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Violence in Urban Mexico: a Municipal Analysis of State Capacity and Competition among Drug Trafficking Organizations

Rocío A. Rivera Barradas
University of Miami, r.riverabarradas@gmail.com

UNIVERSITY OF MIAMI

VIOLENCE IN URBAN MEXICO: A MUNICIPAL ANALYSIS OF STATE CAPACITY AND COMPETITION AMONG DRUG TRAFFICKING ORGANIZATIONS

By

Rocío A. Rivera Barradas

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VIOLENCE IN URBAN MEXICO: A MUNICIPAL ANALYSIS OF STATE CAPACITY AND COMPETITION AMONG DRUG TRAFFICKING ORGANIZATIONS

Rocío A. Rivera Barradas

Approved:

_____ Bruce M. Bagley, Ph.D. Professor of International Studies	_____ William Smith, Ph.D. Professor of Political Science
_____ Laura Gómez-Mera, Ph.D. Assistant Professor of Political Science	_____ Lilian Yaffe, Ph.D. Lecturer of Geography and Regional Studies
_____ Brian J. Phillips, Ph.D. Assistant Professor of International Studies Centro de Investigación y Docencia Económicas Mexico City, Mexico	_____ Dean of the Graduate School

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This dissertation examines why certain cities in Mexico experience higher levels of drug-related violence. Traditionally, this kind of violence was thought to be endemic of the border region with the U.S. Nevertheless, since 2007 some cities have experienced an alarming increase in drug-related homicides despite their proximity to the U.S. By employing a quantitative analysis and a small-N comparison across three cities (Monterrey, Veracruz and Cuernavaca), this dissertation addresses two related puzzles: why some cities suddenly experienced a significant increase in drug-related violence; and, why the deployment of military force has been able to successfully mitigate this violence in some cities and not in others. The main argument focuses on the presence of two variables: (1) state capacity understood as military and bureaucratic, and (2) competition among cartels for the illicit drug market. In this sense, the analysis emphasizes how the strength of the local government along with the actions of the army and the navy, and the structure of the illegal market –monopoly, oligopoly or fragmented– interact to produce widely varying levels of violence. The results suggest that municipalities under an oligopolistic market with intermediate state capacity might experience higher levels of violence; whereas, the lowest levels may be found either in the monopolistic or fragmented markets with strong local governments.

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Chapter 1. Introduction

Even though figures are still contested, the war on drugs in Mexico has left between 60,000 to 125,000 deaths, a figure that resembles a civil war conflict. Mexico's homicide rate in 2011 was 23.7, and according to some analyses, organized criminal groups are responsible for approximately 45 to 60% of this violence depending on the source, government documents or local newspapers (Molzahn, Rodríguez and Shirk 2013, 1-13).

Although the increase in drug-related violence has been astonishing and without precedent since 2007, it has not been homogenous across the country. Traditionally, high levels of violence were assumed to be endemic of the Mexican northern border region due to the tendency of illegal activities taking place more prominently in this area (Andreas 2000; Grayson 2010). In this sense, scholars have often described the border city of Ciudad Juárez, frequently referred to as a "murder city," as emblematic of this regional phenomenon, since it was ranked as the most violent city in 2010 with 2,738 drug-related homicides (Ríos and Shirk 2011, 1) However, I will contend that arguments linking violence to the specificities of the border region are outdated and many, in fact, pose obstacles to our understanding of the significant escalation of violence in contemporary Mexico.

Some recent analyses like the *Mexican Peace Index* released by the Institute for Economics and Peace (IEP) provide a useful overview on how violence has varied greatly throughout the years and by regions. In 2006, the year in which Felipe Calderón Hinojosa started his six-year period as President of Mexico, the most violent states were Baja California, Chihuahua, and Sinaloa, two of them sharing the border with the U.S.

Notably, by 2012, Calderón's last year in office, violence escalated through the territory with 14 states showing high levels of violence. This violence was not only concentrated at the northern border region, but also it expanded to central states like Jalisco, Guanajuato and Morelos. In the Yucatán Peninsula, the state of Quintana Roo showed similar high levels of violence (IEP 2015).

Moreover, levels of violence also vary within a single state. For example, the state of Quintana Roo was ranked with high violence due to the increase in the number of homicides in the Benito Juárez municipality, while other municipalities in the same state remained peaceful and did not experience a single drug-related murder, i.e., José María Morelos, Lázaro Cardenas (Presidencia de la República 2011a; SESNSP 2015). Thus, studying this phenomenon at the state level could be misleading since violence concentrates in key cities.

Changes in drug-related violence also vary remarkably over time and across the country. For instance, in 2011, Ciudad Juárez was ranked the most violent city in the country. For 2012 and 2013 Acapulco replaced Ciudad Juárez, and by 2014, Cuernavaca occupied this position (SJP 2012, 2013, 2014 and 2015). This raises the question on how to explain the recent spike in homicides in Cuernavaca, located very close to Mexico City and long thought to be a safe haven from the effects of organized criminal activities. Similarly, how can social scientists explain why Acapulco in the southern state of Guerrero replaced Cd. Juárez as Mexico's most violent city in 2012 and the second most violent in the world? (SJP 2013). My objective is to offer a theoretically sound and empirically supported explanation for recent patterns of subnational violence in Mexico.

Acknowledging that violence is a complex and multi-causal phenomenon, I argue that levels of organized crime-related violence at the subnational level in Mexico vary depending on the interaction between two main variables: local governments' state capacity and illegal drug market configuration. Though the phenomenon in Mexico is not technically a civil conflict, the literature on this topic may help to understand some dimensions that foment internal conflict and spark episodes of violence. For instance, in terms of state capacity, understood both as bureaucratic and military capacity (Hendrix and Young 2012), the literature emphasizes that weak governments may have a higher probability of confronting civil conflicts (Fearon and Laitin 2003) and that institutional weakening attracts criminal organizations to carry out their illegal activities (Skaperdas 2001). In addition, a more complex argument contends that state capacity and levels of violence may present an inverted-U shape relationship, with autocratic and well-consolidated regimes likely to experience a lower probability for civil conflicts (Hegre 2014, Skrede and Ruggeri 2010, Hegre et al. 2001).

However, state weakness alone is only part of the explanation. Another relevant factor, that has not been studied sufficiently, is the configuration of the illegal drug market, which (similarly to a legal market structure) shapes the behavior of criminal organizations as profit-driven enterprises (Reuter 1983; Williams 2012; Valdés Castellanos 2013). My research thus analyzes how illegal drug markets' configurations – monopoly, oligopoly or fragmented – impact levels of violence (Castillo, Mejía and Restrepo 2013). I will test the hypothesis that the relationship between levels of violence and the illegal drug market follow an inverted-U shape. In this sense, we would expect that under a monopoly of a larger drug cartel, levels of violence might be lower; whereas,

under an oligopoly structure of competing cartels, violence will increase. Violence is expected to decrease again as the number of criminal organizations multiply and resemble a fragmented market. This argument has only been made superficially in the existing literature and it has not been subjected to rigorous empirical testing for the Mexican case.

In short, this dissertation argues that levels of violence may vary depending on the combination of local state capacity and illegal market structures. In particular, I argue that strength of local governments mitigates the increase in drug-related violence across municipalities when the configuration of the illegal drug market changes. The period studied covers six years, from 2007 to 2012, which represents one presidential term. The unit of analysis is the municipality, which is the political and administrative organization in a defined territory in which an elected council (*ayuntamiento*) exercises local authority. There are 2,457[1] municipalities in the 32 Mexican states.

The dependent variable analyzed is the drug-related homicide rate[2] at the municipal level. Violence is not limited or circumscribed to the legal boundaries of the municipal territory and frequently many homicides and violent crimes spill-over and occur in several municipalities. Local governments are responsible for providing security, according to the Mexican constitution. However, agencies from state and federal levels also participate in the general justice system and therefore provide public security. This complex situation certainly generates a limitation since it is difficult to theoretically and

[1] INEGI considers a total of 2,457 municipalities. However, in their SIMBAD database for the homicide count there are 30 extra municipalities included in the state of Oaxaca. Therefore, this project considers the total count of 2,487 municipalities.

[2] Throughout the document I also use the term organized crime homicide rate to refer to the dependent variable.

empirically disentangle the impact that each governmental level may have on levels of violence. Yet, as previously mentioned, violence varies within states and therefore it is convenient to narrow the analysis to local governments without attempting to measure the influence of state and federal governments.

The independent variables I examine include a variety of political, social, economic and geographical indicators that relate to the different hypotheses discussed in Chapter 2. In general, however, the focus will be placed on state capacity and illegal market configuration, as previously mentioned. State capacity will be understood following Max Weber's definition of the state not only as the entity that exercises the monopoly over the use of force, but also as the authority organized in a bureaucratic and administrative unit in a given territory (Weber [1919]1958). This conceptualization refers to the modern state where there is a certain degree of professionalization within public services. In Chapter 4 I suggest the use of an index of state capacity at the municipal level based on three dimensions: law enforcement efficiency, financial autonomy and level of infrastructure. Concomitantly, the configuration of the illegal market refers to three typical market structure categories: monopoly (one organization), oligopoly (a few number of organizations), and fragmentation (several organizations). In order to empirically test these hypotheses, a mixed-method approach will be employed, combining quantitative and qualitative techniques.

1.1 Research Design

Data at the municipal level on organized crime homicides does not exist before 2007. Consequently, the quantitative analysis on drug-related violence in Mexico is carried out

at the municipal level for the period between 2007 and 2012. Additionally, analyzing this period is relevant since 2008 represents a critical moment in which Mexico experienced a significant spike in drug-related homicides. As already mentioned, this period covers one presidential term and thus, waves of violence at the subnational level can be analyzed, maintaining political continuity at the federal level.

The regression analysis employs a multilevel model since it is the most suitable technique to incorporate variables at different levels of analysis, in this case at the municipal and state levels. The advantage of conducting a regression analysis stems from its ability to find regularities in a large population and in identifying causal relations among variables of interest holding constant other relevant variables (Goertz and Mahoney 2012). Chapter 4 presents the results from the statistical analysis.

As pointed out by George and Bennett (2005), the inclusion of case studies provide four main advantages for testing hypotheses and theory development: they help in providing conceptual validity; they shed light on the possibility of new hypotheses that merit investigation; and they are useful in specifying closely the causal mechanisms, and they provide a better understanding of the complex causal processes. Thus, my research examines three cases to test the hypotheses and illustrate the causal mechanisms. Mill's method of difference, which seeks to analyze different outcomes based on the presence or absence of the independent variables of interest, will be employed.

I will examine the municipalities of Monterrey, Veracruz and Cuernavaca because they experienced different levels of violence in the period under study (2007-2012) and present various combinations of the variables of interest. Prior to 2007 and even in this year, Monterrey, Veracruz and Cuernavaca had low organized crime homicide rates

(8.85, 4.88 and 2.80 in 2007, respectively) and had never experienced the recurrent high levels of violence plaguing cities located on the U.S. border such as Tijuana and Ciudad Juárez. However, from 2007 to 2011 – being 2011 the most violent year in the country – Monterrey, Veracruz and Cuernavaca experienced increases of 737%, 507% and 531%, respectively, in organized crime homicide rates (Presidencia de la República 2011a; SESNSP). Thus, these three cases constitute representative examples of significant increases in drug-related violence in traditionally non-violent municipalities.

Furthermore, in 2012, Monterrey and Veracruz, following the national trend, saw a reduction in the level of violence, by 17.2% and 78.3%, respectively. However, Cuernavaca presented a different outcome. In 2012 its organized crime homicide rate increased by 149%. Thus, in terms of the dependent variable, two municipalities experienced a reduction and one an increase. These three cities share similar structural characteristics. All three are urbanized areas. In fact, Monterrey and Cuernavaca are the capital cities of their respective states. The three have similar levels of Human Development: Monterrey 0.80, Veracruz 0.79 and Cuernavaca 0.82 (PNUD 2010) and Gini coefficients: Monterrey 0.45, Veracruz 0.46 and Cuernavaca 0.45 (CONEVAL 2010). In terms of state capacity, all witnessed the presence of the military in the form of joint operatives carried out by the federal government in their respective states (*Operación Lince*, *Veracruz Seguro* and *Morelos Seguro*). Thus, my task is to explain why although they shared these characteristics, they showed different outcomes.

