despite the time limits of the analysis. An in-depth analysis of the process can help disentangle these effects.

For Central America, the representative is El Salvador, with 3 court cases, including one at the state level, and all of which include defendants with explicit ties to MS-13.  

Located roughly in the middle of its region, El Salvador has been chosen precisely due to the special case of this gang. In a sense, the Salvadoran case is the epitome of the butterfly effect hypothesized here, since MS-13 was founded in Los Angeles and expanded to this nation – and the rest of the Northern Triangle – due to deportations of its members in the late 1990s. It is thus interesting to analyze how similar that process was to the one believed to be at play currently. Moreover, its location makes it a transit country for drugs produced in South America on their way to the United States and thus can provide an opportunity to test for how that affects violence.

Jamaica will be the case study for the Caribbean, with the court case of Jermaine Rhoomes (2019, Middle District of Florida), since it is one of the few Jamaican cases prosecuted in the

101 UNODC, “Transnational Organized Crime in Central America and the Caribbean.”
United States and attracted significant media attention in both countries.\textsuperscript{102} Jamaica has been chosen because it has a significant number of deportees in recent years, and a previous study has analyzed their effect on its crime rate, but it only considered Canadian deportations.\textsuperscript{103} Furthermore, it has considerable levels of violence perpetrated by organized criminal groups, as explored by Arias.\textsuperscript{104} It will also provide a way to test whether being an island nation protects a country from spillover effects or not.

Finally, Brazil will represent South America, with the case of Frederik Barbieri (2018, Southern District of Florida), who ran a major gun-smuggling operation from Florida to Rio de Janeiro.\textsuperscript{105} As the biggest country in the dataset in terms of both land area and population, analyzing Brazil is interesting for testing how governance and government control over a territory and its ability – or lack thereof – to provide for its most vulnerable populations can fuel crime. Finally, it is the site where the Pacifying Police Units (\textit{Unidades de Policía Pacificadora} in the original Portuguese), largely considered to be a success against organized crime violence while they lasted, were implemented.\textsuperscript{106} Thus, it is also a good opportunity to explore possible public policy interventions that might curb the devastating effects of the American butterfly.

\textsuperscript{103} TRAC Reports, “Latest Data: Immigration and Customs Enforcement Removals”; Barnes, “Displacing Danger.”
\textsuperscript{104} Arias, \textit{Criminal Enterprises and Governance in Latin America and the Caribbean}.
\textsuperscript{106} Lessing, \textit{Making Peace in Drug Wars}.
Quantitative Analysis: Creating Hurricanes

Introduction

This first analysis section presents the results of the quantitative tests and is divided into 4 sections. First, an introduction, including a brief overview of the methodology and descriptive statistics of the dataset used. This first section will also address the reasons behind the choice of control variables used in the regression models of the remaining sections. The following three sections explore the relationship between the independent variables of interest (gun trade volume with the United States and number of nationals deported in the previous year) and three distinct, though correlated, dependent variables: overall homicide rate per 100,000; firearm homicide rate per 100,000; and gang/organized-crime related homicide rate per 100,000. In each of these sections, multiple distinct regression models are presented, which will be discussed more in-depth in the pages that follow.

The dataset used for these analyses is a combination of data from many sources, some of which were downloadable in CSV format, and others of which the author manually retrieved from official websites. For the dependent variables, all values come from the United Nations Office on Drugs and Crime’s 2019 Global Study on Homicide, which is available at the UNODC’s data portal. An alternative specification of the firearm homicide rate specifically comes from the Institute for Health Metrics and Evaluation’s Global Burden of Disease study, which is available at the IHME’s data portal. For the independent variables, gun trade volumes between the United States and all 33 independent countries of Latin America and the Caribbean were retrieved from the Norwegian Initiative on Small Arms Transfers’ Researcher’s database, and are specified in both number of guns transferred and in total value of the transaction in U.S dollars. The number
of deportees from the United States by country and year were manually retrieved from Syracuse University’s TRAC website. Finally, all control variables with the exception of Polity scores, which were obtained from the Polity IV project website, come from the World Bank indicators data portal. These are the total population of each country, the percentage of males in the population, the percentage of youth (defined as those between the ages of 15 and 24) in the population, the percentage of male youth in the population, the gross domestic product (GDP) per capita in U.S. dollars, the GINI coefficient, the control of corruption, and the subregion of which the country is part. Tables 1 and 2 below show the descriptive statistics of the numeric variables included, and the breakdown of countries by subregion.

Table 1: Descriptive Statistics for the full dataset

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Pctl(25)</th>
<th>Pctl(75)</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>495</td>
<td>17,749,114.000</td>
<td>38,040,267.000</td>
<td>45,746</td>
<td>354,154</td>
<td>14,306,410</td>
<td>207,833,831</td>
</tr>
<tr>
<td>% male</td>
<td>465</td>
<td>0.495</td>
<td>0.009</td>
<td>0.469</td>
<td>0.490</td>
<td>0.501</td>
<td>0.510</td>
</tr>
<tr>
<td>% male youth</td>
<td>465</td>
<td>0.092</td>
<td>0.010</td>
<td>0.064</td>
<td>0.085</td>
<td>0.099</td>
<td>0.112</td>
</tr>
<tr>
<td>% youth</td>
<td>465</td>
<td>0.182</td>
<td>0.021</td>
<td>0.124</td>
<td>0.169</td>
<td>0.197</td>
<td>0.221</td>
</tr>
<tr>
<td>GINI</td>
<td>212</td>
<td>49.040</td>
<td>4.384</td>
<td>38.000</td>
<td>46.100</td>
<td>52.300</td>
<td>59.500</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>492</td>
<td>7,801.605</td>
<td>6,058.841</td>
<td>332.615</td>
<td>3,634.240</td>
<td>10,411.990</td>
<td>31,827.240</td>
</tr>
<tr>
<td>Corruption Control</td>
<td>495</td>
<td>-0.021</td>
<td>0.791</td>
<td>-1.722</td>
<td>-0.626</td>
<td>0.625</td>
<td>1.725</td>
</tr>
<tr>
<td>Firearm rate (UNODC)</td>
<td>233</td>
<td>17.548</td>
<td>16.721</td>
<td>0.000</td>
<td>4.700</td>
<td>26.800</td>
<td>87.700</td>
</tr>
<tr>
<td>Homicide rate</td>
<td>454</td>
<td>21.597</td>
<td>17.310</td>
<td>2.500</td>
<td>8.400</td>
<td>29.800</td>
<td>105.400</td>
</tr>
<tr>
<td>Nationals Deported</td>
<td>495</td>
<td>8,515.776</td>
<td>35,218.890</td>
<td>2</td>
<td>44.5</td>
<td>1,433</td>
<td>288,395</td>
</tr>
</tbody>
</table>

(Continues on the following page)
Polity Score 360 6.928 3.713 -7.000 7.000 9.000 10.000
Number of Guns sold 452 5,083.288 15,548.280 1.000 223.000 4,465.000 255,278.000
Dollar value of gun transaction 453 2,183,788.000 6,436,519.000 795.000 88,313.000 1,674,836.000 82,114,252.000
Firearm rate (IHME) 480 12.490 11.765 0.400 3.528 16.622 48.865

<table>
<thead>
<tr>
<th>Table 2: Breakdown of countries by region (World Bank Classification)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caribbean</strong></td>
</tr>
<tr>
<td>Antigua and Barbuda</td>
</tr>
<tr>
<td>The Bahamas</td>
</tr>
<tr>
<td>Barbados</td>
</tr>
<tr>
<td>Cuba</td>
</tr>
<tr>
<td>Dominica</td>
</tr>
<tr>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Grenada</td>
</tr>
<tr>
<td>Haiti</td>
</tr>
<tr>
<td>Jamaica</td>
</tr>
<tr>
<td>St. Kitts and Nevis</td>
</tr>
<tr>
<td>St. Lucia</td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
</tr>
</tbody>
</table>

The dataset in general has 495 country-year observations (15 years, 2003-2017). The years of interest for independent variables are 2003-2016, while those for the control and dependent variables are 2004-2017. This is because, as mentioned in the previous chapter on research
methodology, the independent variables are lagged by one year to address endogeneity concerns. The control variables are not lagged because the idea is to control for the demographics and other country-specific characteristic for the year of the homicide rates, not the year before. As shown in the table, some of the variables have a very high percentage of missing values (most strikingly the GINI coefficient, 212/495 or 42.8%, with 18 countries or 54.5% missing this indicator for the majority of years). Because of this, the GINI coefficient will not be used as a control variable. The Polity scores are missing for 9 countries, which at less than 30% of the total sample may at first seem reasonable to exclude, however, 8 out of them are classified as Caribbean nations, and the last one is Belize, which is a member of the Caribbean Community (CARICOM), and shares many country characteristics with the other 8. Thus, removing these countries from the dataset might prevent the results from being generalizable to that subregion, and prevent a deeper analysis of the role of small island status as a potential protective factor. Taking this into account, Polity Scores were instead dropped from the list of potential controls. Population-related variables are missing for Dominica and St. Kitts and Nevis, and due to the low number, these variables remained. The three missing GDP observations are for Venezuela in the last 3 years of the dataset and were also considered to be negligible.

Missing observations for dependent variables will be addressed later in each corresponding section. However, a few words on the source of the UNODC and IHME data are in order. As the UNODC reports on the methodological annex to its study, “an act of killing qualifies as an intentional homicide when it fulfils three basic criteria: 1. Causing the death of a person (objective criterion); 2. Intentionality (subjective criterion); 3. Unlawfulness (legal criterion).”

these criteria are most often followed by criminal justice bodies, data originating from such agencies is preferred to public health data, which might not necessarily consider the third one.\textsuperscript{108} That being said, for certain countries – most notably for the purposes of this thesis, Mexico – the UNODC had no choice but to use public health data, which it obtained from the World Health Organization’s Mortality Database.\textsuperscript{109} Unlike the IHME, these values are not regression-based estimates, but actual recorded numbers of causes of death in a country,\textsuperscript{110} which, while more reliable, are still not perfect and may bias the models (see figure 1 for a visual representation of Mexico’s outlier status in this regard). Furthermore, due to the number of missing values in the UNODC/WHO-based firearm rate (262/495 or 53% of the data; refer to table 1), IHME estimates will be used for some models. A deeper discussion of the nature of the estimates and potential discrepancies between models is included in the third section of this chapter.

Figure 1: Countries by source of homicide data (UNODC)\textsuperscript{111}

\textsuperscript{108} Data Development and Dissemination Unit of UNODC, ii.
\textsuperscript{109} Data Development and Dissemination Unit of UNODC, iii.
\textsuperscript{110} Data Development and Dissemination Unit of UNODC, iii.
\textsuperscript{111} Data Development and Dissemination Unit of UNODC, “Methodological Annex to the Global Study on Homicide 2019.”
Finally, before moving on to specific models and their results, it is worth specifying the definition of guns being used for the study. In the gun trade volumes, only small arms and light weapons are included. Since the term can be misleading, the official definition, as written by the 1997 and 1999 UN Panel of Experts and used by NISAT is as follows:

Broadly speaking, small arms are those weapons designed for personal use, and light weapons are those designed for use by several persons serving as a crew. The category of small arms includes revolvers and self-loading pistols, rifles and carbines, submachine guns, assault rifles and light machine-guns. Light weapons include heavy machine-guns, hand-held underbarrel and mounted grenade launchers, portable anti-aircraft guns, portable anti-tank guns, recoilless rifles, portable launchers of anti-tank missile and rocket systems, portable launchers of anti-aircraft missile systems, and mortars of calibres of less than 100 mm.\textsuperscript{112}

As the Panel also mentions, “The [...] accumulation and transfer of small arms and light weapons is [...] closely related to the increased incidence of internal conflicts and high levels of crime and violence. Small arms and light weapons [...] are the weapons of choice in many contemporary conflicts, in particular in internal conflicts and activities involving insurgent forces, \textit{criminal gangs} and terrorist groups (emphasis added).”\textsuperscript{113} Thus, the NISAT measure is an acceptable proxy for arms flows to gangs and organized crime, even though it measures legal transfers of weapons, since criminal gangs often divert weapons from official arsenals, be it through corrupt law enforcement or hijacking of shipments.

\textbf{General Homicide Rate}

The first dependent variable to be considered is the general homicide rate, expressed in deaths per 100,000 inhabitants and obtained from the UNODC dataset. The independent variables


\textsuperscript{113} UN Panel of Experts, 8.
are both logged, due to their non-normal distribution. The gun trade variable is specified in two different ways: dollar value of the transaction or number of guns sold. Both specifications yield similar results but have somewhat different theoretical implications. Table 3 below reports the results for fixed-effects panel models without controls, considering both possible specifications for the gun trade variable.