As mentioned above, state capacity and illegal market configuration are the two principal independent variables analyzed. These municipalities represent different combinations of these variables. For instance, the three cities experienced a shift from

monopoly to oligopoly illegal markets. However, Monterrey and Veracruz strengthened their local governments during the period under study, while Cuernavaca experienced erosion in its state capacity. It is important to mention that the qualitative analysis presented here does not attempt to generalize the findings for all Mexican municipalities. Rather, these three cases are selected as a subset with certain common characteristics. They represent examples of a particular configuration of variables and thus specific causal mechanisms. For a more sophisticated and powerful leverage of causal inference, other techniques, such as Boolean algebra or fuzzy set and Qualitative Comparative Analysis (QCA) might be appropriate.

In order to show how the level of organized crime related violence evolved in these three cases I rely on information gathered from newspapers (most of them in Spanish); on personal interviews[3] with academics, journalists, public officials, members of the navy, and activists that were conducted while doing fieldwork; on studies from local universities, think tanks and non-governmental organizations; and on official reports from governmental agencies. To gather information on the perception from the U.S. government actors, I rely on classified diplomatic cables released by Wikileaks.

1.2 Contribution

The contribution of this project encompasses three primary aspects. First, this research contributes to the methodological debate on subnational comparisons (Snyder 2001) and seeks to fill the gap in the literature that has overlooked how violence unfolds at the subnational level (Kalyvas 2007; Bates 2008). Bates (2008, 10) argues that "the origins

[3] All interviews were conducted in confidentiality by mutual agreement. Thus in order to protect the identity, an alias will be used to refer the interviewee.

of political disorder lie in conflicts whose own origins are to a great degree, internal to the nation-state: regional inequality, conflicting partisan preferences, religious differences and so on. Aggregate, national-level data offer the wrong optic by which to view within-country conflict." Hence, by incorporating into the analysis different degrees of local state capacity in Mexico, along with the configuration of the drug market, this research contributes to the discussion on how variations in the characteristics of subnational units combine to generate differing levels of violence. The findings of this dissertation suggest that municipalities under an oligopolistic market with intermediate state capacity might experience higher levels of violence; whereas, the lowest levels may be found either in the monopolistic or fragmented markets with strong local governments. Thus, the analytical framework proposed in this dissertation is not limited to Mexico and may help to understand similar phenomena that currently take place in Latin America as well as other regions in the world.

Second, to explain levels of drug-related violence, previous studies have emphasized the importance of political variables, particularly, electoral competition (Osorio 2013) and changes in the alternation of political parties at the state and local level (Dell 2011; Trejo and Ley 2013). Other studies have emphasized the lack of coordination among the three levels of government as a cause for the expansion of organized crime activities (Ríos 2012b). In terms of military capacity, several analyses have shown that after the deployment of troops in a municipality, violence may rapidly increase (Escalante 2011; Merino 2011; Ríos 2012a; Espinosa and Rubin 2015). Nevertheless, these studies have not examined the weakness of the local governments and the configuration of the illegal drug market as relevant factors. Thus, this research

contributes to the analysis of the phenomenon on violence by systematically incorporating these two variables.

Finally, at the empirical level, this research makes two contributions. First, it offers an advance in the conceptualization and operationalization of state capacity by proposing an index of state capacity at the local level. Second, as part of the qualitative analysis, this research examines three cases that have not been studied in depth (although perhaps Monterrey has received recent attention) and that represent important cases in the study of the relationship between the state and criminal organizations.

1.3 Organization

Chapter 2 discusses the relevant literature on violence where different hypotheses regarding levels of violence are presented. In this Chapter, I also introduce typologies delineating the possible relationships between organized crime and state capacity in terms of levels of violence. Chapter 3 presents a historical overview on the evolution of organized crime in Mexico since the beginning of the twentieth century. Chapter 4, then, quantitatively tests the hypotheses discussed and provides an analysis on the expected levels of violence reflecting the interaction between illegal drug market structures and the state capacity of local governments. Chapters 5, 6 and 7 examine in depth the cases of Monterrey, Veracruz and Cuernavaca. Finally, Chapter 8 presents conclusions.

Chapter 2. Causes of Organized Crime Violence. A Revision of the Literature

The purpose of this chapter is to discuss how the two variables under study, state capacity and the configuration of the illegal drug market, interact to produce wide levels of violence, with particular emphasis on cities located far from the U.S. border. I will first discuss these two main bodies of literature and their relationship with violence. Second, I will propose a configuration that incorporates these two elements and their expected impact on levels of violence. Then, I will present explanations on the recent increase in drug-related violence in Mexico and the respective hypotheses. Finally, the methodological approach employed in the present research will be discussed.

2.1 State Capacity

Even though clearly, the current situation in Mexico is not a civil conflict,[4] the literature on civil war helps in understanding the relationship between the weakness of the state and the occurrence of episodes of violence. First of all, it is imperative to underscore that drug trafficking organizations are not insurgent militias with political objectives, even though more than 60,000 deaths have led some scholars to compare it to the levels of violence during a civil war (Beittel 2013).

[4] According to Fearon and Laitin (2003, 75), "Insurgency is a technology of military conflict characterized by small, lightly armed bands practicing guerrilla warfare from rural base areas. As a form of warfare insurgency can be harnessed to diverse political agendas, motivations and grievances." Ross (2004, 47-38) identifies a civil war as "a conflict between a government and an organized rebel movement that produces at least one thousand battle-related deaths." Kalyvas (2006, 17) defines conflict or civil war as "armed combat taking place within the boundaries of a recognized sovereign entity between parties subject to a common authority at the outset of the hostilities." As explained by Kalyvas, this definition leaves out other domestic conflicts such as communal riots, terrorism, crime and genocide.

In this sense, there are three main theoretical frameworks – culturalist, rationalist and structural – that provide some insights concerning the origins of civil conflict. The first argues that greater ethnic or religious diversity within a country increases the probability of civil war (Sambanis 2001; Huntington 1996; Moynihan 1993). However, some analysts have observed that this explanation is not very relevant to Mexico since there is not "a high level of ethnically motivated violence" (Paul, Clarke and Serena 2014, 68).

The second approach is related to theories of greed and grievances and how inequality affects criminal behavior. The "greed" argument contends that unemployment and the lack of opportunities drive individuals to participate in the illegal market where they can obtain an income that the legal market is unable to provide. The role of natural resources has been linked to the greed argument on the causes of civil conflict. According to this literature, commodities provide opportunities for extortion and make the rebellion feasible due to the ability of finance (Collier and Hoeffler 2004). This argument has been particularly relevant for African countries, in which oil and diamond provide incentives for incentivize rebellion. In the case of Colombia, the FARC has been able to finance its activities through the illegal drug business (Kalyvas 2007). Though there have been studies that clearly identify a strong correlation between commodities dependence and civil war (Collier and Hoeffler 2004; Fearon and Laitin 2003; Fearon 2006) in his study of thirteen civil conflicts Ross (2004) contests the causal mechanisms in which resource wealth promotes the occurrence of a civil conflict. This author argues that resource dependency can have a differentiated impact on the onset, duration and intensity of the conflict. For example, Ross did not find evidence that the greed or looting argument

played a role in the initiation of the conflicts, whereas, it did in the duration of ten out of the thirteen civil wars.

On the other hand, people in societies characterized by inequality and lack of social justice are presumed to have an incentive to engage in violent behavior as a form of "grievance" (Gurr 1970). Related to the natural resources argument, it has been also discussed by some authors, that the extraction of these resources generates grievances due to environmental and social dislocations that ultimately could cause a lack of jobs, migration flaws and as a consequence of these forms of grievances, the eruption of a civil war (Ross 2014). According to Collier and Hoeffler (2004), grievance can also be conceived as an 'opportunity,' in which individuals with low-income participate in the rebellion because the forgone income is very small; therefore, they participate more because there is a material/economic benefit than due to feelings of anger or resentment. The key difference between the greed and grievance arguments entails the motives of participation.

Finally, the third approach emphasizes the role of state capacity in favoring conditions for insurgency. In their study of countries that have experienced civil wars between 1945 and 1999, Fearon and Laitin (2003, 75-76) contend that, "financially, organizationally, and politically weak central governments render insurgency more feasible and attractive due to weak local policing or inept and corrupt counterinsurgency practices." They also link the natural resources argument with state capacity, particularly regarding states whose revenues come mainly from oil exports. For them, these states have weaker bureaucratic apparatuses because rulers in rich oil countries have fewer incentives to collect taxes from the population, and therefore, are less accountable for

their policies. Therefore, it is expected that the two variables follow a linear relationship: the weaker the state, the higher the probability for insurgency and as a consequence, the higher the levels of violence.

Finally, there is a body of literature that has identified an inverted-U shape relationship between governmental policies and political violence (Mueller and Weede 1990); economic development and collective political protest (Hibbs 1973). Regarding civil war, some studies have found that autocratic regimes and well-consolidated democracies present a lower probability of civil conflict while the semi-democratic or intermediate regimes are more prone to experience an internal armed conflict (Hegre 2014; Skrede and Ruggeri 2010; Hegre et al. 2001). Studies examining terrorism and democracy have also found a similar relationship where intermediate regimes are the more vulnerable entities to terrorist groups and activities, and as a consequence present higher levels of violence (Eubank and Weinberg 2001; Art and Richardson 2007).

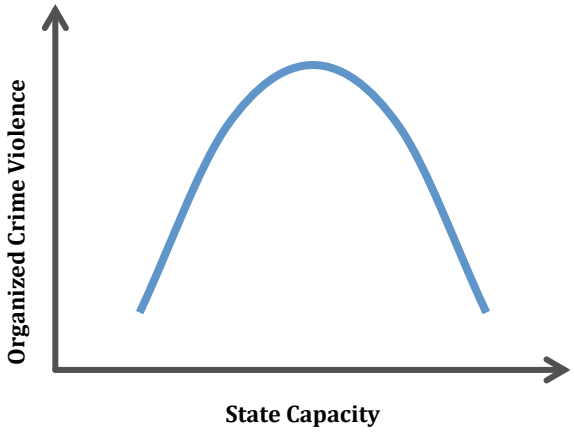
As pointed out by Hendrix (2010, 273), Tilly's political opportunity model incorporates the concept of state capacity "The decision to rebel takes into account the government's capacity for repression and accommodation. If the state is capable of repressing, then the likelihood of capture will be higher and rebellion will be less likely. If the state is capable of accommodating grievances via institutionalized channels, such as redistribution, […], then the motivation for violent rebellion will be lessened and conflict will be less likely." As a consequence we expect that the decision to engage in violent behavior will be shaped by the expectation on how the state is likely to react.

The term 'state capacity' has been widely used in the literature of civil war but as shown by Hendrix (2010), it lacks a precise definition and measurement. He identifies 15

different measurements encompassed in three main theoretical definitions of state capacity: military power, bureaucratic/administrative capacity, and the quality and coherence of political institutions. In order to avoid confusion and be more precise, I will rely on the conceptualization of state capacity provided by Weber that embodies the concept of the state not only as the entity having the monopoly over the use of violence, but also as the authority structured in a bureaucratic/administrative capacity. This definition relates to the concept of the modern state, which is characterized, by the professionalization and division of labor in the administrative state apparatus. As it will be discuss in Chapter 4, this definition of state capacity helps to narrow the responsibility of local governments and tries to avoid the overlapping responsibilities with the state and federal governments.

Organized crime groups, as previously mentioned do not constitute insurgent militias because they do not aim to overthrown the current government. In fact, organized crime needs the government to be able to carry out its illegal activities. Nevertheless, a similar U-inverted relationship between state capacity and organized crime violence would be expected. As shown in figure 2.1 governments with weak state capacity are likely to exist in societies with low levels of violence.

Figure 2.1 Relationship between State Capacity and Organized Crime Violence



Source: Author's own elaboration

Therefore, when the state is absent or extremely weak and generally speaking a strong, formal bureaucracy capable of performing basic tasks such as collect taxes and the provision of public services is likely to be absent, low levels of organized-crime violence is also to be expected. This is related to the presence of warlords, that as Duncan states (2007, 35) "refer to the armed structures organized like an army, capable of assuming state functions in a community up to the point that they shape the social, economic and political order" […] The warlords' maximum aspiration is to become 'the State' in the semi-urban and rural areas of the country." In Colombia, for example, the warlords take the form of self-defense groups or militias. In México, the *caciques*[5] have

[5] *Caciques* are considered political actors that exercised authority and coercive power in certain regions. According to Olvera (2011), after the process of independence, the Latin American countries faced a very weak and limited government; therefore, during the XIX and part of the XX centuries, the governability was achieved through pacts made between the central governments and the *caciques*. These pacts gave concession of spaces and positions to the local *caciques*, and in return, the central government obtained a certain formal representation. Therefore, "these kind of pacts meant the privatization of the State" (316).

long controlled rural areas that traditionally have been beyond the reach of the government. As a consequence, local warlords frequently assume functions like protection, property rights, taxation and the organization of certain community services traditionally performed by the state (Duncan 2004, 18).

Thus, when there is no state or a very weak state, warlords will have an incentive to establish themselves as the authority, and because there is no intention or resources from the central government to impose its presence, a monopoly of coercion is established by a non-state actor. For example, Duncan (2007) found that in small villages in Colombia, the self-defense groups or the FARC are in charge of public security, supplanting the state. In contrast, in medium and large cities, the police maintain the authority over the security. Thus, "in isolated regions where private armies of drug traffickers are the only source of local authority, there is also a monopoly of coercion, only here it is in the hand of warlords." (Duncan 2014, 19)

However, when the state imposes itself and carries out its functions by performing tax collection, creating law enforcement, security and economic institutions and providing transportation and infrastructural services, it becomes an attractive target for the mafias: "The maximum aspiration of the agents from the mafia is to infiltrate the government in an important city. […] Even by controlling the local governments, the mafia groups need a state that regulates the main interactions typical from the organization of the society" (Duncan 2007, 35).

As pointed out by Schelling (1967, 74), there should be an "optimum degree of enforcement" from constituted authority. This means that for the criminal organizations the intermediate level of state capacity may be the most attractive context for their

operations. In the other two extremes the illegal activity cannot easily be carried out. On one hand, in the absence of enforcement the black market is not profitable enough. There are no state structures that can protect them, assist with deterring competition and in general facilitate their illegal activities. Therefore, criminals will not find these localities attractive. On the other hand, complete and effective enforcement, where the state has strong institutions and there is no room for corruption and infiltration of the local police, illegal business operations may not be feasible.

This phenomenon is what Duncan (2014, 19) refers to as 'oligopolies of coercion,' in "which several organizations have overlapping control of the means of coercion necessary to regulate societal transactions." On the one hand, when the state regulates the legal transactions by establishing the rule of law, enforcing property rights and providing a safe environment, these activities are more likely. On the other hand, organized crime attempts to carry out its illegal activities and in order to be able to do so, it needs to infiltrate the governmental apparatus that can provide support and protection when needed. Thus, "it is only in spaces where the state maintains an intermediate level of authority and institutional presence that oligopolies of coercion are feasible" (Duncan 2014, 19). It is in this scenario in which the levels of violence would increase. It is the urban, middle or large sized municipalities that are more attractive for organized crime to carry out their activities.

Finally, at the other extreme of the inverted-U relationship, the levels of violence are likely to decline. In this stage, the state is strong enough not only to be able to perform all the bureaucratic tasks, but also to send the message that violent crimes, if committed, will be pursued and condemned. In the civil war literature, this is related to

the idea of the political opportunity structure, in which depending on the strength of the state, the civil conflict may or may not emerge. As pointed out by Sobek (2010), the majority of studies has focused on the willingness of the rebels to participate in the conflict but has not paid enough attention on how the weakness of the state allows them to engage in violent behavior by shaping expectations regarding the probability and intensity of repression. For example, in his study of civil war, Kalyvas (2006) presents a model in which insurgents may react differently depending on the kind of violence (selective or indiscriminate) exerted by state authorities.

In the case of organized crime, the key is that the presence of a strong state means that corruption and particularly impunity are likely to be lower and therefore the state will have a greater probability of effectively implementing the rule of law. Here, the state is the one that exercises the monopoly of coercion. In this scenario, the members of criminal organizations know that they are facing professionalized bureaucratic agencies and that the probability they will be captured, processed and, convicted is higher. Therefore, in a cost-benefit analysis, they refrain from engaging in illegal activities and violent crimes.

Based on the aforementioned arguments we would anticipate that local governments present the same inverted-U shape relationship between state capacity and levels of violence. Therefore we would have the following hypothesis:

> H1: Municipalities with intermediate levels of state capacity will experience higher levels of violence rather than municipalities with either weak or strong state capacity.

2.2 Organized Crime

There have been numerous definitions of what constitutes organized crime. According to Galeotti (2005, 10) "Organised crime is a continuing criminal enterprise that rationally works to profit from illicit activities that are often in great public demand. Its continuing existence is maintained through the use of force, threats, monopoly control, and/or the corruption of public officials." In a similar fashion, Chabat (2010a, 5) emphasizes that organized crime entails the following characteristics: 1) serious criminal activities executed in a planned manner with the aim to obtained a benefit; 2) a hierarchical division of labor, of a business kind that includes discipline and internal sanctions; 3) the real or implicit use of violence and intimidation and; 4) influence over many appointed or elected public officials, leaders of public opinion and other pillars of social control through corrupt practices. However, the main difference between common crime and organized crime is that the latter can effectively challenge the state and the society in terms of governability. Fiorentini and Peltzman (1995, 5) point out that organized crime, in a clear contrast with common crime, tries "to govern and control the whole economic structure of the underworld."

All the definitions above underscore the conceptualization of organized crime as a firm. Therefore, the illegal drug market, which, similarly to a legal market structure, can be expected also to shape the behavior of criminal organizations as profit-driven enterprises (Reuter 1983; Williams 2012; Valdés Castellanos 2013) resulting in similar competitive practices. Consequently, conceptualizing an organized criminal group as a firm is helpful in several ways. As pointed out by Fiorentini and Peltzman (1995), the control over the territory is a necessary condition for the criminal organization to be able

to carry out its activities. Second, the organization needs to invest in military technology and corruption in order to obtain monopoly over the territory and increase the profitability of the illegal business. This investment could be seen as similar to the investment in research and development implemented by legal firms in order to expand their business. For example, the Gulf Cartel created the Zetas as its armed branch to enforce internal agreements as well as to confront the external threats by other cartels. Attacks on local politicians and police officers thus constitutes a form of threat to the government should it decide to support a rival cartel.

Third, criminal organizations confront a principal-agent dilemma, in which the activities by the members need to be monitored very closely due to the illegal nature of the business. However, the criminal organization needs to find alternative mechanisms because they cannot appeal to the intervention of the government to solve disputes. Fourth, and related to the former feature, in order to maintain their monopoly status, larger criminal organizations will collude with other smaller groups and allow them to participate in a stage of the illegal business as long as the small group does not intend to contest their power. “However, the problem of monitoring the terms of such agreements, in which each transaction requires the smallest possible diffusion of information, usually makes the agreements themselves unstable. If such problem arise, while legal firms involved in cartels can start a price war in order to punish the firms that violate the collusive agreements to get a greater market share, criminal organizations have no alternative but to start an open military conflict to achieve the same result” (Fiorentini and Peltzman1995, 13). The case of Sinaloa and Juárez cartels illustrates this problem. In 2001, in a meeting in the city of Cuernavaca, representatives of Sinaloa, Juárez and the

Beltrán Leyva brothers decided to join forces and try to create a "federation" in order to confront their rivals, the Tijuana and the Gulf cartels. However, the alliance between Sinaloa and Juárez only lasted until 2004 when the Sinaloa cartel decided to break the pact due to the excessive demands of Juárez partners and the low revenues that they provided to the federation (Valdés Castellanos 2013, 310-312).

If organized crime behaves as a firm, then it is expected to prefer a monopoly on the market, particularly because in the drug business, the greatest profitability comes from the prohibitionist regulation and the high inelasticity of the demand. Thomas Schelling (1967) describes the advantages of establishing a monopoly in the illegal market:

> [T]here is the attraction of not only monopolizing a market, but achieving a dominant position in the underworld itself, and participating in its governing. To the extent that large criminal business firms provide a governmental structure to the underworld, helping to maintain peace, setting rules, arbitrating disputes, and enforcing discipline, they are in a position to set up their own businesses and exclude competition. Constituting a "corporate state," they can give themselves the franchise for various "state-sponsored monopolies." They can do this either by denying the benefits of the underworld government to their competitors or by using the equivalent of their "police power" to prevent competition (66).

If a single organization controls the *plaza*, has been able to establish key contacts and a network to receive and transport drugs, and ultimately has been able to ensure protection from the local authorities against federal intervention or potential rival organizations, then the levels of violence will be lower. The likelihood of episodes of violence against the authorities will be lower because it is assumed that the dominant organization has successfully infiltrated the government and, therefore, the government capabilities can be relied upon to deter and threaten any potential rival organization. Thus, the dominant organization will not have to employ excessively violent methods.

As evidence of this situation, Castillo, Mejía and Restrepo (2013) in their study on how reductions in cocaine flows from Colombian affected violence in Mexico under Felipe Calderón, found that municipalities with only one criminal organization suffered fewer drug-related homicides than the ones with two or more. For them, the monopoly exists because a) there is no competition for routes and, b) the organization is strong enough to deter any attempt of rival organizations from entering its territory. However, contrary to what is expected in an uncontested territory, the mere dominant presence of the Zetas increased the violence. This is related to the modus operandi of this organization, namely its strategy to dominate the local criminal bands and the police authorities with the systematic use of violence (Váldes Castellanos 2013, 407).

Of course, illegal markets may also resemble an oligopolistic structure, not a monopolistic one. Though it is not the purpose of this research to discuss if the tendency of the illegal market structure is one of monopoly or oligopoly, it is relevant to acknowledge that this issue has received substantial discussion.[6] The key to the present analysis is that due to the high levels of profitability from the drug industry, large-scale organizations tend to emerge and fight for control over strategic territories, particularly when they have similar resources to deter rivals, collude with the local authority and inflict violence.

When monopoly control is disrupted and the market is contested by several criminal organizations, the levels of violence can be expected to rise. Challenges to a monopoly may occur for several reasons. The first is associated with internal disorders in the criminal organization due to a beheading strategy. According to Williams (2010, 28), a power vacuum inside an organization can be very attractive to rival groups that may

[6] Fiorentini and Peltzman (1995) address this topic.

seek to eliminate or replace it. When the absence of a clear leadership is prolonged and uncertainty over the succession increases, the more intense the competition among the groups becomes and, as a consequence, levels of violence are likely to increase. This thesis has also been advanced by Eduardo Guerrero (2011a), who presents evidence that the strategy of the Calderón administration to detain or assassinate *capos* has divided organizations that dispersed, thus engendering rising levels of violence. Particularly, in 2010 and 2011, the prevalence of this policy intensified the internal division of the organizations up to the point that by 2011, 16 active drug cartels were registered (Guerrero 2012b). Still, differing levels of violence may hinge on how the power vacuum was generated. A study by Phillips (2015) shows that a strategy of decapitation of the drug leader leads to more violence in the long run.

When a market changes from a monopoly to an oligopoly due to internal disruptions or external conquests by other rival organizations, fierce competition may emerge. This is probable because "larger organizations generate stronger competition than their smaller rivals as a result of their superior access to resources, greater market power, and economies of scale and scope" (Baum 1995, 82). The organizational ecology literature also emphasizes the concept of localized competition as a source of this rivalry:

> [A]lthough organizations of different sizes are engaged in similar activities, large and small organizations depend on different mixes of resources. This implies that organizations compete most intensely with similarly sized organizations. For example, if large and small organizations depend on different resources (e.g. large hotels depend on conventions while small hotels depend on individual travelers), then patterns of resource use will be specialized to segments of the size distribution. Consequently competition between large and small organizations will be less intense than competition among large or small organizations (Baum 1995, 84).