Results

Table 3: Panel Regression Results for the General Homicide Rate

<table>
<thead>
<tr>
<th></th>
<th>General Homicide Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>log(Nationals Deported</td>
<td>0.632</td>
</tr>
<tr>
<td>year-1)</td>
<td>(0.649)</td>
</tr>
<tr>
<td>log(Dollar Value of the</td>
<td>0.702**</td>
</tr>
<tr>
<td>transaction year-1)</td>
<td>(0.273)</td>
</tr>
<tr>
<td>log(Number of guns sold</td>
<td>0.267</td>
</tr>
<tr>
<td>year-1)</td>
<td>(0.240)</td>
</tr>
<tr>
<td>Interaction(w/ Value)</td>
<td>0.243**</td>
</tr>
<tr>
<td></td>
<td>(0.107)</td>
</tr>
<tr>
<td>Interaction(w/ Units)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.263***</td>
</tr>
<tr>
<td></td>
<td>(0.090)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Observations</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Residual Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>423</td>
<td>0.880</td>
<td>0.870</td>
<td>6.301 (df = 389)</td>
</tr>
<tr>
<td></td>
<td>390</td>
<td>0.883</td>
<td>0.873</td>
<td>6.169 (df = 357)</td>
</tr>
<tr>
<td></td>
<td>389</td>
<td>0.882</td>
<td>0.871</td>
<td>6.212 (df = 356)</td>
</tr>
<tr>
<td></td>
<td>390</td>
<td>0.884</td>
<td>0.873</td>
<td>6.162 (df = 356)</td>
</tr>
<tr>
<td></td>
<td>390</td>
<td>0.886</td>
<td>0.875</td>
<td>6.126 (df = 355)</td>
</tr>
<tr>
<td></td>
<td>389</td>
<td>0.882</td>
<td>0.871</td>
<td>6.209 (df = 355)</td>
</tr>
<tr>
<td></td>
<td>389</td>
<td>0.885</td>
<td>0.874</td>
<td>6.144 (df = 354)</td>
</tr>
</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01
Fixed-effects models were chosen to control for country-specific characteristics, as the countries in the dataset differ substantially on a number of measures (population, GDP, geographic proximity to the United States). We now briefly discuss each model in turn. Models 1, 2, and 3 test the relationship between the homicide rate and each of the independent variables in isolation. Both the number of nationals of the country deported from the United States and the number of guns received by the country from the United States the previous year are not statistically significant, but the dollar value of the gun transactions is. Because this variable is log-transformed, it is interpreted as the effect of a percent change in the independent variable on the homicide rate. In this case, an increase of 20% in the dollar value of gun transactions would result in an increase of 0.14 homicides per 100,000. For a country in the Americas that had a population of 10 million people – almost 40% of the sample had higher numbers than this for at least one year in the dataset – 14 additional people would die by homicide every year. For Brazil (2017 population = 208 million), Mexico (2017 population = 125 million), El Salvador (2017 population = 6.4 million), and Jamaica (2017 population = 3 million) the increases would be of 291, 175, 9, and 4 additional deaths, respectively. Models 4 and 6 simply calculate the deportee and gun variables (both specifications) together in an additive model. The results are not substantially different from calculating the two variables in separate equations. As in the first 3, only the dollar value of the gun transaction is statistically significant, and it presents a quite similar, though very slightly higher, coefficient (0.702 x 0.710).

Models 5 and 7 introduce an interactive term between the two independent variables. Model 5 uses the gun variable as expressed by the dollar value of the transaction, while model 7 uses the number of guns sold. In an interactive model, the lower-level coefficients are not relevant for the sake of hypothesis testing, as they indicate what the coefficient for that variable would be
if the other variable was equal to zero.\textsuperscript{114} In this case, there is not even an observation in the dataset where the number of log of deportations would be equal to zero, and while there are a few cases in which the gun trade (in units) between the United States and a country is equal to 1 (and thus the log would be 0), the same is not true for value of transactions. Therefore, the statistically significant negative coefficient of the number of guns transferred in model 7 should not be interpreted as an indication that more guns reduce homicide, since that would be the coefficient \textit{if} the log of deportations was 0, which as previously mentioned it never is for the country-years analyzed (min=0.69).

In relation to the discrepancy between the results for the influence of the gun trade depending on the specification used (dollar value of the transaction or number of units sold), one possible explanation is that more expensive weapons tend to be more powerful, and therefore more deadly. In this context, the number of units sold would be a bad proxy, because, quite intuitively, we would expect an AR-15 assault rifle, for example, to be considerably more deadly than a 9mm pistol. Thus, looking solely at numbers of guns sold can be deceiving. Since it is hard to quantify with a “deadliness measure” each gun unit, the dollar value is the best representation of this differences available at the moment.

Considering this, the values of interest in these two models are the interaction terms, which are both significant and similar in value. The graphs below (Figures 2 and 3) offer a visual representation of the marginal effects of each of the variables on the other, with a 90\% confidence interval.\textsuperscript{115} In both cases, low values of the moderator variable cause the effect of the other variable on homicide rates to be slightly negative, though a null effect (flat line) would also fall within the


\textsuperscript{115} The gun trade is presented with the dollar value specification only, for the reasons explained above.
confidence intervals. For high values of the moderator variable, on the other hand, the effect of the remaining variable on the homicide rate is positive, and significantly so, since a null effect (flat line) lies outside of the confidence interval.

**Figure 2. Predicted values of the Homicide Rate (effect of deportations, given dollar value)**

![Graph showing predicted values of the Homicide Rate](image1)

**Figure 3. Predicted values of the Homicide Rate (effect of dollar value, given deportations)**

![Graph showing predicted values of the Homicide Rate](image2)
The results presented above lead to an interesting conclusion: the effect of each of the predictor variables depends on the presence or absence of the other. As it has been shown, the dollar value of the gun trade seems to have an independent effect regardless of whether deportee flows are present or not, but deportee flows seem to have no significant effect, except as part of the interaction term with gun flows. One possible explanation for this is that the majority of those deported do not have a previous criminal record, let alone a violent one, and by themselves are more likely to be recruited as low foot soldiers. If a gang’s arms arsenal is limited, those members are the least likely to receive a weapon, and thus are less likely to have any substantial influence in the homicide rate. However, if the volume of the gun trade is high enough, there will be an abundance of weapons at the disposal of gangs, and thus even foot soldiers will be more likely to have a firearm. This in turn means that any dispute for control of a drug market corner, for example, can escalate and become deadly, which would not have happened in the absence of firearms. In other words, more people without more arms cannot be as deadly as more people with more arms. Conversely, the effect of firearms is also intensified by the presence of deportees, as guns with no gang members to yield them would just remain idly by in a stockpile, without being used to fuel further violence.

Controls

While it is interesting to consider the effect of the independent variables of interest by themselves, it is also important to consider what else could influence the homicide rates in a country. First, as mentioned in the chapter on methodology, there are certain demographic factors that are often associated with crime rates, including the number of young males in a population, the income level of a country and the corruption level in the government. Thus, the following two models present the results of the analysis of the effect of the gun (only the dollar value
specification) and deportee flows on the homicide trade controlling for other factors. The first model is once again a fixed-effects model, and the second one is a pooling model, for reasons that will be further explained below.

Table 4. Regression results for the General Homicide Rate with controls

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Homicide Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed-Effects</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>log(Nationals Deported year-1)</td>
<td>1.862**</td>
</tr>
<tr>
<td></td>
<td>(0.722)</td>
</tr>
<tr>
<td>log(Dollar value of gun transaction year-1)</td>
<td>0.658**</td>
</tr>
<tr>
<td></td>
<td>(0.274)</td>
</tr>
<tr>
<td>% Male Youth</td>
<td>-84.997</td>
</tr>
<tr>
<td></td>
<td>(86.170)</td>
</tr>
<tr>
<td>Region: Central America</td>
<td>-3.314</td>
</tr>
<tr>
<td></td>
<td>(2.374)</td>
</tr>
<tr>
<td>Region: South America</td>
<td>-8.879***</td>
</tr>
<tr>
<td></td>
<td>(2.017)</td>
</tr>
<tr>
<td>log(GDP per capita)</td>
<td>-0.020</td>
</tr>
<tr>
<td></td>
<td>(1.154)</td>
</tr>
<tr>
<td>corruption</td>
<td>-3.913*</td>
</tr>
<tr>
<td></td>
<td>(2.336)</td>
</tr>
<tr>
<td>Constant</td>
<td>-42.223**</td>
</tr>
<tr>
<td></td>
<td>(20.479)</td>
</tr>
</tbody>
</table>

| Observations         | 371           | 371     |
| R²                   | 0.893         | 0.312   |
| Adjusted R²          | 0.882         | 0.299   |
| Residual Std. Error  | 5.966 (df = 336) | 23.526*** (df = 7; 363) |
| F Statistic          |              |         |

Note: *p<0.1; **p<0.05; ***p<0.01
The results of these two analyses lead to some noteworthy conclusions. First, contrary to the control-free models, the deportation variable is highly significant in both specifications. This is probably due to the control for the percentage of male youth, since in general most of those deported are male and young adults. The almost doubling of the coefficient is due to the fact that fixed-effects regressions assign country-specific baselines (intercepts) and thus part of the variation would be contained there. In any case, the coefficient in Model 1 reflects that, for a 20% increase in the number of nationals of the country deported from the United States the previous year, the homicide rate increases by 0.37. For a country with 10 million inhabitants, these would translate to an addition 37 homicides each year. For Brazil, it would be 770 lives lost to violence; for Mexico, 463; for El Salvador, 24; and for Jamaica, 11. For the pooling model, which in brief treats Latin America and the Caribbean as a unit and disregards inter-country variation, with a total population for 2017 of around 631.5 million, a 20% increase in the number of deportations would result in over 4,000 additional killings. The coefficient for the gun trade in the fixed-effects model is consistent with those for the control-free models (see table 3). The change in direction in the pooling model is probably a reflection of the extreme variance in the value of the gun trade across countries, rather than an indication that more guns in Latin America reduce homicide. Nevertheless, it is possible that this number reflects the fact that NISAT numbers are official sales and do include guns destined to security forces, which theoretically could be a reason for reduced crime.

When it comes to the control variables, only corruption is significant for the fixed-effects model, while the situation reverses in the pooling model. Once again this might be due to country effects capturing part of the variation reported by the controls. An important note on the corruption
variable is that it exists on a -2.5 to 2.5 scale, with higher values meaning a less corrupt country. Thus, the negative coefficient in this variable indicates that, as a country becomes less corrupt, their homicide rate tends to reduce. The incredibly high coefficient for male youth is misleading. Since that variable is measured in percentages, a 1-unit increase would in fact result in a percentage higher than 100%. To help in understanding the real impact of that variable, it is worth thinking of a 0.01 increase (1% more males in the population) which would result in a new coefficient of 3.7, meaning 1% more males result in almost 4 more people being killed per 100,000. The behavior of the GDP variable is inconsistent, and its positive and significant coefficient in the pooling model is probably driven by a few outliers, that have high GDP per capita and high homicide for certain years, such as St. Kitts and Nevis and Venezuela. Finally, the pooling model contains variables for the region the country is part of – the fixed-effects model captures that variation in the country effects. Interestingly, being South American acts a protective factor for countries, resulting in a lower homicide rate than the baseline Caribbean. This is probably a sign that the closer a country is to the United States, the stronger we would expect the effect to be. The coefficient for Central America is negative as well but not significant, and this might be because Mexico is included in that category and has unusually low homicide rates given the other factors, which will be explored further in the qualitative analysis of the following chapters.

**Firearm Homicide Rate**

For the firearm homicide rate, there are two possible specifications. As mentioned earlier in the chapter, this variable was obtained both from the UNODC and the IHME and is measured quite differently by each institution. As shown by the descriptive statistics (see table 3), values from the UNODC are consistently higher than those from the IHME, but the former has less than half as many country-years as the latter (233 x 480, St. Kitts and Nevis is the only country missing
from IHME). Furthermore, while those missing values are concentrated in a few countries, all countries have at least 2 years missing. 8 countries (approximately one quarter of the sample) have less than 2 years listed, and half the sample has more than half of the years missing. Thus, though in general UNODC numbers should be more reliable as they are not estimates, the number of missing values creates a significant bias. For the purpose of comparison, below are the non-control fixed-effects models for both specifications of the rate (note that only the dollar value specification for the gun trade volume was included, for the reasons explained in the previous section).

Results

Table 5. Panel Regression Results for the Firearm Homicide Rate

<table>
<thead>
<tr>
<th>Dependent variable: Firearm Homicide Rate</th>
<th>( \log(\text{Nationals Deported year-1}) )</th>
<th>( \log(\text{Dollar value of gun transaction year-1}) )</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNODC (1)</td>
<td>1.366**</td>
<td>0.732*</td>
<td>0.254*</td>
</tr>
<tr>
<td>(2)</td>
<td>1.483**</td>
<td>0.762**</td>
<td>(0.141)</td>
</tr>
<tr>
<td>(3)</td>
<td>-2.046</td>
<td>-0.912</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>0.574**</td>
<td>0.161</td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td>0.613**</td>
<td>0.166</td>
<td></td>
</tr>
<tr>
<td>(7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8)</td>
<td>-0.681</td>
<td>-0.426</td>
<td></td>
</tr>
<tr>
<td>IHME (1)</td>
<td></td>
<td></td>
<td>0.099**</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td>(0.041)</td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observations | 233 | 207 | 207 | 207 | 448 | 410 | 410 | 410 |
R\(^2\)       | 0.885 | 0.880 | 0.881 | 0.883 | 0.965 | 0.960 | 0.960 | 0.961 |
Adjusted R\(^2\) | 0.868 | 0.862 | 0.863 | 0.864 | 0.962 | 0.957 | 0.957 | 0.958 |
Residual Std. Error | 6.074 (df = 203) | 6.121 (df = 179) | 6.110 (df = 178) | 6.071 (df = 177) | 2.291 (df = 415) | 2.396 (df = 378) | 2.379 (df = 377) | 2.364 (df = 376) |

Note: *p<0.1; **p<0.05; ***p<0.01
As expected, the results differ significantly between the two specifications. Interestingly, the gun trade variable has no effect on the firearm rate under the IHME specification, but it does under the UNODC one; for the deportation variable, the situation is reversed. This might be because the IHME estimates are based on known characteristics of a country and take population into account. Thus, an influx of people would affect it. The UNODC measure, however, is the actual rate of firearm homicides registered, and intuitively, would be affected by an influx of firearms. Nevertheless, the results are inconclusive, as one measure is an estimate and the other has too many missing values to be reliably generalizable for the entire region. Importantly, the interaction term is still positive and significant (though only at the 0.1 level in this model). This is evidence that the moderation effect withstands different tests and is worth considering seriously.

Controls

Table 6. Regression results for the Firearms Homicide Rate with controls

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable:</th>
<th>UNODC Fixed-effects</th>
<th>UNODC Pooling</th>
<th>IHME Fixed-effects</th>
<th>IHME Pooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>log(Nationals Deported year-1)</td>
<td></td>
<td>2.350*</td>
<td>2.717***</td>
<td>0.656**</td>
<td>2.522***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.298)</td>
<td>(0.540)</td>
<td>(0.284)</td>
<td>(0.281)</td>
</tr>
<tr>
<td>log(Dollar value of gun transaction year-1)</td>
<td></td>
<td>0.712*</td>
<td>-0.812</td>
<td>0.160</td>
<td>-0.751**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.386)</td>
<td>(0.560)</td>
<td>(0.106)</td>
<td>(0.303)</td>
</tr>
<tr>
<td>% Male Youth</td>
<td></td>
<td>-58.643</td>
<td>-19.597</td>
<td>10.078</td>
<td>208.660***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(141.640)</td>
<td>(165.997)</td>
<td>(32.549)</td>
<td>(76.221)</td>
</tr>
<tr>
<td>Region: Central America</td>
<td></td>
<td>-7.750***</td>
<td>-0.825</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.953)</td>
<td>(1.476)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region: South America</td>
<td></td>
<td>-9.781***</td>
<td>-1.657</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.585)</td>
<td>(1.217)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>log(GDP per capita)</td>
<td></td>
<td>0.378</td>
<td>-7.103***</td>
<td>0.310</td>
<td>4.881***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.433)</td>
<td>(2.372)</td>
<td>(0.449)</td>
<td>(0.875)</td>
</tr>
<tr>
<td>corruption</td>
<td></td>
<td>-7.749*</td>
<td>-3.272*</td>
<td>0.130</td>
<td>-3.387***</td>
</tr>
</tbody>
</table>
As with the general homicide rate, it is important to consider how the independent variables behave when specific controls are introduced to the model. The controls used are the same as before, and two iterations of the model are presented, one with fixed-effects and one using the pooling method. The table above presents the results for these analyses for each of the two specifications for the firearm homicide rates explained above. In general, the conclusions are similar to those presented for the general homicide rate, most likely because these numbers should indeed be highly correlated, since an increase in the firearm homicide rate would necessarily mean an increase in the general homicide rate. An important and somewhat unexpected result is that, under the UNODC specification, the coefficient for Central America is highly significant and negative, indicating that the region should have significantly lower levels of homicide than the baseline (Caribbean). This is counter-intuitive, since the top 13 country-years for the firearms rate are in the region. However, the reason for this is most likely the biased nature of this measure. Many of the countries missing the most years for this measure are in the Caribbean and have very low homicide rates. In fact, over half of the Caribbean countries are missing a very high number of years. Thus, these results most likely do not reflect reality.
Gang/Organized-Crime Homicide Rate

Finally, we now turn to the gang/organized-crime related homicide rate. The choice to treat these two separate measures as a single one is due to the fact that different countries may consider a similar type of group as a gang, while others will deem it organized crime. The values come from the UNODC dataset, and to the best of the author’s knowledge, have never previously been used in a statistical analysis of this nature. A word of caution about the nature of this measure is warranted, however. First, as table 7 below showcases, there are only 72 country-years included, as opposed to the 495 used for the previous two analyses. The years contemplated are 2005-2017, but no year has data for all countries, and no country has data for all years. Among these countries, only 1 comes from South America, 4 from Central America, and the remaining 5 from the Caribbean (see table 8 for reference). Second, many homicides may not have an associated gang/organized crime label to it but may still have ties to gang activity that were unknown to law enforcement at the time of recording; this means that rates may be lower than in reality. Finally, the small-n of the sample limits the number of control variables that could be included, and therefore, despite the better proportion of non-missing values for certain variables (such as the Polity Score), the models will retain the same variables used before.

Table 7. Descriptive Statistics for the Gang/Organized-Crime Homicide Rate Dataset

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Pctl(25)</th>
<th>Pctl(75)</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gang/organized-crime homicide rate</td>
<td>72</td>
<td>11.659</td>
<td>9.062</td>
<td>0.128</td>
<td>4.660</td>
<td>16.879</td>
<td>32.602</td>
</tr>
<tr>
<td>Population</td>
<td>72</td>
<td>8,127,770.000</td>
<td>12,907,792.000</td>
<td>179,126</td>
<td>1,342,657.0</td>
<td>8,192,449.0</td>
<td>47,520,667</td>
</tr>
<tr>
<td>% male</td>
<td>72</td>
<td>0.493</td>
<td>0.009</td>
<td>0.470</td>
<td>0.490</td>
<td>0.499</td>
<td>0.503</td>
</tr>
</tbody>
</table>

(Continues on following page)
% male youth | 72 | 0.093 | 0.009 | 0.068 | 0.088 | 0.097 | 0.108
% youth | 72 | 0.184 | 0.017 | 0.135 | 0.173 | 0.196 | 0.212
GINI | 41 | 50.041 | 4.416 | 40.600 | 46.900 | 52.800 | 56.200
GDP per capita | 72 | 9,826.303 | 8,714.097 | 1,572.066 | 3,676.396 | 13,748.350 | 31,472.100
Corruption Control | 72 | -0.166 | 0.621 | -0.954 | -0.392 | -0.161 | 1.368
Nationals Deported | 72 | 7,400.556 | 11,495.560 | 9 | 165.5 | 18,633.8 | 40,654
Polity Score | 60 | 8.350 | 1.102 | 7.000 | 7.000 | 9.000 | 10.000
Number of Guns sold | 69 | 5,609.623 | 14,684.580 | 1.000 | 960.000 | 4,548.000 | 110,523.000
Dollar value of gun transaction | 69 | 3,414,688.000 | 8,984,732.000 | 4,084.000 | 322,027.000 | 2,297,102.000 | 61,886,542.000

Table 8. Breakdown of countries by region and number of years in the gang dataset

<table>
<thead>
<tr>
<th>Caribbean</th>
<th>Central America</th>
<th>South America</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Bahamas (8)</td>
<td>Belize (1)</td>
<td>Colombia (7)</td>
</tr>
<tr>
<td>Dominican Republic (4)</td>
<td>El Salvador (9)</td>
<td></td>
</tr>
<tr>
<td>Jamaica (10)</td>
<td>Honduras (10)</td>
<td></td>
</tr>
<tr>
<td>St. Lucia (3)</td>
<td>Panama (10)</td>
<td></td>
</tr>
<tr>
<td>Trinidad and Tobago (10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results

With all of this in mind, three models were considered. Model 1 represents an additive effect, model 2 represents an interactive effect and model 3 includes the same controls as previously. This time, due to the limited number of observations for each country, no fixed effects were considered, and all results shown come from the pooling method. Despite this choice, region
was not included as a variable as it was for previous pooling models, since there is severe underrepresentation of South America.

With the exception of the deportation variable in the additive and the controls models, no predictor was statistically significant even at the 0.1 level. This indicates that there is indeed an effect of deportations on the crime rates that warrant further investigation, as the effect remained even in such a restricted sample. Regarding the interaction effect, unlike with the other two independent variables, there does not seem to be one. This does not mean that the effect may not exist for gang crime, but the current sample might not be enough to detect it. Alternatively, these results can be interpreted to mean that gangs in the countries present in this sample are affected more by an influx of deportations regardless of the volume of gun transactions. Since Jamaica and El Salvador are both in this sample, this is an interesting avenue to be explored in the following qualitative analyses, especially in comparison with Mexico and Brazil, which are absent from this sample and are the other two cases.

**Table 9. Regression results for the Gang/Organized-Crime Homicide Rate**

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Gang/Organized-Crime related Homicide Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>log(Nationals Deported year-1)</td>
<td>1.189^{**}</td>
</tr>
<tr>
<td></td>
<td>(0.520)</td>
</tr>
<tr>
<td>log(Dollar value of gun transaction year-1)</td>
<td>-0.790</td>
</tr>
<tr>
<td></td>
<td>(0.609)</td>
</tr>
<tr>
<td>Interaction</td>
<td>-0.259</td>
</tr>
<tr>
<td></td>
<td>(0.256)</td>
</tr>
<tr>
<td>log(GDP per capita)</td>
<td></td>
</tr>
<tr>
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</table>

(Continues on next page)
corruption 3.999
\(2.760\)

% Male Youth 238.431
\(239.325\)

Constant 13.891*
\(-9.530\)
\(-23.259\)
\(8.250\)
\(24.571\)
\(48.072\)

Observations 69 69 69

R\(^2\) 0.081 0.095 0.144

Adjusted R\(^2\) 0.053 0.054 0.076

Residual Std. Error 8.889 (df = 66) 8.887 (df = 65) 8.780 (df = 63)

F Statistic 2.911* (df = 2; 66) 2.283* (df = 3; 65) 2.124* (df = 5; 63)

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

Conclusion

The results of the previous three sections indicate that there indeed seems that deportations and gun transactions have a relationship with the homicide rate in Latin America and the Caribbean. The effects are not large in some models, and there are some significant data limitations, especially for the results of the last section on gang/organized-crime homicides. Nevertheless, these analyses have shown that this is a promising avenue for research, which warrants more attention and more quantitative analyses.

For the future, it would be useful to consider the demographic breakdown of those deported (by age, sex, criminal conviction or lack thereof) as well as the breakdown by type of weapon imported. Moreover, improved controls would be useful, especially the GINI coefficient and the Polity Score, both of which are missing for a significant percentage of the countries of interest. Alternative specifications of certain variables are also worth exploring, especially for gun flows. As was explained earlier, the NISAT dataset measures legal, registered, arms transfers between countries, and while it may serve as a proxy for arms flows in general, and part of the arms obtained
by criminal groups are indeed diverted in-country from legitimate sources, it does not capture perfectly the reality of arms flows. Models with firearms tracing data would be better at reflecting the method of straw purchasing, for example, but as of now the UNODC dataset on this subject does not include country of origin of the guns traced, only whether they were registered domestically or internationally, and the United States’ ATF data includes only a very limited subset of countries. Finally, the ideal measure for a study such as this one would indeed be the UNODC gang/organized-crime homicide rate, but as of now the data is so limited that conclusions cannot be generalizable, and models serve only as very basic proofs of concept. Future researchers should attempt to either manually compile a comprehensive dataset by combining country-level data, or the UNODC should improve its recording process of this data from member states.