Therefore, smaller organizations, due to their lack of capabilities, are less likely to challenge larger cartels. Furthermore, due to inequalities in resources, smaller organizations will engage in other illicit activities (i.e., kidnapping or extortion) different from the drug trafficking traditional activity of larger organizations such as Sinaloa. The fierce competition between the Zetas and the Gulf, or the Gulf and Sinaloa demonstrates that levels of violence may significantly increase in the territories in which larger cartels have similar heavy weaponry, transportation resources and deep infiltration in the governmental apparatus.

However, in a fragmented market, characterized by smaller organizations, the levels of violence will likely decrease. This is related to the fact that younger organizations have higher failure rates. This is closely related to the size factor, which indicates smaller organizations tend to fail because they face the challenge to invest in training, resources and influence (Baum 1995, 73). Hence, it is expected that newer and smaller organizations will face more daunting challenges in successfully confronting other criminal organizations.

Additionally, the survival chances of an organization also depend on the population density levels (how saturated is the market in terms of the number of organizations). For example, an organization entering a high-density population market will have an elevated failure rate due to two situations: first, "high density creates a *liability of resource scarcity* that prevents organizations from moving quickly from organizing to full-scale operations. [Second,] high density also results in tight niche packing, forcing newly founded organizations, which cannot compete head-to-head with established organizations to use inferior marginal resources." (Baum 1995, 82)

Eduardo Guerrero (2011b) identified at least 64 local organizations in 2011 that emerged from the fragmentation of larger drug cartels. Due to the lack of resources and structure of the former cartel, the new cells' main activities consisted of extortion, kidnapping and robbery crimes. Some of the smaller organizations have disappeared; as occurred in the case of "*La Mano con Ojos*," the "*Cártel del Charro*," "*La Nueva Administración,*" and "*Los Incorregibles,*" among others, which became local gangs.

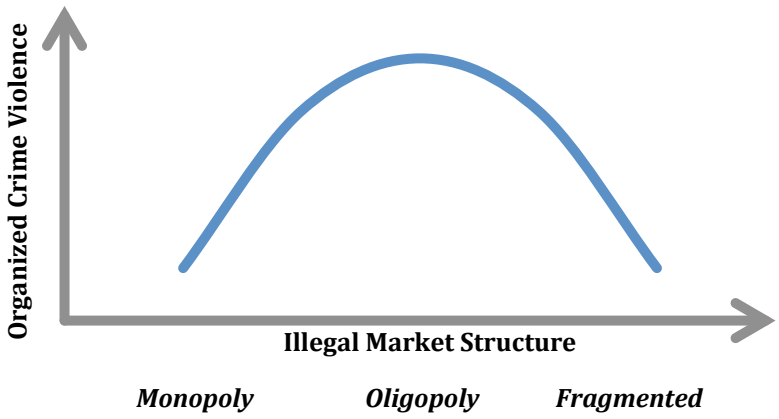
These smaller organizations whose primary activities are not drug-trafficking develop what Guerrero (2012a) has coined "mafia ridden violence." One of the characteristics of these mafia groups is that they use violence as a means of propaganda to build a reputation while frightening other potential mafiosi. One of the ways to carry out this propaganda is through the use of messages left next to the dead victims. The narco-messages usually explain the reason for a particular murder, express a clear threat in case others try to continue with the same behavior, and are signed by the executor. The municipalities that showed more mafia driven violence between 2007 and 2010 were Cuernavaca, Chilpancingo, Acapulco, Ecatepec and Lázaro Cárdenas, among others, which are precisely the localities in which the fragments from the BLO organization are fighting for market share. Thus, Guerrero (2012a, 43) concludes that, "mafia driven violence seems to be prevalent in areas with no strategic value for transnational drug trafficking" and points out that "mafias may develop in municipalities with weaker law enforcement institutions or in those that already have large criminal networks" (45). Therefore, we would expect this kind of violence precisely in fragmented markets.

Hence, based on the organizational ecology arguments with smaller organizations will fail to survive when population density increases and, due to the fact that they lack

the capabilities, resources and weaponry of the larger cartels, the expectation is that these local gangs will face great challenges to continue in the business and as a result will have a short life span.

As shown in figure 2.2, as a consequence of the behavior of organized crime as a firm, it is expected that the illegal drug market structure will follow an inverted-U shape with respect to the levels of violence. Hence, under the presence of a single organization, the violence is hypothesized to be lower due to the monopoly over coercion that the organization can successfully exert; whereas, under an oligopolistic market structure the violence is expected to substantially increase. Conversely, violence should likely decrease again as the number of criminal organizations rise.

Figure 2.2 Relationship between the Illegal Market and Organized Crime Violence



Source: Author's own elaboration

As a consequence, the following hypothesis can be formulated:

> H2: Municipalities with oligopolistic market structure can be expected to experience higher levels of violence than municipalities with either a monopoly structure or a fragmented market structure.

To recapitulate, the main argument of this dissertation is that the levels of drug related violence at the subnational level in Mexico will vary depending on the interaction between two main actors: the state and criminal organizations. Taking into consideration the preceding discussion on the relationship between these two variables and violence, I propose the following hypothesized configurations:

Table 2.1 State and Illegal Market Effects on Levels of Violence

Market / **State**	**Monopoly**	**Oligopoly**	**Fragmented**
Weak	Low	Moderate	Low
Intermediate	Moderate	High	Moderate
Strong	Low	Moderate	Low

Source: Author's own elaboration.

Hence, the most violent scenario should be encountered in territories in which local governments enjoy an intermediate level of state capacity and oligopolistic illegal markets. The intense competition among large criminal organizations along with the possibility of infiltrating bureaucratic apparatuses of the state can be expected to trigger a fight for control over trafficking in the *plaza* as well as over local security agencies. The

levels of homicide can be expected to be high due to a) confrontations among organized crime groups, b) attacks against local authorities that seem to favor the rival organization and, c) confrontations between the government and organized crime.

Moderate levels of violence will be expected in four market-state configurations characterized y: 1) Monopoly markets-intermediate state capacity; 2) Oligopoly markets-weak state capacity; 3) Oligopoly markets-strong state capacity and; 4) Fragmented markets-intermediate state capacity. In the first case, violence between a single organization and the government can be predicted if there are disagreements between bureaucracies and agencies that do not want to cooperate with the single organization. In the second scenario, levels of violence should increase due to the confrontation among larger criminal organizations with virtually no presence of the state. Third, these confrontations will increase the level of violence in the municipalities with a strong state capacity. Even if the state successfully carries out law enforcement responsibilities and corruption is low, casualties from struggles among various criminal organizations raises the probability of intensified violence. Finally, the fourth scenario in which many small organizations with less capabilities fight one another for control over the municipality and will increase efforts to penetrate local government to be able to carry out their illegal activities. As pointed out by Guerrero (2012a) the remnants of a former dominant cartel will deploy mafia-driven violence to expel competitors. As a consequence, levels of violence will increase. But because many smaller organizations have a low survival rate, the level of violence may not be as intense as in context with oligopolistic market structures.

Scenarios characterized by lower levels of violence can be hypothesized to have: 1) Monopoly markets-weak state capacity; 2) Monopoly markets-strong state capacity; 3) Fragmented markets-weak state capacity; and 4) Fragmented markets-strong state capacity. In the first and third cases, it is expected that levels of violence will be low because a lesser level of development with a weak market demand that would made organized crime organizations lack strategic interest in these localities. Therefore, the expected level of violence should be low. In the second scenario, with a strong state capacity and a dominant organization, violence should be low because the monopoly organization should have few incentives to engage in episodes of violence due to the higher probability that the state will enforce the rule of law.

Finally, the fourth scenario with a fragmented market and a strong state capacity should exhibit low levels of violence because there is a credible expectation that the state will react strongly against the attempt of the smaller organizations to engage in any illicit activity. Additionally, from the government's perspective, it would be easier to manage smaller organizations with less weaponry capabilities.

2.3 Explanations for the Recent Rise of Violence in Mexico

Due to the visibility and astonishing intensification in the violence experienced in Mexico, this topic has sparked considerable attention. Therefore, the purpose of this section is to discuss further explanations of this phenomenon and their implications on drug-related homicides.

2.3.1 Democratization

The literature on democratization suggests two possible explanations for the recent rise of drug related homicides in Mexico. First, increased political competition at the local and state level broke the informal rules established between the drug cartels and the PRI (Institutional Revolutionary Party) in previous decades (Chabat 2010c). This change provoked the emergence of new and multiple actors that dispersed decision-making in local politics. The multiplicity of actors at the three levels of government –federal, state and municipal– gained autonomy, in contrast with previous, much more centralized governance arrangements (Campbell 2009; Shelley 2001; Snyder and Duran-Martínez 2009; Dell 2011; Ríos 2012b).

Snyder and Durán-Martínez (2009, 254) emphasize that the levels of violence increased due to the dismantling of what they call "state-sponsored protection rackets" operating as "informal institutions through which public officials refrain from enforcing the law, or alternatively, enforce it selectively against the rivals of a criminal organization, in exchange for the share of the profits generated by the organization." Consequently, democratization at the state and local level and the administrative reforms undertaken by the Office of the General Attorney (*Procuraduría General de la República*, PGR) the central authority, shattered the long time horizons of public officials, thus increasing uncertainty regarding the future implementation of previous pacts, which in turn prompted confrontations among criminal groups and between them and the government.

Closely related to the subnational democratization a variegated process of decentralization of the government also took place. Ríos (2012b) has advanced the

argument that administrative decentralization impacted levels of violence due to three reasons. First, decision-making power has been dispersed across many institutions and law enforcement agencies as well as the three levels of government. This multiplicity of actors makes corruption expensive due to the many instances where various individuals need to be bribed in order to obtain protection. Second, under decentralization, "if a criminal organization protected by one bribe engages in violent behavior in the jurisdiction of another bribe, its behavior may go unpunished, because corruption agreements with one government will inhibit law enforcement operations conducted by another. In other words, decentralization does not allow a government fully to internalize the costs of violence in all its jurisdictions and thus reduces the likelihood of punishment." (Ríos 2012b, 7) Finally, in a more decentralized context, organized crime organizations cannot rely on the state to protect them against rivals, thus leading them to invest in private armies. Hence, it is expected that under a centralized government, violence will be lower than in a decentralized scenario.

Related to this last point, Trejo and Ley (2013) argue that the uncertainty generated by competition and rotation of the political parties at the subnational level may have encouraged drug-cartels to invest in private protection. Therefore, investment in private armies and the use of sophisticated military weaponry becomes attractive to protect against the incursion of rival cartels and enforcement policies implemented by the government. As the criminal organizations augmented their military power, the level of violence increased. Changes in the incumbents of local governments is expected to create more opportunities for rival cartels to conquer valuable *plazas* and, as a result, the probability of confrontations between organized crime groups rises in tandem.

Interestingly, scholars and analysts have found that different combinations in completion and alternation of political parties in the control state and local governments may result in varying levels of inter-cartel violence. In this sense, the most lethal scenario is expected to be found when municipalities and state government experience a simultaneous rotation, with an increase of 117%. In contrast, when a municipality experienced a change in political parties, but the state governorship remained under the PRI, the violence increased 39%. Moreover, if the political power rotated at the state level but not in the municipality, the level of violence increased by 78% (Trejo and Ley 2013, 16).

Additionally, some scholars have paid attention to specific political parties holding power in the municipalities and the degree of political competition at the local level. For example, Dell (2011) found that the probability of an incident of a drug-related homicide is 8.4% higher in the municipalities in which the PAN won the election for mayor.

Based upon these assumptions, the following hypothesis may be averred:

H3a: A municipality that shares the same political party with the state and the federal government will experience lower levels of violence, while power sharing (and hence competition) should lead to higher levels of violence.

According to some authors, the democratization process at the state and municipal level also encourages politicians to fight criminals due to electoral and popularity motivations. These politicians seek police and military forces to carry out operatives

against illegal activities. These law enforcement strategies aim to weaken the criminal organization and as a consequence trigger the intention of other groups to invade and compete for that particular territory, increasing the levels of violence (Morris 2013; Ríos 2012a; Osorio 2013).