While these are questions and limitations this thesis cannot at present solve, the results of the quantitative analyses raise some interesting questions that can and will be explored in the qualitative analyses that follow. First, the pooling models did indicate a role for geography in the relationships, namely that being from South America – and thus farther away from the United States – acts as a protective factor for countries. This will be addressed through the geographic diversity of countries considered – especially considering the position of Brazil. Second, the interaction effects showed that at high levels of both gun trade volumes and deportees, the homicide rate should be at its highest, but Mexico has the highest numbers of deportees and some of the highest gun trade volumes and yet does not have one of the highest homicide rates. In addition, if distance from the United States is hypothesized to be a protective factor, the effect should be even more evident. Finally, the remaining two countries, El Salvador and Jamaica, are much smaller compared to the other two (which in terms of both population and territory are the two biggest countries in the region), and yet are at the top of their respective regions in terms of
homicide rates. In the two chapters that follow, all of these puzzling situations will be explored in-depth.
Qualitative Analysis I: A Butterfly Flaps its Wings - Deportees

Introduction

This chapter and the next aim to explore the mechanisms by which deportee and gun flows may affect the homicide rate in Latin America and the Caribbean, namely by strengthening organized crime. This first chapter focuses on deportees, and the following one on guns. Both of them will use the same four countries as case studies: Brazil, El Salvador, Jamaica, and Mexico. These countries have been chosen to represent each of the four subdivisions of the region (South America, Central America, Caribbean, and North America,\textsuperscript{116} respectively), but also because they have high deportee flows and quite active gangs. Figure 4 below shows the log of the number of nationals deported the previous year for each of the countries in comparison with the median for Latin America. As can be seen, all of the countries are well above the halfway point.

Moreover, with the exception of Mexico in the first half of the period under study, all of the countries have a higher homicide rate than the median for Latin America, but there is ample variation among them (see figure 5 below). Therefore, the rest of this chapter will compare the four in an attempt to pinpoint what other factors may influence the relationship as well.

\textsuperscript{116} The World Bank does indeed include Mexico as part of Central America in its subdivision, and the author is aware that the classification is debated, but Mexico is a key case due to its long land border with the United States and its overwhelming share of the total deportees to the region.
Figure 4. Log of nationals deported in the previous year as compared to the sample median

Figure 5. Homicide rates in the case study countries as compared to the sample median
Finally, because the focus is on deportee flows, it is worth having in mind the breakdown of deportees by criminal conviction in each of the countries, since, intuitively, criminal deportees would be more likely to increase homicide rates than those that have no previous convictions. For the purposes of table 10, the non-criminal group includes deportees with a conviction of illegal entry or re-entry as well.

**Table 10: Breakdown of deportees by criminal conviction (2003-2018)**

<table>
<thead>
<tr>
<th></th>
<th>% Criminal</th>
<th>% Non-criminal</th>
<th>Total</th>
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<tbody>
<tr>
<td>Mexico</td>
<td>48</td>
<td>52</td>
<td>2,985,045</td>
</tr>
<tr>
<td>El Salvador</td>
<td>31</td>
<td>69</td>
<td>281,095</td>
</tr>
<tr>
<td>Brazil</td>
<td>10</td>
<td>90</td>
<td>48,648</td>
</tr>
<tr>
<td>Jamaica</td>
<td>83</td>
<td>17</td>
<td>21,263</td>
</tr>
</tbody>
</table>

The remainder of this chapter uses news articles and secondary sources, most of which include interviews with deportees in each of the countries of interest, to trace the mechanisms by which deportees may join gangs and thus strengthen them. The focus is on the different recruitment strategies of each type of gangs, and how they might attract – or not – recently returned deportees.

**Jamaica**

The first case we will consider is Jamaica. The focus here, as in the remainder of this chapter, is on the internal characteristics and structure of gangs, especially their objective and recruitment methods, as they relate to deportee flows. The quantitative chapter analyzed the
connection between deportees and the homicide rate, but the analyses that follow have a narrower focus that aims to illuminate how the two could be related.

Gangs in Jamaica, also known as posses, are not only interested in drug trafficking and turf wars, but also have a business mentality.¹¹⁷ As in other places in Latin America and the Caribbean, Jamaican posses are not just a violent, drug trafficking organization. Instead, they are also a sort of “state within a state,” providing services to citizens when the state fails to do so. In many cases, they, not the formal government, are the ones enforcing security, providing education, public health and employment.¹¹⁸ Therefore, it is not unreasonable that citizens would often feel closer to the gangs that provide them services as opposed to the government that fails to curb violence and is awash with corruption, and thus perceived as both unwilling and unable to serve them as it should.

Moreover, as gangs grow, they increasingly need more low-level workers, especially as increased crime-fighting initiatives might reduce the number of members as they get arrested and incarcerated. However, posses do not want just any person to be part of their enterprise. Instead, they have a strong preference for Jamaican nationals, if at all possible.¹¹⁹ This might be because they perceive Jamaicans as more connected to their overall culture, but also because they may be wary of outsiders who might not feel as much allegiance to them.

Considering this background, it is relatively clear how deportee flows from the United States could strengthen gangs in Jamaica. First, most scholars of the gang phenomenon in Jamaica,
regardless of whether they believe deportees – criminal or otherwise – have an effect on crime or not, point out that deportees face a very strong stigma as they return to their countries, and are therefore isolated from society, rather than reintegrated. To make matters worse, this perception that those forcibly returned are nothing but hardened criminals comes not only from communities themselves, but reflect views openly held by high officials of the Jamaican government. This, therefore, translates to lack of employment and support systems, but also of public support from a welfare-state, which in turn could push deportees to gangs, as they: (1) provide social services; (2) are a network of people, many of whom have ties to the United States, the country many of the deportees consider their home. Therefore, stigma becomes a self-fulfilling prophecy.

As Tanya Golash-Boza shows, through interviews with 37 deportees in Jamaica, in general they feel ashamed, isolated, and have complex ideas of home. Moreover, the men – which are the majority of the deportees – feel an added layer of gendered shame because they feel they are supposed to provide for the families but are unable to do so and are instead dependent on their wives, girlfriends, mothers or children. While the author’s focus is on how the deportees feel after their return, and the people she interviews only mention involvement with the drug trade in the United States but not in Jamaica, it is not hard to extrapolate that the isolation and shame they feel might lead them to a similar involvement in the illegal economy if their need becomes extreme.

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122 Headley, “Giving Critical Context to the Deportee Phenomenon.”

enough. Thus, the sociopsychological impacts of the experience of deportation might draw those who experience it to the gangs, as a last resort to escape homelessness, unemployment and the shunning of formal society. In such a context, deportees might feel the gangs are the only ones who “get them.”

Nevertheless, many authors argue that quantitatively speaking the effect of deportees on Jamaican homicide rates is negligible or at best very low.\(^{124}\) In fact, some authors go as far as to say that at the end of the day deportations might still be worth it because the costs of a life, as often calculated in criminological economics research, are lower in Jamaica than in the United States, though they do stress that they are not claiming some people are worth saving more.\(^{125}\) That being said, a qualitative impact might still exist, and the effect might be indirect because, as mentioned briefly in the previous chapter, most deportees are not violent offenders. Jamaica does indeed have the highest proportion of criminal to non-criminal deportees among the case studies (refer to table 10 in the previous section), something that was noted by other authors for the period of the late 1990s as well.\(^{126}\) However, the majority of them have been convicted for marijuana or cocaine sale offenses.\(^{127}\) Since most authors trace the strength of Jamaican \textit{posses} precisely to the trafficking of marijuana – “ganja” – and cocaine,\(^ {128}\) this means that those deportees could still strengthen the gangs, and since they are known for being some of the most violent of the region,\(^ {129}\) that would indirectly increase homicides. Moreover, previous studies have also identified a strong correlation


\(^{125}\) Madjd-Sadjadi and Alleyne, “The Potential Jamaican Impact of Criminal Deportees from the U.S.” 51.


\(^{129}\) Manwaring, “A Contemporary Challenge to State Sovereignty.”
between deportees from the United States and the homicide rate in Jamaica for the period between 1990-2004 – therefore a period of a similar length as the present one but immediately prior – which might indicate that, even if the effect is weaker for the past decade, it might have been quite strong in the recent past.\textsuperscript{130}

\textbf{El Salvador}

The second case study is El Salvador. Salvadoran gangs (or maras) are, in a way, the epitome of the Butterfly Effect this thesis explores. Though there are other small gangs in the country, the biggest and most influential ones are Mara Salvatrucha (MS-13) and its rival 18\textsuperscript{th} Street (Barrio/M-18). Unlike Jamaican posses, the maras started in the streets of Los Angeles, and only moved to the Central American nation after the United States starting deporting members in the late 1990s.\textsuperscript{131} Therefore, the link between deportations and gang crime in this case seems relatively more straightforward, as some authors have shown by analyzing the emergence of extortion and drug trafficking in the country after deportations started.\textsuperscript{132} To make matters worse, initially – in fact as recently as 2014 – the government of El Salvador was not informed of the gang status of deportees it received, as U.S. regulations prohibited the disclosure of such information, making the phenomenon even harder to control.\textsuperscript{133}

\textsuperscript{130} Williams and Roth, “The Importation and Re-Exportation of Organized Crime,” 308–9.


In the case of El Salvador, unlike in the case of Jamaica, most deportees – more precisely around two thirds – do not have any criminal conviction.\textsuperscript{134} Nevertheless, most of the literature has found some link between the subset of deportees who do have a criminal record and increases in crime in the country, both in recent years and in the more distant past.\textsuperscript{135} As an example, one author stresses the case of Borromeo Henrîques Solórzano, also known as the Little Devil of Hollywood, who is generally considered to be one of the top leaders of MS-13 and was deported from the United States in the late 1990s.\textsuperscript{136} Other authors note that to this day the two gangs – MS-13 and M-18 – rely on deportees to hold the positions of power and leadership within their organizational structure, since they tend to have criminal knowledge from their time abroad, though lower-level workers tend to be recruited among local youth.\textsuperscript{137} In that context, even though the number of criminal deportees is lower, we would expect them to exercise a noticeable influence in the strength of the gangs.

If Jamaican \textit{posses} were a sort of welfare state or social work agency, \textit{maras} are more akin to (ultraviolent) surrogate families.\textsuperscript{138} In that context, they provide the social support and sense of collective identity that may be lacking for certain Salvadorans, who seek respect and friendship within gangs.\textsuperscript{139} While this idea is often applied to the local youth that are recruited into the gangs, it is possible to draw a parallel with the deportees’ situation since they also feel isolated upon return, as the Jamaicans do.\textsuperscript{140} As in Jamaica, the government of El Salvador also considers

\begin{footnotesize}
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\item TRAC Reports, “Latest Data: Immigration and Customs Enforcement Removals.”
\item Arana, “How the Street Gangs Took Central America,” 102.
\item Dingeman and Rumbaut, “Immigration-Crime Nexus and Post-Deportation Experiences: En/Countering Stereotypes in Southern California and El Salvador”; Charles Negy et al., “Psychological Homelessness and
\end{enumerate}
\end{footnotesize}
deportations to be a main cause of its struggle with violence, and in this instance media sensationalization is also present, with MS-13 at times being dubbed the most dangerous gang in America or indeed the world.\textsuperscript{141} Against this background, stigma against deportees is even stronger than it was in the Caribbean nation, reaching unprecedented levels, and goes beyond simple social ostracization. Official \textit{mano dura} (hard line) government enforcement actions have led to profiling of all deportees as criminal, and, as Salvadoran deportees told researchers Dingeman and Rumbaut, seemingly innocent tattoos and Spanglish have become synonymous with gang affiliation and led to police searching and arresting non-criminal deportees.\textsuperscript{142}

In El Salvador, a significant number of the deportees originally emigrated as children, and essentially grew up in the United States, which makes their situation even more complicated. It is them that suffer the most with the stigmatization and conflation with gang members, since they appear more foreign than adult migrants who might have only spent a couple of years outside of the country.\textsuperscript{143} Because they experience the social isolation and stigmatization more intensely, they are more likely to turn to gangs, seeing as its members are the ones that would be more similar to them than the general population of a country they barely know. As Jamaicans struggled with physical homelessness, the plight of Salvadoran deportees is mainly “psychological homelessness,” that is, not feeling connected to a country that is supposed to be home.\textsuperscript{144} In this context, this extreme sort of isolation would prompt a return to gangs, which traditionally attract

\textsuperscript{141} Ambrosius, “Deportations and the Roots of Gang Violence in Central America”;
\textsuperscript{142} Dingeman and Rumbaut, “Immigration-Crime Nexus and Post-Deportation Experiences: En/Countering Stereotypes in Southern California and El Salvador.”
\textsuperscript{143} Dingeman and Rumbaut, “Immigration-Crime Nexus and Post-Deportation Experiences: En/Countering Stereotypes in Southern California and El Salvador.”
\textsuperscript{144} Negy et al., “Psychological Homelessness and Enculturative Stress among US-Deported Salvadorans.”
“alienated young men who expect to die young or spend most of their lives in prison.”¹⁴⁵ For Salvadoran deportees, that is precisely their prospective future, since stigma may lead them to arrest and subsequent incarceration or to death at the hands of gang members that already perceive them as members of a rival gang.¹⁴⁶ Hence, if everyone treats them as a gang member and they therefore already suffer all the negative consequences but reap none of the benefits of membership, they have nothing to lose and a lot to gain from indeed joining such a group. Once again, as in the Jamaican case, “removal policies […] become self-fulfilling prophecies, expanding and exacerbating that which they attempted to detain, deport, and deter.”¹⁴⁷

On a final note, maras originated as youth gangs, and to this day the age of initiation is still very young – often under 15 years of age.¹⁴⁸ Because of that, recruitment works in a different way than it did for posses and thus deportees would not necessarily strengthen the organization by becoming foot soldiers – as mentioned above, they tend to be at higher levels. That being said, studies have shown that as the inflow of (criminal) deportees grows, levels of schooling – especially for males – drop, which indicate intensified recruitment in a gang.¹⁴⁹ Therefore, deportees in El Salvador may strengthen gangs both by (re)joining to curb their own social isolation and by indirectly leading to an increased demand for low-level workers, which are recruited from elementary/middle schools.

¹⁴⁶ This also raises the possibility that deportees could increase the homicide rate by being victims rather than killers.
Mexico

While Jamaica and El Salvador fit quite well the model specified in the quantitative analysis presented in the previous chapter, the remaining two cases studies are a bit different. The two of them are the biggest countries in terms of both territory and population, and have significantly higher internal diversity than the small countries already addressed. The first one of the two, Mexico, has the highest number of deportees in the sample – about half of whom have no criminal conviction – and is in fact responsible for 70% of the total number of deportees the United States sends to the entire world. However, it is far from having the highest homicide rate in the sample, despite the fact that some of its regions are indeed among the most dangerous in the world, and the country has the highest incidence of kidnappings in the planet. One explanation for the counterintuitively low rates for Mexico in this dataset could be the source of the data (public health as opposed to law enforcement), as mentioned previously, but it is also possible that this result is an instance of the Simpson’s Paradox, when aggregating results across groups causes a relationship to reverse or disappear entirely. In this case specifically, it is possible that the relationship between deportee flows and homicide rates does exist for certain regions in Mexico, but because there is great variation among them, the aggregate result does not reflect that. Finally, it is also possible that characteristics of Mexican gangs simply do not lead them to be strengthened by the high volumes of deportees. Therefore, it is worth exploring in what ways deportee flows could affect the levels of homicide in the country, even the effect is not uniform.

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150 TRAC Reports, “Latest Data: Immigration and Customs Enforcement Removals.” See also table 10 in the introduction to this chapter for a comparison with the other three cases.
153 Manwaring, “A Contemporary Challenge to State Sovereignty.”
As before, it is important to provide a brief overview of the structure of gangs – or cartels – in Mexico and their recruitment patterns before addressing how deportees might fit into the picture. Due to the regional variation within the country, it is impossible to define one “ideal” type of gang, and in general the landscape in Mexico is quite fragmented, including the presence of Salvadoran maras in the south, which fight for power over trafficking routes.\textsuperscript{154} In fact, it is possible that there is contagion, and that there is less of an effect of deportees strengthening gangs in Mexico because there is an effect in El Salvador and the maras are so strong that cartels lose power in the process. Nevertheless, overall gangs in Mexico are less of a family or social service as were the maras and posses, and operate more as an extremely violent corporation, which relies on kidnapping and extortion. Moreover, corruption and state failure play a much bigger role in Mexico, and gangs have created criminal “free states” which are de facto states within the country.\textsuperscript{155}

With that being said, we now turn to the mechanisms that could link – or not – deportees to gang strengthening in Mexico. Many sources, both scholarly articles and news, report on how deportees are often prey to kidnapping and held for ransom to be paid by their U.S. relatives.\textsuperscript{156} Thus, they would not directly strengthen gangs by becoming members, but rather might strengthen them indirectly by being victims and unconventional sources of revenue. Deportees’ sense of “psychological homelessness” and general social stigmatization in this case, which many report,\textsuperscript{157}

\begin{footnotesize}
\begin{itemize}
\item Manwaring.
\item Manwaring.
\item Albicker and Velasco, “Deportación y estigma en la frontera México-Estados Unidos”; Jill Anderson, “‘Tagged as a Criminal’: Narratives of Deportation and Return Migration in a Mexico City Call Center,” \textit{Latino Studies} 13,
\end{itemize}
\end{footnotesize}
would not draw them to join the very gangs that have victimized them, but might prevent them from seeking help and cause them to be victimized multiple times. In that context, however, it does seem that deportees find a new family in each other more so than they did in the two countries previously studied, by – in a best case scenario – working together in call centers in Mexico City or – in a worst case one – sharing a homeless encampment and heroin needles under a bridge in a border town.¹⁵⁸

Even if it does appear that deportees in Mexico are significantly more likely to be victims than perpetrators, it is still important to at least conceptually consider how they could possibly strengthen gangs by being criminals. As in El Salvador, some deportees have become crime bosses, such as Rubén Oseguera Cervantes, El Mencho, who leads the “most dangerous cartel” in the country, Jalisco Nueva Generación.¹⁵⁹ While this is one deportee out of hundreds of thousands, it shows that criminal involvement upon return, while not probable, is at least possible. Moreover, most scholars that have interviewed deportees in Mexico have failed to interview active or semi-active gang members, but have heard from their colleagues at call centers or friends that they do continue their involvement.¹⁶⁰ Furthermore, being kidnapped at the border or robbed upon return due to their perceived wealth, are both short-term outcomes, and it is possible that in the long term the social isolation and stigmatization both by government officials and the general public, which

¹⁵⁸ Albicker and Velasco, “Deportación y estigma en la frontera México- Estados Unidos”; Anderson, “‘Tagged as a Criminal.’”
¹⁶⁰ Anderson, “‘Tagged as a Criminal.’”
lead to unemployment, might still draw deportees to cartels as it happens in the cases previously studied.

Finally, despite the shared theme of “psychological homelessness” and criminal stigmatization that is present in the previous two cases as well, there is one important aspect for gang strength that differs significantly between Mexico, on the one hand, and El Salvador and Jamaica, on the other. Both Salvadoran maras and Jamaican posses had significant influence directly in U.S. cities in the 1980s, and arguably grew in strength due to this experience when they moved back or expanded to their countries. Mexican cartels, on the other hand, definitely have connections in the United States, but most are “generational” organizations that started and grew in Mexico itself over a span of half a century. Therefore, it is possible that deportee flows would strengthen Jamaican and Salvadoran gangs because they already had the transnational connections, but not Mexican ones because they are mostly “homegrown” and operate under a different framework, not needing deportees as members, but gladly taking advantage of them as victims of extorsion – which would raise the crime rate, but not necessarily the homicide rate.

**Brazil**

The final case study is Brazil. It is the largest country in the region, and, like Mexico, has considerable internal variation in terms of homicide rate, so a lack of results may once again indicate an instance of the Simpson’s Paradox. Strikingly, it also has the lowest percentage of criminal deportees among the four, with only 10% of the total number having a criminal conviction (see table 10 in the introduction to this chapter). It is also the country among the four that is farthest away from the United States, and, as presented in the previous chapter on quantitative analysis,

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geography does play a role in the relationship of interest. More specifically, the results showed that being from South America acts as a protective factor for countries, minimizing the effect of deportee flows from the United States on their homicide rates. It is important to keep these two factors in mind as we analyze gangs in Brazil, because from the outset we expect the effect to be dampened by the geographical distance and the low numbers of criminal deportees. Nevertheless, conceptually it is still important to consider if an effect is present, even if it is exponentially smaller, or if there are yet other factors that, compounded with these two, essentially neutralize the effect.

First, as with the other case studies, it is important to understand the structure of gangs in the country. As with Mexico, there is not one single gang – or facção – but the most lethal and largest in South America is the PCC (Primeiro Comando da Capital), which will be used for this analysis. The PCC – and its main rivals – are neither social workers, nor surrogate families, nor family businesses. Instead, the PCC operates under a trade union model, even charging a monthly membership fee from its members. Another significant difference between Brazilian facções and the previously studied models is that they are prison-based, and recruit the majority of its members while they are incarcerated. They also recruit former guerrillas fighters from

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neighboring Colombia, as they are “skilled labor” and have experience with heavy weapons. Deportees coming from the United States do not fit either of those categories, and, thus, we might expect that, unless they find themselves incarcerated, they are unlikely to become members of these groups.

That being said, it is still worth analyzing if any of the same risk factors for gang involvement that were present in the other three cases are also present in Brazil. In part, this exercise is important because, even if gangs do not generally actively recruit outside prison walls, if deportees face the same sense of isolation that was reported among the population in the other three cases, they might still turn to crime, and thus get incarcerated and suddenly become ideal recruits. In fact, interviews with service providers who work with the immigrant community in Lowell, Massachusetts – which has a high concentration of Brazilians – indicate that deportees do face some of the same challenges, at least initially. They return to their countries with nothing but the clothes on their bodies and are often dropped off in airports far from their actual places of residence. Moreover, deportees themselves, upon arrival to an airport in São Paulo, the largest city in the country, described to a researcher the experience of being deported as shameful and humiliating. They also felt that they were perceived as criminals by the authorities of the sending countries, even if they had committed no serious offense.

169 Barbai.
As terrible as these first impressions and moments may seem, however, in the long-term Brazilian deportees appear to fare much better than their counterparts elsewhere in Latin America and the Caribbean. Unlike with the other cases, there is no generalized stigmatization of deportees, be it by the media, by government officials or by the general public.\(^{170}\) In fact, stigma is so negligible in the country that only one study addresses it – as opposed to the multiple ones that did so for the previous three cases – and even so only to state that it is not present. In Brazil, deportees have no major issues finding employment or finding social support networks, and therefore they are not isolated from society.\(^{171}\) Thus, the draw to gangs as a substitute is simply not present and we should not expect an inflow of deportees to strengthen *facções* significantly. To be sure, Brazilian deportees – and South Americans in general – are more likely to have large debts with coyotes upon return to their country, since the journey to reach the United States is significantly longer and more expensive for them than it is for Mexicans, Central American or Caribbean migrants.\(^{172}\) Thus, it is in theory possible that this debt burden would lead them to turn to crime, but it is quite improbable.

Finally, as with Mexico, it is important to note here that Brazilian *facções* are not truly influential in the United States. They are even more removed than the Mexican cartels, and some argue they might not even be *interested* in establishing a presence in U.S. soil.\(^{173}\) Perhaps due to the sheer distance between the two countries, the PCC – and other gangs – are much more involved

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\(^{171}\) Golash-Boza and Ceciliano-Navarro.

\(^{172}\) Golash-Boza and Ceciliano-Navarro.

in neighboring countries such as Paraguay and Bolivia. That being said, two years ago a Brazilian gang did appear in Massachusetts under the name “Primeiro Comando de Massachusetts,” which makes reference to the PCC. However, it is unclear if this gang is an actual branch of the facção or simply borrowed the name. Thus, at least for the time being, the reality seems to be that Brazilian gangs are not connected to the United States, and therefore deportee flows from the latter are unlikely to strengthen them, even if deportees did have an incentive and an opportunity to attempt to join these groups.

Conclusion

In sum, deportees can indeed significantly strengthen gangs by being recruited. However, that effect is dependent on the recruitment process and general structure of the gang in question, and in the reintegration process of deportees in their home countries. If there is stigma surrounding deportees, and they are therefore socially isolated and struggle to find employment, gangs will become an attractive option. If, on the other hand, reintegration is relatively smooth, gangs lose their appeal. In addition, if gangs rely on many foot soldiers and recruit on the streets, it would make sense for them to “hire” deportees. If, however, they have more closed-off structures, deportees might not be the recruits they are looking for.

The four countries analyzed differed significantly in these measures. The first two fit the model quite well, but the last two miss one or both of these criteria. El Salvador has the second largest volume of deportees in this sub-sample, which proportionally to its population is quite

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175 Sullivan, José, and Bunker, “Third Generation Gangs Strategic Note No. 15: Primeiro Comando Da Massachusetts (PCM) Emerges in Massachusetts | Small Wars Journal.”
176 Sullivan, José, and Bunker.
significant. It also has the highest homicide rates, and the analysis has shown that the necessary conditions – stigmatized and isolated deportees and street gangs recruiting “unskilled labor” – are met in this case. Therefore, El Salvador would be the epitome of this relationship, as was mentioned before.

Jamaica has a very similar situation, with extraordinarily high levels of stigmatization, and an unusually high proportion of criminal deportees. Its case may not be as emblematic as the Salvadoran one, but it does provide an example of the influence of a predominantly “criminal” deportee flow versus a non-criminal one. In Jamaica, deportees may strengthen gangs by continuing their drug sale activities, not by being recruited as unskilled workers.