Similar to other facets of democratization, Osorio (2013) discusses the probability that government authorities may engage in a "law enforcement event." He finds that an increase in electoral competition measured by the effective number of parties, increases the probability of carrying out law enforcement operations against organized crime. Additionally he finds that the closer the margin of electoral victory between the winner and the loser, the greater the incentive for the winner to pursue an enforcement strategy. Moreover, he argues that the violence at the subnational level is related to the economic value a municipality represents for the drug-traffic business.

Thus, if the degree of political competition is related to the implementation of law enforcement strategies, and as a result to an increase in the levels of violence, then the next hypothesis follows:

> H3b: Municipalities with higher levels of electoral competition will experience higher levels of violence.

2.3.2 Military Presence

Hendrix and Young (2012) disaggregate the concept of state capacity. They authors reach two interesting conclusions. First, state capacity measured as military capacity has a positive impact in the number of terrorist attacks. Second, in contrast, when state capacity

is measured as bureaucratic/administrative capacity, the relationship with terrorist attacks is negative. The authors emphasize that "if terrorism is a tactical response to preponderant repressive capacity on the part of the state, then states with more repressive capacity should experience more terrorist attacks" (Hendrix and Young 2012, 7). Even though clearly organized crime is not terrorism[7], it is worth analyzing if different dimensions of state capacity have different, or even opposite, implications for the levels of violence to be expected. For example, in the Mexican case, the impact of greater reliance on repressive agencies such as the army and the navy may have actually resulted in a rise in the number of organized crime-homicides.

In this sense, several scholars (Escalante 2011; Merino 2011; Guerrero 2011a; Ríos 2012a) have argued when joint operations – federal police, army and navy deployment – are undertaken in a particular area that previously had experienced drug-related violence, confrontations with drug cartels leads to greater violence. Buttressing this argument, Escalante (2011) finds a positive correlation between the deployment of federal forces and the homicide rate, while Merino (2011) argues that there is a more visible presence of the casualties from attacks to authorities, rather in the number of executions.

Guerrero (2011a) contends that the strategy of eliminating high-level drug leaders carried out by the federal government under the Calderón administration generated a massive fragmentation of organized crime groups that only served to disperse the violence more broadly in territorial terms. This policy put an end to the previous prevalence of relative stability, thus shattering expectations that cartel leaders might have

[7] Some scholars have argued that in some occasions organized criminal groups engage in terrorist tactics. For further discussion about this topic please refer to Phil Williams (2012) *The Terrorism Debate Over the Mexican Drug Trafficking Violence.*

had regarding relations with authorities. Without stable leaders, members of cartels have fewer incentives to abide by previous pacts due to their perception that the government cannot be trusted.

In relation with the operations carried out by the government, Ríos (2012a) hypothesizes rising drug-related violence is caused by what she calls the "self-reinforce violent equilibrium," in which a cycle of violence has two main sources: first, the competition among drug cartels spurred the violence in a particular locality. Second, due to pressures from the electorate, the government needs to intervene by carrying out enforcement operations, which in turn, generate even more violence. This leads to the following hypothesis:

> H4: A municipality in which joint enforcement operations are implemented by the federal government involving the presence of the army, navy or the federal police, can expect to witness rising levels of violence.

2.3.3 Transit Areas and Drug Consumption

Two main contrasting arguments connect Mexico's position in the drug trade to the rising levels of violence. First, drug scholars have emphasized the strategic geographic position of Mexico as a transit route essential to meeting the demands for drugs in the U.S.; thus they attribute the most violence to competition among drug cartels for controlling key routes (Reuter 2009) and strategic warehouses in the northern border region (Williams 2009).

International and regional dynamics have also influenced the violent situation in Mexico. Castillo, Mejía and Restrepo (2013), for example, argue that the massive cocaine seizures by the Colombian government since 2006 led drug prices to rise and profits to become even more lucrative. In this sense, the partial victory of the U.S. strategies in the Andean region and in Colombia through Plan Colombia and the Democratic Security program launched by President Álvaro Uribe have allowed the Mexican drug trafficking organizations to seek even greater control in order to replace the Colombian cartels as the dominant actor (Bagley 2009). NAFTA's liberalization policies, which increased the trade flow between the U.S. and Mexico, have contributed to facilitating a higher volume of drugs. Therefore, there has been an increase in the number of organizations that participate in this lucrative illegal market (O'Neil 2009; Carpenter 2010). Thus, the strategic position of Mexico can be seen as a "location curse" (Williams 2009).

Moreover, in relation to Mexico's geographic position, arms trafficking into Mexico has provided the cartels with sophisticated military weapons, thereby enhancing their capacity to challenge the state's monopoly over the use of force (Chu and Krouse 2009; Astorga and Shirk 2010). A study by Dube, Dube and García-Ponce (2013) found that after the expiration of the U.S. Federal Assault Weapons Ban in 2004, the levels of violence increased in the country, particularly the municipalities near the border with Texas, Arizona and New Mexico. Trejo and Ley (2013) find the same effect. Though the trafficking of weapons is not explored in this research, it is important to highlight that this factor is clearly another significant source of this violence.

Additionally, Hope (2013) highlights that the U.S. not only provided weapons to Mexico, but also men well trained and ready to use them. The number of ex-convicts

deported to Mexico grew by 35% from 2002 to 2008, making the receptive communities more vulnerable to an increase in crime rates, particularly the ones closer to the border. In order to capture the importance of the geographic location of México, then, the following hypothesis can be advanced:

H5a: The closer the municipality is to the U.S. border, the higher the level of violence.

In contrast, however, scholars have pointed to the importance of the domestic market in Mexico as a source of drug-related violence. Due to the strong border interdiction measures adopted by the U.S. since 9/11, drug cartels have expanded their activities in Mexico, creating a domestic market. Phil Williams (2010) stresses that Mexico, has suffered the same destiny as other "bridge" territories that have become significant drug consumption markets. He illustrates this relationship by looking at tourist destinations, as is the case of Acapulco, in which the violence clearly stems from the competition for control over the local drug consumption market. The violence in Ciudad Juárez has been also related to the control over the 25,000 sales locations (Williams 2010, 28). Generally, this violence is generated by factionalism and the outsourcing of violence through young gangs that aim to control local markets (Williams 2012). Therefore, it is expected that the levels of violence will increase in the municipalities that have experienced a rise in drug addiction.

Artz and Vázquez del Mercado (2010) emphasize that not only the strong measures in the U.S. border, but also the payment in kind done by the Colombian cartels

to their Mexican counterparts strengthened incentives in growing Mexico's domestic market. Statistics compiled by the National Council Against Addictions (*Consejo Nacional Contra las Adicciones,* CONADIC) point out that between 2002 and 2008 the domestic consumption of all drugs grew, with cocaine presenting the greatest increase. Accordingly, it can be hypothesized that competition for control over Mexico's new internal market has fed killings among drug trafficking organizations.

H5b: Municipalities with higher levels of drug consumption should experience higher levels of violence.

2.3.4 Structural Variables

Literature in the field of criminology generally identifies a series of structural or socioeconomic variables that are associated with higher levels of violence. There is evidence that inequality is correlated with increasing levels of crime (Fajnzylber, Lederman, and Loayza 2002), particularly violent crime (Kelly 2000). Because crime is a phenomenon that disproportionately takes place in urban areas, it is expected that regions with higher levels of urbanization will also experience higher levels of criminality in contrast with rural areas.

Recent studies on inequality in Mexico have found that an exacerbation in the levels of inequality is correlated with the number of homicides, especially those associated with organized crime. Enamorado et al (2014, 14) found that an increase of one point in the Gini coefficient is associated with an increase in more than ten drug-related deaths.

Moreover, Guerrero Gutiérrez (2010) has found that in the case of Ciudad Juárez, low social and education indices, extreme poverty, the housing deficit, high levels of drug consumption and prostitution, the lack of infrastructure and public services, and the number of local gangs (he estimated around 500 gangs with a total membership of 15 to 25 thousand people) have been key factors for the emergence and multiplication of violence.

Similarly, Herrera-Lasso (2012) contends that poverty and marginalization along with domestic violence and lack of opportunities are directly related to the emergence of local gangs. Young people without expectations and opportunities frequently end up on the streets and that contributes to an increase in the propensity of violence and criminality in Mexico. The structural causes of insecurity that are not directly related to organized crime facilitate the presence and penetration of criminal organizations.

In general, high levels of unemployment, urban marginalization, limited access to education institutions and the lack of better opportunities, push young people to engage in violent crime. For example, Ingram (2014) finds that low levels of education attainment are negatively correlated to violence, which has a protective effect in the locality. Regarding economic development, the same author finds that an increase in income is associated with higher levels of violence. This phenomenon takes place because "a within-unit increase in income may draw offenders from surrounding communities. Thus, when income increases in surrounding communities, violence decreases in the central unit. […] the policy implication is that neighboring communities have a shared interest in each other's economic growth. More specifically, neighboring communities have a

mutual interest in growing economically, and in doing so at relatively the same rate in order to reduce perceived spatial inequalities" (Ingram 2014, 54).

Due to the importance of structural variables in the incidence of violent crimes, three additional hypotheses can be delineated:

> H6a: Municipalities with high levels of income inequality have a higher probability of experiencing higher levels of violence than counterparts with lower inequality.
>
> H6b: Municipalities with higher levels of human development will experience lower levels of violence.
>
> H6c: Urban municipalities more likely will experience higher levels of violence than rural regions.

2.4 Methodological Approach

In order to test the hypotheses elaborated above, I will employ a mix-method approach incorporating quantitative and qualitative tools. Laitin (2002) emphasizes that on the one hand, through a cross-sectional analysis with a large number of observations, the researcher may find statistical regularities, measure the explanatory power of variables of interest and thus explain variation in outcomes on the dependent variable. Concomitantly, qualitative analysis with case studies "allows comparativists to address questions of how historically there has been a translation of values on independent variables onto values on dependent variables" (Laitin 2002, 631).

The advantage of the quantitative techniques is that the researcher can "make inferences about populations. Here it is natural to ask and answer questions about the typical effects of specific variables of interest within the population as a whole" (Goertz and Mahoney 2012, 48). Therefore, the interest is on the impact that independent variables have in average on the population. The strength of statistical methods stems from the ability to generalize causal effects of variables (George and Bennet 2005, 5). It is also possible to contrast rival theories and analyze which factors have a significant impact on the dependent variable of interest in the presence of the others.

In complementary fashion, case study methodologies are essential in fleshing out causal mechanisms that are not readout in the statistical correlations found in the large-N analysis. Additionally, case studies help the researcher identify intervening and contextual variables (George and Bennett 2005) as well as to investigate the causal mechanisms and to explain the particular features of a key case (Gerring 2007). Case studies are also helpful in suggesting how statistical anomalies can be resolved by providing reliable information on the measurement of key variables, and helping to discover omitted variables that may affect previous statistical findings (Laitin 2002).

As Goertz and Mahoney (2012, 48) observe, "when quantitative results about the effects of causes are reported, it seems natural to ask if these results make sense in terms of the history of individual cases, one wishes to try to locate the effects in specific cases. These kinds of complementarities make mixed-method research possible, and they point toward value of cross-cultural communication and cooperation."

The small-N qualitative case studies will be analyzed by using Mill's method of difference, in which there are similarities in most of the independent variables, but not

all, and the expected outcome, in terms of levels of organized crime violence will be different. Process tracing will be employed in order to look for the observable implications of the hypothesized causal processes. The advantages of employing both methodologies are the possibility of testing the independent variables of interest –state capacity and illegal market configuration–, and their explanatory power vis-à-vis on levels of organized crime violence and the causal processes that triggered different manifestations of the expected outcome.

Before testing the hypotheses outlined in this chapter, the next chapter will provide a historical overview regarding the evolution of organized crime in Mexico and its relationship with the government during the second half of the twentieth century and the first years of the twenty first century. Subsequently, Chapter 4 will test empirically the hypotheses described based on a large-N statistical analysis while Chapter 5 will examine the three case studies.