Mexico has the highest volume of deportees, but the lowest homicide rate. As such, it truly does not fit the model. As mentioned, it is possible that the model does hold in certain states of Mexico but not others, but there are also other characteristics that could contribute to this result. Gangs in Mexico are generational organizations that have involved the same family for the last fifty years, and they are also not necessarily physically present in the United States as the Salvadoran and Jamaican were. Thus, deportees would not be their ideal recruits, even though they do face similar stigmatization as do Jamaicans and Salvadorans.

Finally, Brazil is an example of the role of geography in this relationship. Being the farthest away from the United States, it is intuitively not surprising that the effect would be weaker there – which the quantitative analysis also predicted would happen. In any case, there are additional factors to take into account. As with Mexico, subnational variation is erased by aggregate analysis, and it is possible that certain states would see an effect even if the country as a whole does not. Most importantly, however, the most powerful Brazilian gangs are prison-based, and recruit among inmates, not necessarily in the streets. Considering how Brazil has a strikingly low
proportion of criminal to non-criminal deportees (10/90), it is quite unlikely that deportees would find themselves in prison in order to join these gangs in the first place, especially considering they tend to be better reintegrated than in the other case studies. Thus, in Brazil there is neither stigma against deportees nor do they fit the general profile of gang recruits.

This chapter has analyzed only the effect of deportees in gang strengthening in these four countries, which is perhaps not an intuitive mechanism. In the next chapter, the focus will be on gun flows, which have a more direct and evident link with gang strength, but which are no less important, especially considering the quantitative analysis found that the effect of one is stronger when the other is also present.
**Qualitative Analysis II: A Butterfly Flaps its Wings - Guns**

**Introduction**

This next chapter focuses on the other independent variable of interest, namely gun flows from the United States to select countries in Latin America and the Caribbean: Jamaica, El Salvador, Mexico, and Brazil. Before moving on to that analysis, however, it is important to briefly address how the case study countries compare to the general trend in terms of gun flows from the United States. In the quantitative analysis, this variable was defined as the total value of gun transactions between the United States and the country of interest in the previous year, which does have significant limitations that were addressed in that chapter and will again be mentioned below.

Figure 6 shows the log of the total value of gun transactions between each country and the United States in the previous year, as compared to the region’s median. Though the trend lines for each case overlap significantly and make the figure a bit convoluted, Mexico stands starkly apart as the receiver of the largest gun trade volume from its northern neighbor. The other three countries are relatively close to each other and the median, though Brazil did experience a spike and rose to second place in recent years. This contrast is quite interesting because, as is shown by figure 5 of the previous chapter, Mexico has the lowest homicide rates among the four, followed by Brazil. This contradicts the quantitative model, but may be a result of the proxy. As addressed in the quantitative analysis, since the guns included in these counts are for the most part destined for the military and security forces, it could be possible that homicide rates are lower in the country that receives the most guns from the United States because their security forces are thus better equipped to deal with criminal organizations.
Figure 6: Log of the value of gun transactions in the previous year as compared to the median

When explaining the choice of that proxy, it was mentioned that it is possible to do so because part of the guns obtained by criminal organizations is the result of diversion from official arsenals, but it is important to consider how U.S. actions could lead to a different type of gun flow. As highlighted by criminologists who specialize in U.S. gun laws, criminal guns recovered in states with stricter gun laws tend to come from states with laxer gun laws, an effect that has been found repeatedly both between U.S. states and between the United States and Mexico.¹⁷⁷ While some regulations are in place at the federal level, and many states – such as Illinois – have quite strict gun laws, in general U.S. laws tend to be quite lax compared to their counterparts to the south. Most importantly, federal law does not require “infrequent sellers” of firearms to perform

background checks, which is often termed the “gun show loophole.” That means that potential firearms traffickers would have a much easier time obtaining guns through these sellers, which can have a potentially deadly effect some thousands of miles away. Clearly the U.S. laws are intended to uphold the rights of the 2nd amendment, and most would see them as a harmless flap of butterfly wings, but the hurricane of bullets is quite real, and quite lethal.

Therefore, the current chapter will use federal court cases related to international firearms trafficking to each of the four case study countries in order to illuminate the mechanisms by which gangs get guns beyond the diversion from official arsenals obtained legally. Information about the court cases has been obtained from official sources – most notably press releases of the U.S. Attorney’s offices in each relevant district and court documents, when available – and from U.S. and country-specific news sources who interviewed attorneys and public officials with knowledge of the cases and/or had access to court documents that are not currently accessible to the general public. The cases are presented here as a way to explore possible mechanisms for the gun flows-organized crime-homicide rate relationship and are not necessarily representative. They will serve as a proof-of-concept of how a firearms trafficker might take advantage of U.S. laws to send guns abroad, though they are by no means the only way this goal can be achieved.

**Brazil**

The first case to be considered this time is that of Brazil. Here, the analytical strategy is to rely on a single court case, namely *United States v. Frederick Barbieri*, prosecuted in 2019 in the Southern District of Florida. U.S. v. Barbieri was chosen due to its recency, but also to its extreme high profile in Brazilian media, and the abundance of information about the case available through

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court documents in both the United States and Brazil. Moreover, Barbieri is considered by the Brazilian authorities as the largest and most important arms traffickers in the country.\textsuperscript{179}

Before exploring how the trafficking process worked in this case, a brief background is in order. Barbieri, who is a Brazilian and U.S. dual citizen, commanded a trafficking scheme that involved at least 15 other individuals and exported over a 1,000 rifles and at least 300,000 rounds of ammunition to Brazil over a 5-year period.\textsuperscript{180} Brazilian authorities had been interested in Barbieri since the late 1990s, due to his friendship with the then largest Brazilian arms trafficker in his native Rio de Janeiro, but lost track of him as he moved to the United States and had a green-card marriage in 2006 to create a path to naturalization.\textsuperscript{181} In the following two decades, Barbieri opened multiple exporting/importing businesses in both Brazil and the United States, going from a pool cleaner to a successful arms trafficker, before being caught by the authorities in early 2018.\textsuperscript{182}

Despite the abundance of information on this case, both the U.S. and the Brazilian court documents are silent as to how exactly Barbieri acquired the weapons. However, as was mentioned, Barbieri was a naturalized U.S. citizen, with only relatively minor traffic infractions,\textsuperscript{183} which would not preclude him from legally acquiring firearms in the state of Florida – or in the


\textsuperscript{181} Leitão, Eltz, and Costa, “Da pacata St. Lucie, Barbieri mandou quase 1,2 mil fuzis e 300 mil munições para a guerra do tráfico no Rio.”

\textsuperscript{182} Leitão, Eltz, and Costa.

United States more generally, for that matter.\textsuperscript{184} In fact, one of the biggest news sources in Brazil states that Barbieri had a contact in an Orlando gun shop, where he would buy the weapons, but this individual remains unidentified.\textsuperscript{185} Considering the sheer number of firearms Barbieri obtained in the five years his scheme was active, it might at first seem unlikely that he would have been able to accumulate thousands of high-powered rifles and hundreds of thousands of rounds of ammunition without raising suspicion, but a deeper look at the situation reveals that is not the case, for a couple of reasons. First, there are over a hundred gun shops in Orlando alone,\textsuperscript{186} and almost 7,000 licensed gun dealers in Florida as a whole,\textsuperscript{187} and, since the state does not require gun dealers to keep records of rifle sales, and not only does not require, but in fact explicitly prohibits creating lists or registries of gun owners and their firearms,\textsuperscript{188} none of the shops would be able to know how many other guns Barbieri had acquired through another dealer. In any case, there is no limit to the types or number of guns a single person can buy at one time in Florida, and gun shows are completely unregulated.\textsuperscript{189} Therefore, Barbieri would have had plenty of legal opportunities to acquire the weapons that he subsequently illegally exported to Brazil.

Barbieri’s shipping operation relied heavily on hiding the weapons and ammunition in otherwise legal and innocuous products. His first known shipment, in 2010, which was sent in a container through maritime freight, did not follow this method, and was intercepted by police in

\textsuperscript{185} Leitão, Eltz, and Costa, “Da pacata St. Lucie, Barbieri mandou quase 1,2 mil fuzis e 300 mil munições para a guerra do tráfico no Rio.”
\textsuperscript{186} Leitão, Eltz, and Costa.
\textsuperscript{187} University of Sydney, “Guns in Florida — Firearms, Gun Law and Gun Control.”
\textsuperscript{188} University of Sydney.
\textsuperscript{189} University of Sydney.
Bahia, in the northeast of Brazil. But Barbieri seems to have learned his lesson, because between 2013 and 2015 he sent 75 shipments with hidden weapons, with a total of 124 water heaters, 15 air conditioning units, and 520 water motors to Rio de Janeiro, in the southeast of the country. All the shipments were carefully packed to replicate the regular weight of the legitimate products prior to them being hollowed out to create space for the firearms, and upon arrival in Rio they were received by dispatchers and delivered to shell companies under Barbieri’s name. Payments were made in small amounts, in order not to attract attention, but there is at least one instance of an accomplice traveling from Brazil to Florida to hand deliver a suitcase full of money. In general, this was a highly sophisticated operation, and Barbieri and his accomplices were careful to create an air of legitimacy around their highly illegitimate – and deadly – business.

Barbieri was not specifically tied to any specific Brazilian facção, but the 16-defendant indictment in the Rio de Janeiro Federal Court revealed that the arms were destined for all three of the main gangs in the city. Transcripts of phone calls intercepted by Brazilian law enforcement reveal specific references to at least two individuals with strong ties to the Comando Vermelho, the most powerful gang in the city, as buyers of the weapons Barbieri trafficked into Rio. Thus, it is clear that the weapons would raise the homicide rate in the city through arming – and therefore strengthening – organized criminal groups. In fact, were it not for the lax gun laws

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190 Leitão, Eltz, and Costa, “Da pacata St. Lucie, Barbieri mandou quase 1,2 mil fuzis e 300 mil munições para a guerra do tráfico no Rio.”
192 Hernández, “Armas contrabandeadas dos EUA fortalecem o crime organizado no Brasil.”
193 Leitão, Eltz, and Costa, “Da pacata St. Lucie, Barbieri mandou quase 1,2 mil fuzis e 300 mil munições para a guerra do tráfico no Rio.”
194 Ministério Público Federal, Barbieri et al., No. 1.30.001.002385/2017-00 (Oitava Vara Federal Criminal do Rio de Janeiro 2017).
195 Ministério Público Federal.
of Florida – and the United States generally – these individuals would not have had access to these types of weapons, since civilians are banned from legally obtaining rifles in the country.\textsuperscript{196}

**Mexico**

This section, unlike the previous one, is based on multiple court cases, with information about them retrieved from court documents, U.S. Attorney Office’s press releases and news articles. Keyword searches for international firearms smuggling cases involving Mexican nationals and/or in which the weapons were destined for Mexico return significantly more cases than for any of the other cases, which is consistent with the reality showcased in figure 1 earlier in this chapter. It was expected that this would be the case, given the geographic proximity between the two countries, which allows for land shipment of the weapons as opposed to air freight, which is subject to more oversight. The choice of cases was once again based on their recency, the media attention they attracted, and the availability of enough information to reveal the strategies behind firearm trafficking schemes.

Because of the number of results, six cases were chosen. All of them were federal prosecutions in Texas, half in the Western District and half in the Southern District. Three of the cases are from 2014, one is from 2012, one from 2017, and one from 2018. The number of defendants in each case varies from 1 to as many as 46. Despite the differences between the cases, four out of the six involve legal purchases of weapons through straw purchasing operations,\textsuperscript{197} i.e.


using multiple people to buy small numbers of guns separately and then consolidating them, while in the 22-defendant case firearms trafficking was part of a larger trafficking operation that also included sex trafficking and migrant smuggling, and the remaining one was a sophisticated operation that directly involved a former law enforcement officer and a weapons manufacturer. This 2/3 proportion of straw purchasing strategies reveals that it seems to overwhelmingly be the strategy of choice for traffickers.

None of the individuals worked alone, since Jesus Rodriguez of the single-defendant 2012 case enlisted the help of his wife, and most had explicit gang ties. Only two of the cases do not specify a gang affiliation, and in the remaining ones the weapons were destined for the Los Zetas cartel, the Gulf Cartel, or the Houston Southwest Cholos, which have ties in Mexico. Even in the cases in which the defendants have no disclosed gang affiliation, it is not unreasonable to assume that the weapons they sent south of the border were intended for cartels, since they often

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200 U.S. Attorney’s Office for the Western District of Texas, “Austin Man Sentenced to Federal Prison for Firearms Smuggling Scheme.”

201 U.S. Attorney’s Office for the Southern District of Texas, “Pharr Man Sentenced to Prison for Lying to Buy Almost Two Dozen Firearms Destined for Mexico.”

202 U.S. Attorney’s Office for the Western District of Texas, “San Antonio Man And Woman Sentenced To Federal Prison For Aiding In The Exportation Of Firearms From The United States”; U.S. Attorney’s Office for the Western District of Texas, “San Antonio Gang Member Sentenced To 40 Years In Federal Prison For Drug And Firearms Violations.”


204 U.S. Attorney’s Office for the Southern District of Texas, “22 Alleged Gang Members Indicted for Multiple Violent Crimes.”
control border areas and have high-powered rifles as their favorite weapons.\(^{205}\) In addition, as traffickers in Mexico themselves have said, it would be stupid not to take advantage of the fact that they can easily and cheaply buy guns from Walmart or gun shows in the United States.\(^{206}\) Therefore, firearms would increase the deadly power available to gangs, which in turn would raise the violence levels in a given country.

In all of these cases under consideration, the defendants benefitted from Texas’ stunningly permissive gun laws. In the state, civilians may possess semi-automatic weapons without a license, there is no requirement to keep a record of purchases, transfers or possessions of firearms, no limit on the number of guns a single person can obtain, and no background checks required for any type of sale or transfer.\(^{207}\) In Arnoldo Lopez’ case, for example, he was charged with making false statements in the federal forms, but was not truly subject to much regulation at the state level, and he also directed others to acquire dozens of AK-47 and AR-15 assault rifles, which they could theoretically have transferred legally to him without much oversight if they could claim they were unaware of his felony status.\(^{208}\) In another case, that of Jesus Rodriguez in 2012, he was also charged because of false statements in ATF forms when acquiring more than 20 weapons – in this case simply by certifying the weapons were for himself, as he did not have a felony conviction as did Lopez.\(^{209}\) Therefore, it is clear that lax laws significantly facilitated the acquisition of firearms by these individuals.

\(^{206}\) Harp, “Arming the Cartels.”
\(^{208}\) U.S. Attorney’s Office for the Western District of Texas, “San Antonio Gang Member Sentenced To 40 Years In Federal Prison For Drug And Firearms Violations.”
\(^{209}\) U.S. Attorney’s Office for the Southern District of Texas, “Pharr Man Sentenced to Prison for Lying to Buy Almost Two Dozen Firearms Destined for Mexico.”
Finally, it is interesting to consider how the actual shipping process of the weapons might happen in this case, as Mexico is contiguous to the United States, and thus transport is easier than to any of the other three countries. Among the six cases, 2 were prosecuted in McAllen, another 2 in San Antonio, 1 in Austin and 1 in Houston. It is no coincidence that all of the cases under consideration are from Texas, and from cities towards the south of the state. McAllen is a border town, and San Antonio is, according to Google Maps, a mere 2-hour-drive away from Piedras Negras, a stronghold of Los Zetas, the intended recipients of the weapons recovered in the two cases prosecuted in that city.210 The other two cities are farther way. Houston is 5 hours away from the nearest border crossing – per Google Maps – but the gang implicated in that case had multiple stash houses along the Rio Grande Valley.211 Austin is 3 hours away – again per Google Maps – but its case is the one with the sophisticated operation, and Tyler Carlson, the main defendant, hired drivers to go through border crossings in McAllen.212 Therefore, there is no doubt that geography plays a role, and it should not be a surprise that more guns arrive in Mexico than in the other countries under study.

**El Salvador**

We now consider the case of El Salvador. Similarly to the case of Mexico, this section is not based on a single court case; instead, it relies heavily on multiple U.S. Attorney’s Office press releases and indictments of several MS-13 members in the United States. These cases were chosen, once again, because of their recency and the media attention they gathered. In addition, many of

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210 U.S. Attorney’s Office for the Western District of Texas, “San Antonio Man And Woman Sentenced To Federal Prison For Aiding In The Exportation Of Firearms From The United States”; U.S. Attorney’s Office for the Western District of Texas, “San Antonio Gang Member Sentenced To 40 Years In Federal Prison For Drug And Firearms Violations.”
211 U.S. Attorney’s Office for the Southern District of Texas, “22 Alleged Gang Members Indicted for Multiple Violent Crimes.”
212 Harp, “Arming the Cartels.”
the cases involving Salvadoran arms traffickers’, to the best of the author’s knowledge, are currently sealed, and thus not as much is available as it was in the previous two cases.

In the Salvadoran case, one interesting characteristic, also shared by Mexico and Brazil to a much lesser degree, is immediately obvious: none of the firearms trafficking operations are the work of “lone wolves.” Here, searches of case law databases, news websites, and the Department of Justice’s U.S. Attorney’s Office’s press releases for Salvadorans involved in firearms trafficking yield only multi-defendant indictments in which most of the involved persons are tied in one way or another to MS-13. The numbers are quite stunning, with one case, in Suffolk County, NY, involving as many as 96 defendants, all of which were MS-13 members or associates.213 Thus, the ties between the flow of arms and the strengthening of organized criminal groups is perhaps clearer in the Salvadoran than in any of the other cases, as the operations are essentially embedded within the group’s structure.

The three main cases that will be addressed here are a 61-defendant 2018 Massachusetts federal case, a 6-defendant New York federal case, and the 96-defendant Suffolk County case.214 According to the Gun Law Navigator page from the Everytown for Gun Safety, New York and Massachusetts have comparably more stringent gun control laws than other states in the United States, especially in relation to background checks.215 Therefore, it may at first glance be hard to link the availability of firearms to these individuals to lax laws, unlike in the case of Florida or Texas. Nevertheless, considering these cases involve multiple defendants, with varying levels of

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legal status, including U.S. citizens, it is possible that the strategy is to have the members with some status act as straw purchasers for the ones that do not have proper documentation. Furthermore, German Hernandez-Escobar, the 39th defendant in the 61-defendant case, stated that part of their work was to facilitate the acquisition of firearms for the group indirectly through “fundraising” through drug trafficking, which also generated the money to pay “dues” to MS-13 leaders in El Salvador itself.

In any case, compared to the gun regulations in El Salvador, New York has laxer laws when it comes to long guns – including rifles – and does not require a license to buy or possess such weapons, as the Salvadorans do. Furthermore, one of the defendants in the Southern District of New York federal case, Jaime Santana, was actually initially presented in the Middle District of Tennessee, a state with extremely lax gun laws. Just to cite a few provisions, private sales require no background checks, possession of semi-automatic weapons is permitted without a license, and there is no minimum age to possess a rifle. Finally, federal U.S. law allows for interstate sales of long guns with few restrictions, which also means that, even if the states at issue here are more restrictive, U.S. laxer laws would still facilitate arms acquisition that would later wreak havoc

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217 U.S. Attorney’s Office for the District of Massachusetts, “Two MS-13 Members Plead Guilty to RICO Conspiracy.”
in El Salvador. Thus, it is important to avoid dealing in absolutes, as the concept of lax law exists here not in a vacuum, but in comparison to the ones in effect in the country of interest.

Due to the extreme recency of some cases – the Suffolk county indictment was presented in late December of 2019 – and the lack of public availability of court documents and plea agreements on the others, it is not possible at this time to trace the shipping process of the weapons as it was in the previous two cases. However, the ATF delegate for Central America, Harry Peña, has stressed that the method is most commonly tráfico de hormiga (Spanish for ant traffic), that is, shipping of weapons in multiple different shipments, disassembled and mixed with legitimate packages such as fridges, DVDs, or vehicle parts.221 Thus, it is exactly the same strategy as that employed by Barbieri. Finally, much is known of what happens with the weapons once they arrive in San Salvador, the capital of the country. As mentioned before, arms trafficking in this case is embedded in the MS-13 organizational structure, and this conclusion is reinforced by the fact that they have been in control of the sale of illegal firearms in the city since 2012, with little to no competition.222 Therefore, it is clear that firearms and ammunition that would raise the homicide rate in El Salvador pass necessarily through the hands of the largest organized criminal group in the country, and violence is thus inextricably linked to the strengthening of gangs.

Jamaica

The final case is Jamaica. The basis for this analysis is once again a single case, with information obtained specifically from a press release by the United States Attorney’s Office for the Middle District of Florida and news articles by the Jamaica Observer and The Gleaner, two

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widely circulated newspapers in Jamaica. The court case under study is *United States v. Jermaine Rhoomes* (2019), which was chosen, as the others, both due to its recency and the media and official attention it received, with even the Jamaican Director of Public Prosecutions attending the sentencing hearing in early 2020.223

First, it is important to provide some background on the defendant. Jermaine Rhoomes was born in Jamaica and had been living in the United Kingdom up until 2008 when he got deported on drug charges; a few months later, he moved to the United States, where he was reportedly undocumented.224 He was 46 years old at the time of his sentencing in early 2020, and had been living in St. Petersburg, Florida.225 He used a variety of aliases to conduct his illegal business, including but not limited to Craig Hall and Roy Ricketts, which made it more complicated to track all of his activity.226 In September 2019, he plead guilty to international firearms trafficking, and thanks to that plea agreement, there is detailed information on his trafficking strategies.227

Unfortunately, there is not much information on how Rhoomes acquired the guns he was shipping to Jamaica, unlike in some of the other cases, but it is safe to assume that he did it under a false name – since he often used aliases and false addresses for his shipments – at a gun show or convinced an accomplice to buy them, since Florida is more lenient on transfers and reselling of guns and does not require background checks from unlicensed – or occasional – sellers.228 That

227 Hall.
228 University of Sydney, “Guns in Florida — Firearms, Gun Law and Gun Control.”
means that no background checks would have been performed if Rhoomes bought guns from a
gun show seller, and an accomplice would not technically have committed a crime by transferring
guns to him – s/he would, in theory, have had the plausible deniability of not being obligated to
check Rhoomes’ background. Thus, Florida gun laws facilitated the acquisition of the guns, and
consequently also the transfer to Jamaica.

Despite the lack of information about the details of Rhoomes’ acquisition of the guns, there
is a considerable amount of information available about the process of shipping them to Jamaica.
The July 2017 shipment that led to the investigation and charges against him included 15 guns –
two AK-47 assault rifles, 5 AR-15 assault rifles, and 8 pistols – and more than 3,000 rounds of
ammunition.229 This was not the first instance in which Rhoomes shipped guns and ammunition to
Jamaica, and firearms found at his house after the investigation began indicate it was not intended
to be the last.230 As Rhoomes himself explained to associates, the key to sending such large
quantities of illegal firearms undetected is to “break them in two, wrap them up.”231 After those
first steps, he would then put them in barrows and hide them among other innocuous,
inconspicuous products, such as bags of flour, rice, sugar or among disassembled audio
equipment.232 Before the 2017 shipment was intercepted, and Rhoomes was identified and charged,
he successfully completed at least two gun and ammunition shipments to Jamaica, both in 2016.233
Additionally, when police searched his house following his arrest, they found an additional 6,000
rounds of ammunition, two AR-15s, two AK-47s, one M16, two shotguns, and multiple parts of

229 U.S. Attorney’s Office for the Middle District of Florida, “International Firearms Trafficker Sentenced to Federal
Prison.”
Shipments.”
231 Quoted in “Jamaican Gun Trafficker Now in U.S. Prison Blames Talkative Associates for Exposing Him.”
233 Hall, “Death Merchant - Jamaican Gunrunner Sentenced to 57 Months in U.S. Prison Was Planning More
Shipments.”
disassembled firearms.234 Clearly, Rhoomes was confident that he would not be caught, and, in fact, he attributed his capture and the failure of the July 2017 shipment to “snitches,” which leads to the conclusion that he did not believe law enforcement would get to him without an insider tip.235

The story of Jermaine Rhoomes’ trafficking operation exemplifies one of the most common trafficking methods, namely straw purchases, which accounts for a high proportion of the gun flow to Jamaica, especially considering that most illegally shipped guns apprehended in Jamaica come from the United States, and were bought legally.236 Since it was not explicitly stated in any of the publicly available court documents that the guns Rhoomes purchased were destined for Jamaican gangs, nor is the true identity of the receiver ever disclosed, at first glance it might seem as though guns would perhaps increase violence, but not necessarily through strengthening posses. Nevertheless, as Director of Public Prosecutions Paula Llewellyn told the U.S. court in her victim impact statement, guns are the gangs’ “weapon of choice.”237 As such, it is reasonable to conclude that Rhoomes weapons were likely destined for posses, since gangs buy most guns that arrive in the country, and only the minority goes to the scamming industry.238

This case also shows how easy it was for a single man – for the most part a “lone wolf,” unlike in the other cases – to obtain many dozens of powerful firearms and ship them internationally with little oversight. Were U.S. gun laws generally, and Florida laws specifically,

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234 Hall.
more stringent, Rhoomes would have had to undergo background checks or the sheer number of firearms and ammunition he owned would have raised suspicion. Instead, laws were so lax that he did not even truly bother to hide the guns either in his home or even inside the shipping barrels, as he was confident no issues would arise. Finally, it shows how impactful a single operation can be: even if Rhoomes’ operation was the only one to have succeeded that year in Jamaica – which is highly unlikely – the United States’ lax gun laws could have led to as many as 3,000 additional deaths – since there were 3,000 rounds of ammunition – and could have facilitated much more, given the assault rifles that would have been out in the streets of Kingston, as Jamaican Director of Public Prosecutions Paula Llewellyn stressed in her victim impact statement to the U.S. court.239

Conclusion

In this chapter, the focus has been on addressing an important shortcoming of the quantitative analyses presented a few chapters ago, namely the measure for gun flows. In the quantitative analysis, gun flow between the United States and Latin America and the Caribbean was measured by the volume of official, recorded, military or commercial transactions. While gangs throughout the region do divert weapons from official arsenals, be it through theft or corruption, that is not the only or the main way in which these criminal groups acquire their firearms. Since illegal flows of weapons are by definition unofficial and unrecorded, measuring them is significantly more difficult. To at least begin to address this issue, this qualitative analysis used court cases of international firearms trafficking prosecuted in U.S. federal courts in New York, Texas, Massachusetts, and Florida to showcase what other ways criminal groups use to obtain firearms from the United States to fuel their criminal endeavors south of the continent.