Chapter 3. A Historical Overview of the Mexican Case

The purpose of this chapter is to briefly describe the evolution of organized crime in Mexico's recent history. My intention is not to provide an exhaustive history about drug trafficking since many scholars have already carried out that endeavor in an extensive manner. My aim is to provide an overview that will help to understand the context surrounding the rising levels of organized crime violence in the period under study (2007-2012). For this purpose, I first focus briefly on the first half of the twentieth century. Second, I analyze the period after the Second World War until the year 2000. In the last section, I analyze the arrival of Vicente Fox from the oppositional party PAN to the Mexican presidency, and the new configuration between the state and the criminal organizations at the beginning of President Felipe Calderon's administration (2006-2012).

3.1 The Beginning of Prohibition

The prohibitionist framework against drugs started at the international level in 1909 with the Shanghai Conference and at the domestic level in the U.S. in 1914 with the Harrison Act (Astorga 2007). Following the Spanish-American War in 1898, the U.S. Congress approved the petition by Charles Brent, Episcopal Bishop of Manila, to allow the Philippines government to prohibit the commercialization of opium, designating it only for medicinal purposes. Then, in the Shanghai Opium Commission, President Theodore Roosevelt laid out the prohibitionist approach on opium, except for medical use (Inkster and Comolli 2012, 39). At the domestic level, the Harrison Act was introduced in 1914

with the aim to "restrict the consumption of opiates by limiting access to them. Over time, the act was used to prosecute physicians providing maintenance doses of drugs to addicts, effectively cementing the beginnings of a domestic prohibition policy" (Inkster and Commolli 2012, 40).

If the Shanghai Convention shaped the global prohibitionist regime, the following three international conventions (the 1961 Single Convention on Narcotics Drugs, the 1971 Convention on Psychotropic Substances and, the 1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances) tightened the prohibition approach on production, manufacturing, selling, and consumption of a variety of narcotics, as well as the criminalization of related activities like money laundering (Inkester and Commolli 2012).

In 1971, Nixon declared to the U.S. Congress that drug abused was "public enemy number one." The drug consumption in the U.S. reached 559,000 addicts in 1973, in part due to the rising levels of addiction among the veterans who had served in Vietnam. As Turkey was the main source of opium, the U.S. concentrated its effort in the so-called "Turkish-French Connection" to impede heroin entering into the U.S. (Inkester and Commolli 2012, 46-47). As this strategy proved successful, other countries filled the void.

3.2 Mexico's Role in the Drug Industry

3.2.1 Participation in Opium and Marijuana Production

Since the Shanghai convention, Mexico signed and approved every single international convention that aimed to enforce the prohibitionist approach towards drugs worldwide.

According to Enciso (2010), Mexico followed this strategy to avoid any discrepancies with U.S. narcotics legislation that could create opportunities for traffickers on both sides of the border, and also, because the U.S. criminalization approach many times coincided with the revolutionary family's interests. Even though Mexico adopted the U.S. advocated approach, it was unable to effectively implement these measures due to the fact that the very first years of drug trafficking overlapped with a very weak state that emerged after the Mexican Revolution. The government's priorities were to strengthen agrarian, economic, and social institutions rather than the justice and security system. This triggered a model of coexistence between governmental authorities and organized crime that emerged at the local level, with governors as key connections. This model benefitted both parties: on the one hand, politicians needed money to strengthen their dominance and to guarantee political stability, and on the other hand, criminal organizations needed protection to operate freely and without obstacles (Valdés Castellanos 2013, 86).

However it was clear the support for prohibition, for a very brief period, Mexico tried to implement a different approach. On February 17, 1940, president Lázaro Cárdenas enacted a federal act on drug-addiction in which the problem of consumption was defined from a public health perspective, and the drug market was being regulated by the state. Though it received strong support in Mexico, the U.S. government diverged and threatened to permanently ban the supply of legal drugs through its pharmaceutics during the turbulent period of the Second World War in which German products were not available. After a couple of months, the law was withdrawn and with it any attempt to find an alternative to the criminalization approach (Enciso 2010, 69-72).

Since the beginning of the twentieth century, Mexico started to produce marijuana and opium poppies with the U.S. as the main destination market. Opium in particular had a boost with the outbreak of the Second World War. Marijuana had its boost during the 1960s, in which the consumption increased in the U.S. due to the civil rights movement and the cultural revolution. The states of Sinaloa, Sonora, Chihuahua and Durango were responsible for the most concentrated production of opium, while Michoacán, Guerrero and Oaxaca focused on marijuana production. However, production remained fragmented, in which thousands of peasants and small owners participated in the cultivation with their own lands. This fragmentation and the difficult access to the mountains complicated even more the eradication efforts carried out by the state (Valdés Castellanos 2013, 99).

This win-win situation between the state and organized crime resembled the mafia's classic private protection style. Local governments started to collect a tax from the peasants who cultivated opium in exchange for protection. This is well illustrated by the case of Manuel Lazcano Ochoa, – the Justice Prosecutor and the Chief of the Judicial Police in the state of Sinaloa during three administrations – who demanded a fee from producers in order to guarantee impunity or the support of the authorities. Therefore, at the beginning, drug trafficking was organized and directed by one part of the Mexican state: the northern states. They did not need a private mafia, because the state itself performed that activity. However, this modus operandi between the state and organized crime changed after 1980. The caciques and governors either stopped their involvement in the illegal activity altogether or remained in a secondary role. This shift in the state-

organized crime relationship was possible due to 1) the strengthening of the federal government with the concentration of power with the presidential figure and through the consolidation of the police force, and 2) the presence of one quasi-monopolistic criminal organization in which most of its members were from Sinaloa (Valdés Castellanos 2013, 101-113).

In 1972, with the prohibition measures implemented on opium production and processing laboratories in Turkey and France, respectively, the market became even more lucrative with the insatiable demand in the U.S. that the drug trafficking organizations in Mexico were able to satisfy. Moreover, due to the increasing levels of drug addiction in the U.S. during these years, the government implemented the "Operation Intercept" carried out in 1969 in which all vehicles coming from Mexico were inspected with the aim to seize drugs crossing the border. This operative slowed down the intense crossing of visitors, which also impacted the revenue of cities located on the border (Chabat 2010b, 23). Even though the U.S. focused its efforts in the interdiction and pressured the Mexican government to combat production of illicit drugs, its efforts overseas had unintended consequences at home.

Due to the U.S. pressure on Mexico after the "Operation Intercept" the Mexican government carried out a series of strategies to destroy the production of opium and marijuana that boomed during the 1970s due to the closure of the Turkey-French connection. In January 1977, the "Operation Condor," took place in Sinaloa in which 10,000 members of the army participated in tasks against drug trafficking (Valdés Castellanos 2013, 148). One of the results was the massive exodus of peasants to urban areas. Approximately, 30% of the inhabitants of the municipality of Badiraguato ("*El*

Chapo's" home town) depended on drug trafficking activities as a source of income (Astorga 2005, 115). The participation of the army in combating drug trafficking activities started in the 1930s but only as a support agency to the Office of the Mexican Attorney General (PGR); however, with Operation Condor, the military performed the leading role (Astorga 2005, 174).

The results of these strategies yield successful results. However, they involved an increase in the participation of the police and army in permanent eradication programs (Enciso 2010, 80). The exports to the U.S. were significantly reduced on both drugs. In the case of marijuana, the Mexican exports were reduced from 90% in 1974 to only 5% in 1981. In the case of heroin, they changed from 85% in 1974 to 37% in 1980 (Chabat 2010b, 24).

Since the 1950s, Mexico became an attractive transit route for the transportation of cocaine into the U.S. through the Cuban flights. But it was by mid 1960s that the Andean-Mexican route was constituted after traffickers in Mexico realized the profitability of cocaine. These early years have been identified by Paul Gootenberg (2008, 275) as the "prelude to the infamous Sinaloan drug lords of the 1980s." As pointed out by Astorga (2005), it is in the state of Sinaloa where the drug lords make their appearance at an early stage. It is in this state where the socio-historical conditions made the cultivation and transportation of opium reach larger dimensions. Since these years, Sinaloa was identified as a region that not only produced marijuana and opium, but also was an important transit route for cocaine.

Plenty of examples have been documented (Lupsha 1995; Pimentel 2000; Astorga 2005; Kenny and Serrano 2012a) on the close collaboration between drug traffickers and

the Mexican state – i.e. police forces, law enforcement agents, local politicians and soldiers – during these years. For example, the involvement of the army in drug trafficking activities dates from the 1970s with the eradication programs. Interestingly, Flores Pérez (2009) shows that the same internal dynamics in the army allowed or encouraged that corruption. For example, he illustrates how difficult it was for any soldier to arrest someone that allegedly used to cultivate marijuana in the mountains. The soldier had to travel for days, take care and feed the alleged delinquent, be alert of any attack from the alleged delinquent's relatives, and transport the drug by his own means, all with virtually no resources. Therefore, the incentives from this institutional arrangement made it easier to accept or demand a bribe that many times was much higher than the average salary (172-175).

In terms of the levels of violence, Váldes Castellanos (2013) highlights that perhaps the lack of violence before the 1980s was not related to a "code" or "agreement" between organized crime and the state. Rather, two factors allowed this phenomenon: first, the relative subjugation and control of the border plazas by the Sinaloa Cartel and, second, the state's "management" strategies on organized crime, in which the authorities were in charge of assigning and distributing the *plazas* as a form of avoiding confrontation among criminal organizations. It is also important to underscore that during this period, these organizations did not have the military and force capability to confront each other, or the state, as it would be in the 2000s. The hypothesis also has been advanced that it was the government that encouraged the establishment of one single organization. This large cartel had the support of the DFS, which was able to eliminate the competitors and grant international protection (165-166).

As stated by Váldes Castellanos (2013), the "agreement pact" that was established between organized crime and the state for three decades, from 1950 to 1980, can be illustrated as follows:

> Let's make a great illegal business together; I, the government, will control the management and will establish the rules of the game because I am the State; you, drug trafficking organizations, will operate with my blessing and protection in exchange of a share of the revenues. Additionally, you should promise to behave as a 'decent' organized crime, meaning, that you will not act against neither the institutions nor the society. If any one makes a lot of noise, do not follow my rules or I feel uncomfortable due to foreign pressure, I will have to act against any of you, but do not worry: the damage will be limited (170).

Through this pact a *pax narcotica* was reached; however, the tolerance policy embraced two major problems: first, it did not help to strengthen the law enforcement institutions and second, organized crime grew exponentially and expanded its business (Chabat 2010c, 2).

Bailey and Godson (2000) identify this period as the "Centralized-Systemic Criminal-Political linkages" in which the relationship between coherent criminal organizations and a coherent government exists along a "shadow parallel structure" which is "made up of a network of patrons and clients that takes shape at some point within the government apparatus and subsequently operates alongside of, but functionally connected with, the formal bureaucracy" (Bailey and Godson 2000, 19). Hence, the DFS is identified as that operational arm under the Ministry of the Interior that established agreements with drug cartels.

In terms of the structure of the illegal market, during these years, the market was controlled by the Sinaloa Cartel, which was constituted by several families: the Caro Quintero, the Zambada, the Beltrán Leyva, the Carrillo Fuentes, the Guzmán Loera and the Arellano Felix. All of these families were in charge of a region and were coordinated

by Ernesto Fonseca and Miguel Ángel Félix Gallardo from Guadalajara (they relocated from Sinaloa to Guadalajara after the Condor Operation in the 1970s). These families were also linked among themselves by consanguine ties, which, guaranteed to a certain extent the trust needed in the illegal business (Váldes Castellanos 2013, 179-180).

As we can see, for 30 years, the relationship between organized crime and the state was characterized by a policy of tolerance and moreover, by a relatively coherent and coordinated interaction between the government and at that time, the one single organization. However, this relatively coherent framework changed by the mid 1980s.

3.2.2 The Cocaine Industry

As pointed out by Chabat (2010b), the drug trafficking activities would strongly reemerge during the 1980s due to three elements: first, the cocaine production in South America, second, the tolerance policy followed by the Mexican government and, third, the weakness of the police and law enforcement institutions.