Though each case has its particularities, in general the analysis showed that straw purchases are the most common way of acquiring weapons, and hiding weapons in seemingly legal shipments is the preferred exporting method. In the case of Mexico, besides hiding weapons among other products, it is also common to have trucks with inner and outer shells, or flatbeds with false bottoms, since land shipping is a possibility and more common.240 For the other three cases, weapons and ammunitions were hidden among food products, electronics parts, and inside hollowed out motors and water heaters. In all cases, traffickers successfully completed multiple shipments before being arrested, revealing significant oversight issues in both the United States and the receiving countries. Despite the fact that all of the cases under consideration here were federal U.S. cases,241 and the Director of Public Prosecutions of Jamaica even implied that her country’s laws were not strict enough to deal with firearms trafficking,242 in both the Brazilian and the Jamaican case the trafficking operations were dismantled because of enforcement actions by local law enforcement, not the United States. Thus, not only is more cooperation and coordination among countries necessary, the United States needs to be more proactive, and start caring about the dangerous firearms it is sending southward as much as it does about the contraband sent northward.

The quantitative analyses also did not address one of the hypotheses presented by this thesis, namely that it is lax gun laws in the United States that fuel the firearm flows that in turn strengthen organized crime and raise the homicide rate. It simply measured the relationship

240 Harp, “Arming the Cartels.”
241 Frederik Barbieri was convicted in a U.S. federal case, but he was also charged alongside 15 other individuals in a Brazilian federal case. Ten of his co-defendants were convicted. See Fernanda Rouvenat, “Justiça do RJ condena 10 integrantes da quadrilha de Frederik Barbieri no Brasil,” G1, September 12, 2018, https://g1.globo.com/rj/rio-de-janeiro/noticia/2018/09/12/justica-do-rj-condena-10-integrantes-da-quadrilha-de-frederik-barbieri-por-Enviar-Fuzis-dos-eua-para-o-brasil.ghtml.
242 Hall, “Leaky Laws: Gunrunner Might Have Walked Free If He Had Been Tried in a Jamaican Court.”
between the volume of gun transactions and the homicide rate in the countries in the following year but could not be used to make any assumptions as to what affected the flows themselves. This chapter, however, was a first step in addressing this limitation. Throughout the four subsections, part of the analysis was especially focused on how the laws in each of the states – and the United States more generally – facilitated the process of gun acquisition for the traffickers, especially when compared to the much more stringent gun restriction laws in place in all of the four case study countries.

These few cases outlined here do not account for all of the gun flows between the United States and the countries south of its territory, and more research is needed to further understand all of the trafficking routes used to get weapons and ammunitions southward. Nevertheless, this analysis serves as proof that at least part of the guns that reach Latin America and the Caribbean come from the United States and are easily obtained due to lax laws in many U.S. states. Further, this is no negligible proportion of the flow. Barbieri was dubbed “Lord of Guns” by the Brazilian media and was responsible for the largest ever seizure of rifles at Rio’s airport, and nearly all high-powered weapons – such as AK-47 and AR-15 rifles – owned by criminal organizations in Brazil come from the US. In Mexico, an estimated quarter of a million weapons are smuggled in from the United States every year. Therefore, it is no stretch to say that U.S. legislative decisions on gun regulations are indeed flaps of the butterfly’s wings – and the hurricane of bullets they create is looming large.

244 Hernández, “Armas contrabandeadas dos EUA fortalecem o crime organizado no Brasil.”
245 Harp, “Arming the Cartels.”
Conclusion: Towards Hurricanes of Hope

This thesis has presented a possible explanation behind the disproportionately high homicide rate in Latin America and the Caribbean. Though less than 10% of the world population lives in this region, one out of every three people who are murdered around the globe dies here.²⁴⁶ Scholars have for years tried to explain why that is the case, but no theory has yet been entirely successful in solving this conundrum. Poverty, inequality, corruption and the war on drugs certainly all play a role in the deadly violence, but none is enough to justify the astounding reality. The present research aimed to contribute to this debate, and although it does not purport to offer the sole possible “correct” theory, it has offered a new dimension to the discussion.

The butterfly effect of international relations, similarly to that of chaos theory, proposes that seemingly small changes in one place can start chain reactions that ultimately result in monumental consequences elsewhere. For the particular case of homicide rates in Latin America and the Caribbean, this thesis has argued that U.S. domestic decisions on deportation and gun policy are the flaps of butterfly wings that create hurricanes of bullets southward of the country’s borders. For most people, butterflies are harmless, beautiful insects that brighten the world, but these butterflies are deadly. In faraway rooms in Washington, D.C. and across the United States, politicians write and sign bills that in their minds impact only their country, in a clear example of the classic phrase “out of sight, out of mind.” But should it be that way? In a world as globalized as our own, countries are connected by more than trade or information flows. Decisions one country makes spill over, often negatively, to other countries, and compound problems instead of solving them.

²⁴⁶ Igarapé Institute, “Homicide Monitor.”
The present research has shown that the chain reaction the North American butterflies are creating go through transnational organized crime. The quantitative analysis presented here has shown that yes, deportees and guns from the United States do increase homicide rates in the region, both independently and in combination with each other. According to these models, a 20% increase in the number of nationals deported from the United States to the region would result in over 4,000 additional lives lost to homicide the following year across Latin America and the Caribbean, and 20% increases in the value of gun transactions between the United States and each country in the region could raise the homicide rate by as much as 0.14 per 100,000. For a country in the Americas that had a population of 10 million people – almost 40% of the sample had higher numbers than this for at least one year in the dataset – 14 additional people would die by homicide every year. For Brazil (2017 population = 208 million), Mexico (2017 population = 125 million), El Salvador (2017 population = 6.4 million), and Jamaica (2017 population = 3 million) the increases would be of 291, 175, 9, and 4 additional deaths, respectively.

The qualitative analyses that followed contributed to painting a more complete picture of the exact mechanism behind this relationship. These case studies, conducted over two chapters, focused on four countries, Mexico, Brazil, Jamaica, and El Salvador, one from each subregion. By analyzing secondary sources with deportee interviews, the first of these chapters showed how organized criminal groups prey on returning deportees and either extort them for revenue or recruit them to join their ranks, and how both situations would increase the power of transnational gangs. The second chapter used U.S. federal international firearms trafficking cases to trace how U.S. guns are legally obtained but illegally exported to Latin America and the Caribbean, and showed that lax gun laws in particular states – but also the country more generally – significantly facilitate this process.
This endeavor is an important step in expanding the debate on criminal violence in Latin America and the Caribbean and presenting alternative theories, but it is not without limitations. First, homicide is – thankfully – a relatively rare event, which makes quantitative analysis on the topic in general more complicated. Furthermore, the data used here is not perfect, and contains many missing values and inconsistencies. For example, the quantitative analysis used official gun flows as a proxy for illegal transfers, since firearms trafficking is by definition a black market with no official records. Firearms tracing data is available from the U.S. Alcohol, Tobacco, and Firearms Bureau (ATF), but it was not used here since it does not contemplate the entire region. Future research would benefit from using that data instead to test whether results still hold.

The results here are also limited by the lack of comprehensive data on gang/organized crime and firearm homicide rates, which would be more direct measures of gang strength and the effect of gun flows than the general rate. Scholars and the United Nations Office on Drugs and Crime should work to improve these databases by compiling national-level data across the region, in order to perform more complete analyses. Additionally, the deportee flows were measured with data from Syracuse University’s TRAC initiative, but it would be interesting to replicate the analysis with Immigration and Customs Enforcement (ICE) data as well.

A final issue in terms of data is the difficulty in examining the inner workings of organized crime and gangs to understand directly how these flows can strengthen the groups. A few of the secondary sources used here provided interviews with current or former gang members, but future research would benefit from further exploring this strategy, though it might never be possible to obtain a full picture of the realities within groups that are designed to be secretive. An alternative, and more feasible, method would be to further explore court cases as sources, as they either become unsealed to the general public or are opened to researchers upon request.
The present research has important theoretical implications for the study of International Relations. First, it has shown that domestic decisions do have a direct, if not immediately obvious, transnational effect, and thus cannot be ignored. Building upon Keohane and Nye’s idea of complex interdependence, it takes it one step further, bringing into the discussion the domestic sphere that had been for the most part neglected. As the results have shown, the interdependence between countries is even more complex than the two aforementioned authors had envisioned: not only are countries affected by the ties that bind them together in the international system – be it their foreign offices or their banks – they are also bound by the consequences of the decisions each of them makes domestically. As such, this thesis lends significant weight to the liberal institutionalist argument in favor of international cooperation. Furthermore, it also advances the literature on migration by focusing on a specific flow that, though it is explored in sociological research, is not often considered within International Relations scholarship, namely deportees. Considering the increasing number of deportees from the United States to Latin American and the Caribbean, and to a lesser extent the world as a whole, in recent years, this is a subarea of research that merits more attention than it currently has. Finally, this thesis brings to the forefront an often-overlooked transnational actor – organized crime.

The results presented here also have very important policy implications for policymakers both in the United States and across the region. U.S. policymakers, on the one hand, should reconsider the way they approach deportations, especially the removal of non-violent, non-criminal foreign nationals, and the lack of communication with receiving countries when deportations are indeed conducted. Moreover, they should think more broadly about the impacts of lax gun laws, beyond the protection of 2nd Amendment rights, and consider the human cost of an overly permissive approach to firearms. Movements in the country such as March for Our Lives
provide a glimpse of hope for the future, but decisionmakers should remain conscious so as to not create a distinction of “us” versus “them.” In other words, it does no good for mitigating spillover effects if U.S. policymakers eventually do take steps to protect North American lives against gun violence but do not act against the southward flow of guns, in a selfish view that the violence in other countries takes “their” lives and not “ours.”

Latin American and Caribbean policymakers, on the other hand, should take care so as to not stigmatize arriving deportees, as most of them do not have a criminal record and if effectively reintegrated into society would not ever become criminal offenders. As this thesis has shown, a significant part of the issue for the deportees is the self-fulfilling prophecy of being tagged as criminal by officials and consequently society as a whole, which decreases their job prospects and pushes them towards illegal activities. As presented in the analysis, the connection between deportee flows and homicide rates was not present for Brazil, the country among the case studies that did not have stigmatization. Other countries in the region should follow suit.

Overall, the main takeaway for policymakers is that coordination is key, and that policies such as “America First” are counterproductive. Deportations and gun laws are not solely U.S. domestic decisions, because other countries, most often poorer and with more fragile political structures, are on the receiving end of the foreign nationals the United States chooses to put “out of sight,” because it refuses to acknowledge and address the root issues that brought them into the country in the first place. History is repeating itself, with U.S-born criminal gangs, armed with U.S. guns, in a situation eerily reminiscent of the Cold War U.S.-backed dictatorships, fueled with U.S. guns. In a cyclical way, the more the United States mass deports foreign nationals and refuses to restrict gun acquisition and possession, the more it will receive migration flows. Lack of coordination and cooperation among countries in the Americas will simply result in multiple
butterflies, flapping their wings asynchronously, and generating multiple deadly hurricanes of bullets that if left unchecked might eventually engulf the entire continent in a dark, unending storm of homicidal violence. Butterflies can be beautiful, but it is time they flap their wings in synchrony across the Americas to create hurricanes of hope, development, and security instead.
Bibliography


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