At the regional level, in response to the increasing cocaine flows from Colombia, President Reagan established in 1982 the South Florida Task Force with the aim of stopping the cocaine shipments that were coming into the U.S. through the Caribbean route. Between 1985 and 1990, the strategy proved to be successful and there was a substantial reduction of cocaine coming from Colombia through Florida. Due to the pressure exerted on this area, the Colombian cartels started to use Central America and Mexico as the new routes to transport cocaine (Bagley 2009, 26).

Additionally, in 1986 President Reagan signed the National Security Decision Directive #221, which considered “drug trafficking a threat to U.S. national security, and

permits the Department of Defense to get involved in a wide range of anti-drug activities, in particular in the Mexico-U.S. border area" (Astorga 2004, 93). In Mexico, President Miguel de la Madrid followed the same approach and started to rely more heavily on the military for conducting eradication programs. In 1985, the Mexican agency similar to the FBI, The Federal Security Directorate (*Dirección Federal de Seguridad*, DFS) was dismantled (Toro 1995, 32-33). This security agency was created in 1947 by President Miguel Alemán with the purpose of providing intelligence and protecting the state against internal enemies (Valdés Castellanos 2013, 150). However, due to the collusion of some of its members with drug trafficking activities, the agency had to be dissolved. In fact, one of the most tense episodes in the U.S.-Mexico relationship took place in 1985 with the assassination of the DEA agent Enrique Camarena by Mexican drug traffickers (Rafael Caro Quintero) in which allegedly Mexican authorities participated, in particular the DFS (Reyes 2010, 9). In 1987 de la Madrid declared drug trafficking a national security problem.

This situation represented an important setback in the relationship between organized crime and the state. This was the end of the tolerance agreement that operated for decades. However, "one arm was amputated but other limbs remained; one of them was the Federal Judiciary Police (PJF) in the PGR. This institution had been a key component of the mediation structures, with a long experience in crime organization and a reputation no better than the one the DFS had. The Camarena affair had triggered many arrests and even the assassination of police commanders" (Astorga 2004, 91-92).

Tensions escalated in 1986 when the U.S. established the certification process. The aim of this program consisted of an annual certification for several Latin American

countries for their efforts against drug trafficking. The U.S. State Department evaluated these efforts based on seven indicators (seizures and eradication, arrests of drug lords, budget spent in activities for combatting drug trafficking, etc). As stated by Chabat (2010c, 2), the certification process "was the cornerstone of the Mexican strategy of simulation" since every year the U.S. had to grant the certification process in order to avoid potential political and economic instability in Mexico. As a result, the U.S. was also part of the simulation strategy, helping the criminal organizations to continue and expand their illegal activities.

While these processes took place at the diplomatic and political level between the U.S.-Mexico, the participation of the Mexican cartels in the cocaine industry was being reinforced due to two important events. First, the detention of General Noriega in 1989 during the U.S. invasion of Panama stopped his participation in cocaine trafficking activities, closing or at least waning the Central American route. Second, the weakening of the Medellín and Calí cartels after Pablo Escobar's death in 1993 and the rendition of the Rodríguez Orejuela brothers in 1995, left a vacuum that was promptly filled by Mexican criminal organizations (Bagley 2009, 28).

With the arrest of Félix Gallardo in 1989, Amado Carrillo from the Juárez Cartel deepened the previous relationships with the Colombians. The Juárez Cartel was the first organization that participated in the cocaine transshipment, and due to Amado Carrillo Fuentes' use of an aircraft to transport cocaine from Central America to the U.S.-Mexican border, he acquired the nickname of "Lord of the Skies" –*"El Señor de los Cielos"* – (Bagley 2009, 26-27).

Rapidly, in the 1990s, the Gulf Cartel with Juan García Ábrego as the leader and the Arellano Félix brothers from the Tijuana Cartel also started to expand their relationships with the Cali Cartel and the FARC, respectively. As part of their negotiations, the Mexican cartels started to demand half of cocaine shipments as part of payment instead of a cash fee. This shift allowed the Mexican criminal organizations to change from being employees to establish their own distribution network in the U.S. for the purpose of obtaining more profit (Corcoran 2013, 311).

3.2.3 The 1990s and the New Configuration

As previously mentioned, the arrest of Félix Gallardo in 1989, compartmentalized his organization and the families that had controlled a specific *plaza* fought among them. This was the case of the Tijuana and the Sinaloa Cartels that tried to get rid of each other in multiples kill attempts. Moreover, by mid 1990s, Amado Carrillo Fuentes became the most powerful drug lord in the country trying to convert the Juárez Cartel as the strongest organization based on the structure Félix Gallardo had already constructed. On the other extreme of the U.S.-Mexico border, the Gulf Cartel would emerge, first with Juan García Ábrego and later with Osiel Cárdenas as the drug leaders with the objective to control the crossing points between the state of Tamaulipas and Texas (Corcoran 2013, 313).

In order to become the strongest cartel in the country, and with the DFS extinction, Amado Carrillo created a network of protection at the highest level in the government, with contacts in the army and in the Judicial Federal Police (*Policía Judicial Federal*, PJF). This model proved to be very successful: on the one hand, the Juárez cartel obtained protection and immunity from the authorities, and on the other, it was able

to use police officers and agents as bodyguards and *sicarios* against rival organizations. General Jesús Gutiérrez Rebollo, the anti-drugs czar, used to work for Amado Carrillo and, thanks to the information that he obtained from the Juárez Cartel on its rivals, the Tijuana Cartel, Gutiérrez Rebollo captured several leaders and attained important victories against the Arellano Félix brothers (Váldes Castellanos 2013, 239-243).

The participation by the army and the commitment to fight drug cartels continued during the Salinas (1988-1994) and the Zedillo (1994-2000) administrations. Salinas de Gortari presented the National Drug Control Program and made reforms to the criminal code. After the release of Ignacio Morales Lechuga as General Attorney, President Salinas appointed Jorge Carpizo to this position. He carried out a purge in the federal judicial police and exposed irregularities in law enforcement procedures (Curzio 2000, 86-87).

Despite these achievements against organized crime, there have been allegations of the deep involvement of President Salinas in the drug business. "[D]uring his tenure former President Carlos Salinas selected three individuals to coordinate Mexico's counterdrug efforts. The three have been reportedly linked to drug traffickers by the media. Important positions such as the PGR delegate or deputy delegate in Tijuana or Juarez could cost up to $3 million for the concession. The delegate in turn would pay $1 million per month, payments to be made to the PGR hierarchy, and ultimately to Los Pinos. These monies were provided, of course, by the organized crime elements" (Pimentel 2000, 48-49). Additionally, the case of the participation of Carlos Salinas' brother, Raúl, in the drug business illustrates the strong nexus between organized crime and high-level power spheres (Curzio 2000, 88).

President Ernesto Zedillo continued with the same approach and carried out several reforms. He established in 1995 the National System of Public Security (*Sistema Nacional de Seguridad Pública*, SNSP) with the aim to improve the coordination among the three levels of government. In 1996, Congress approved the Law against Organized Crime. In 1997, a special unit against Money Laundering was created and in 1998 the Federal Preventive Police was created (Chabat 2010c, 4). It is not until after 1995 that a closer cooperation between the American and Mexican armies begins with training programs in counterinsurgency and anti-drugs for Mexican soldiers (Astorga 2004, 175).

Though cooperation increased, the case of General Gutiérrez Rebollo shadowed the bilateral relationship. Undeniably, it has been among the most conspicuous scandals involving members of the army with drug trafficking organizations. In 1996, President Ernesto Zedillo appointed Gutiérrez Rebollo as chief of the National Institute for the Combat of Drugs (*Institutio Nacional para el Combate a las Drogas*, INCD). In 1997, his close links with Amado Carrillo were discovered and he was sent to prison. This provoked even more distrust from the U.S. on the supposed willingness by the Mexican government to combat the activities of the drug cartels.

Bailey and Godson (2000) have characterized this period as the Fragmented-Contested Political Criminal Linkages in a sharp contrast with the centralized and coherent early period. The authors emphasize that under this period cooperation between organized crime and the state is fragmented and opportunistic. The coalitions between these two actors show a variation in terms of the type of criminal activity and the governmental level. For example, marijuana or synthetic drugs produce locally or regionally may require the collaboration of the local and state police corporations while

the trafficking of heroin or cocaine requires protection from national and international governmental agencies. Hence, there is a lack of a central coordination managed from the bureaucracy (20).

After 1985, this disintegrated scheme came as a result of the dual transition identified by Bailey and Godson (2000). On the one hand, the country experienced a change in the economic model from a closed economy to a liberal one. The first economic reforms (unilateral reduction of tariffs, GATT membership, privatization of governmental agencies) took place during the 1980s but it would be in 1994 with the signing of the North American Free Trade Agreement (NAFTA) that the new liberal economic model would be fully implemented. On the other hand, the country also experienced a transition from an authoritarian regime to a democratic system. In 1989, for the first time, the PAN won a gubernatorial election in the country (in the state of Baja California); in 1996 the PRI lost the majority in Congress; and finally, in 2000 the PRI lost the Presidency after 71 years of being in power. As pointed out by Williams and Godson (2002), Mexico and Russia are two examples in which the weakening of the authoritarian regime had implications in the structure of organized crime.

Flores Pérez (2009) supports the Fragmented-Contested model by providing what he calls the fragmented-multidirectional-incremental model. During the Zedillo administration, the PGR requested the apprehension of two former directors of the Federal Judicial Police due to their participation in providing protection to drug traffickers. These measures deepened the process of disarticulation of the security forces – which had already initiated with the dissolution of the DFS – that ultimately had an impact in the organization of illegal activities:

> When the structure of the central control weakened, not a single institutional figure, or a member of the political class had enough enforcement power to force the different parts to follow the rules –even the informal ones– nor the established agreements under the previous scheme. The new protection agreements were established with local authorities or with federal public officials relatively isolated, in a context where the new conditions imposed by the changes in the regime made it difficult the establishment of general operative norms of the illegal business. No public figure posses enough institutional coercive capacity to oblige the leaders of the drug criminal organizations to accept the conditions. Hence, due to the dismantling of the centralized structure of protection, the rules and the agreements became more fluid (Flores Pérez 2009, 216).

However, the change from a centralized-coherent to a fragmented-contested model in the relationship between organized crime and the state was also exacerbated by the democratization process experienced at the three levels of government. As pointed out by several scholars (Snyder and Durán-Martínez 2009; Ríos 2012b; Trejo and Ley 2013) the opposition parties holding municipalities or governorships also broke previous arrangements established with organized crime. From the mid 1980s to the end of the 1990s, the country experienced a series of changes in the political system: at the federal and bureaucratic security agencies as well at the local and state levels that weakened even more the precarious arrangements with criminal organizations. This panorama would continue and would be further intensified with the arrival to the presidency of Vicente Fox from the oppositional National Action Party (*Partido Acción Nacional,* PAN) and the implementation of new strategies against organized crime.

3.2.4 The 2000s and the Democratic Political Regime

During President Vicente Fox's administration, the majority of the security agencies and ministries, had among the highest ranks, members of the military. This implies a continuation of the militarization approach to combat drug trafficking that initiated with Ernesto Zedillo. Moreover, it also shows that the military continues to be seen as the

most reliable agency among the different security corporations in the state (Flores Pérez 2009, 221).

However, the Minister of Defense, Vega García, expressed his disapproval to involve the army in procedures of interrogations, establishing checkpoints and carrying out searches. Hence, the army was assigned to other activities such as interdiction, eradication, and intelligence. Additionally, the *México Seguro* strategy that involved the deployment of the military was done without a clear awareness of the priorities and was perceived to be more a "favor of the month" policy (Grayson 2010, 119). The first cities in which the program was implemented were in the states of Tamaulipas, Sinaloa and Baja California. However, the program failed and the President requested reinforcements. *Mexico Seguro* was renamed to "Northern Frontier Project" on March 2006 (Chabat 2012, 150).

President Fox focused on the capture of the major drug leaders. He arrested the leader of the Gulf Cartel, Osiel Cardenas, the leader of the Tijuana cartel, Benjamin Arellano Felix, and the leader of the Colima cartel, Adan Amezcua. Also, in February 2002, Ramón Arellano Félix was killed in Mazatlán. These arrests pleased the U.S. government, deepened cooperation programs and in general, improved the bilateral relationship to the point that the certification processes was ceased in 2002. However, this strategy had an unintended consequence: "the disruption of the existing balance between drug cartels and the start of a war between the Gulf and the Sinaloa cartel, which dramatically increased the execution-style killings between the warring cartels" (Chabat 2012, 149).

After the capture of the leader of the Gulf Cartel, Osiel Cárdenas, Joaquín "El

Chapo" Guzmán orchestrated a strategy to snatch Nuevo Laredo from the Gulf Cartel. According to Grillo (2011), it is in the fall 2004 that the drug war began, not with President Calderón. The battle in Nuevo Laredo between the Sinaloa and the Gulf-Zetas Cartel showed a new phase in the organized-crime violence: "the use of paramilitary hit squads, widespread attacks on police; and mass kidnappings. These tactics would spread across Mexico on a frightening scale, defining the way the conflict was fought" (94).

Valdés Castellanos (2013) describes how the incursion by the Sinaloa Cartel in Nuevo Laredo brought bloodshed due to the military-style tactics carried out by the Zetas. It is precisely with this episode that criminal organizations realized that the development of the illegal business had changed. Osiel Cárdenas, leader of the Gulf Cartel asked Arturo Guzmán Decena, the "Z-1" – a former lieutenant in the *Grupo Aeromóvil de las Fuerzas Especiales,* GAFE from the Mexican army – to recruit former soldiers as his personal bodyguards and also as the enforcing arm of the organization.

As a consequence, the Zetas innovated the organized crime market in two important ways: first, they introduced the need for other organizations to incorporate paramilitary groups in their structure. Due to the high level of sophistication and training received by the Zeta members, the other cartels had to cope with their competitors in the same way. Therefore, groups of *sicarios* –people hired whose only purpose was exerting violence– increased. Second, the Zetas extended their operations through the introduction of protection fees to local criminal gangs. This is, the Zetas relied on extortion methods against local criminals and as a result they were able to extract money and resources from the society (Valdés Castellanos 2013, 256-258).

By 2005, Ricardo García Urquiza, leader of the Juárez Cartel was arrested, which

triggered even more confrontations among cartels: the Tijuana and Gulf Cartel against the Sinaloa Cartel. Thus, the number of drug-related homicides increased from 1,776 in 2005 to 2,221 in 2006 (Astorga and Shirk 2010, 19-20). As a result, the U.S. Ambassador, Tony Garza, complained about the alarming rising levels of violence at the U.S.-Mexican border (Chabat 2012, 149).

The Fox administration ended up with a mixed balance in terms of security since key changes in the drug market increased drug-related violence. During this period, the drug cartels faced a cocaine market that was shrinking which prompted an even more fierce competition among cartels. Additionally, the criminal organizations also started fighting for controlling tourist and resort destinations like Acapulco due to the relatively higher levels of drug consumption in contrast with other municipalities. Finally, the expiration of the 2004 ban on assault weapons facilitated the acquisition of weapons of high caliber to the cartels' private armies. The response of the Fox administration to these challenges has been questioned. On the one hand, the President was identified with a current that favored non-military strategies and therefore, the deployment of the military was perceived to be "more for show than for real." Moreover, in the summer of 2006, the decriminalization of drug possessions law was introduced. But the law was withdrawn due to the pressures from the Bush administration (Kenny and Serrano 2012b, 70-71).

Thus, the presidency of the first non-PRI candidate concluded with a number of key drug leaders arrests but without the dismantling of the structure of criminal organizations; the unending fight for controlling key *plazas*; the appearance of the Zetas as a new feature in the organized crime business; the availability of more sophisticated weapons and the continual deployment of the military in anti-drug measures.

3.2.5 Calderón's "Drug War"

On December 1, 2006, President Felipe Calderón from the PAN took office after winning the election with a close margin of 0.58% over his opponent Andrés Manuel López Obrador from the left-party Democratic Revolution Party (*Partido de la Revolución Democrática*, PRD). Therefore, Calderón arrived to the presidency with a strong questionable legitimacy. As pointed out by Aguilar and Castañeda (2009), during his campaign, Calderón did not position drugs as one of his main concerns, actually, he placed "employment" at the center of his discourse. Thus, the strong measures taken by his government in the very first days of his administration were surprising.

Calderón sent more than 40,000 federal police and members of the army to combat organized crime. The first operation took place only 10 days after he took office in the state of Michoacán. From 2007 to 2009, joint operations were carried out in Tijuana, Guerrero, the Golden Triangle (Chihuahua, Durango, Sinaloa), Nuevo León, Tamaulipas, Tabasco, Veracruz, Colima and Chihuahua. Moreover, the administration also coordinated operations with the Drug Enforcement Agency, with the "Operation Dragon" that ended up with the arrest of Chinese-Mexican Zhenli Ye Gon in 2007; "Operation Xcellerator" in 2009 that apprehended more than 755 individuals that presumably had ties with the Sinaloa Cartel and carried out activities in the U.S. (Grayson 2010, 165-171).

Moreover, Calderón strengthened security agencies. In February 2007, he raised the salary of the members of the army by 46%, in 2009; the government assigned $9.3 billion for national security, almost a 100% increase since the beginning of his period (Grayson 2010, 153). From 2007 to 2012 the budget of all the security and law

enforcement governmental departments were substantially increased: the Ministry of Defense increased 72.70%; the Ministry of the Navy 79.7%; the Ministry of Public Security increased 96%; the Attorney's General Office 61.73% and the intelligence agency, CISEN 148% (Polanska and Rodríguez Luna 2012, 145).

While the government was carrying out the aforementioned measures, violence continued to escalate until mid-2007, when the cartels reached an agreement to reduce the confrontations (Chabat 2012, 150). The "narco peace summit" was held in Monterrey. The Gulf-Zetas and the Sinaloa Cartel sat together in order to reassign the plazas. The Gulf kept the northeastern region, in the states of Veracruz and Tamaulipas, including the valuable crossing point of Nuevo Laredo. The Sinaloa Cartel kept the old territories including Acapulco and the wealthy municipality of San Pedro Garza García (Grillo 2011, 116). However, this feeble agreement would not last long. By 2008 the number of drug-related homicides would go up again. From 2007 to 2008 the organized crime related homicides increase 142% (Ríos and Shirk 2011, 8). This was caused by a confrontation that the Sinaloa Cartel decided to engage against the Juárez and the Tijuana Cartels.

As pointed out by Grillo (2011) two hypotheses have emerged to explain this "war." The first one, which was backed by the government, relates the confrontation among cartels to the pressure exerted by the Calderón strategy in which, due to the increase in the number of seizures, drug cartels were losing revenue and therefore the control over the plazas became even more imperative. The second hypothesis, the one that achieved more support among academics and journalists, relates to the high level of infiltration by the Sinaloa Cartel into the federal government. Though there has been no

evidence connecting President Calderón with Joaquín "El Chapo" Guzmán, many public officials in the General Attorney's office had been contacted by the Beltrán Leyva brothers in order to provide protection to the Sinaloa Cartel and moreover, prosecute the rival cartels.

This explanation is supported by the results of the measures taken by the Calderón administration to combat corruption. Two relevant episodes against corruption are worth mentioning. In mid-2008, the government carried out what was known as "Operation House-Cleaning" (*Operación Limpieza*) in which several public officials were arrested due to their presumed links to organized crime. This was the case of the chief of the PGR's Specialized Investigation Unit of Organized Crime (SIEDO), Noé Ramírez Mandujano, who received $450,000 USD in bribes from the Beltrán Leyva brothers in order to focus investigations on the Zetas and the Gulf Cartel and overlook the Sinaloa Cartel. On November 20, 2008, he was arrested in Mexico City (Grayson 2010, 127). The second episode took place in February 2009 when the former Security Secretary of Michoacán, Citlallí Fernández González was arrested along with other 27 public officers, including 10 mayors for their alleged links with organized crime, particularly with the Familia Michoacana, the Gulf, the Zetas and the Milenio cartels (Grayson 2010, 208).

Most of the violence in this period has been associated to the fights among cartels for the control of the drug trafficking business or other illicit activities. As mentioned previously, in 2007 due to the truce among criminal organizations the number of homicides declined; however, in 2008 the levels of violence increased again. Váldes Castellanos (2013) identifies two factors that triggered the violence after this year:

First, there was an intensification of previous inter-cartel conflicts, such as the one between the Sinaloa and Juarez Cartel and the emergence of new ones. In 2008, the Beltrán Leyvas separated from the Sinaloa Cartel after the capture of their younger brother, Alfredo Beltrán Leyva in Culiacán. The BLO believed that the arrest was made possible to the collaboration of "El Chapo" with the federal government. To avenge this betrayal, Édgar Guzmá López, "EL Chapo's" son was killed also in Culiacán. As a result, the fight between the Sinaloa and the Beltrán Leyva organization intensified in this period, with BLO establishing alliances with the Zetas and the Juárez Cartel, traditional Sinaloa enemies. Second, the new military tactics employed by the Zetas obliged the rest of the drug cartels to find a way to compete with the same method of violence implemented. Thus, criminal organizations started to include local gangs in their structure as a form of armed divisions. Thus, the cartels implemented an "outsourcing" of violence. They began to use local gangs like the "Mexicles" and "Artistas Asesinos" working for Sinaloa and "La Línea" and "Los Aztecas" for the Juarez Cartel (Váldes Castellanos 2013, 399-402).

According to data from the newspaper *Reforma* (which is considered to release a conservative count), the number of drug-related homicides increased from 2,280 in 2007 to 5,153 in 2008 and to 6,587 in 2009. Moreover, in 2008 the violence was concentrated in three states: Chihuahua, Sinaloa and Baja California with 49.1, 25.7 and 19.6 drug-related homicide rate, respectively (TBI 2010, 6). In 2009 the concentration of the violence dispersed geographically in four states: Chihuahua (31%), Sinaloa (12%), Guerrero (10%) and, Durango (10%) (Durán-Martínez, Hazard and Ríos 2010, 6). By 2010, violence had changed geographically. It was concentrated in 80 municipalities,

being Ciudad Juárez, Culiacán, Tijuana, Chihuahua and Acapulco located at the top. However, new states experienced sudden spikes such as San Luis Potosí, Tamaulipas, Nayarit and Nuevo León. Moreover, by this year, civilians and government officials became targets (Ríos and Shirk 2011, 1).

At the bilateral level, México and the U.S. signed the Mérida Initiative in October 2007, which consisted of an assistance package for Mexico and Central America to combat drug trafficking, arms trafficking and the violence related to organized crime. It included $1.4 billion for three years, which consisted of transferring military technology and equipment, as well as sharing information and training programs. For the first two years, $500 million were allocated to equipment and anti-drug measures, $100 million to strengthen institutions and rule of law and $56 million for public security and law enforcement institutions (Rodríguez-Luna 2010, 47). The Mérida Initiative was presented as a new paradigm in the security bilateral cooperation, since for the first time the U.S. government acknowledged its "shared responsibility" in the impact that the measures against drug trafficking were having in Mexico (Meyer 2010, 71).

In March 2010, the Obama administration along with the Mexican government modified the original framework of the Initiative. While at the beginning the emphasis was placed on equipment assistance to the Mexican security agencies, the new structure addressed the weakness in the institutions and socioeconomic concerns. Thus, the new four pillars are: 1) Disrupting the operational capacity of organized criminal groups, 2) Institutionalizing reforms to sustain the rule of law and respect for human rights, 3) Creating a 21st century border and, 4) Building strong and resilient communities (Ribando Seelke and Finklea 2014, 6).

The success of this program has been difficult to measure, due to the lack of data and the difficulty in determining if the results are directly related to the resources invested. However, the number of arrests and assassinations of drug leaders since 2009 have been used as an indicator of an improvement in bilateral cooperation (Ribando Seelke and Finklea 2014, 26). Another important indicator has been the number of extraditions, which before the PAN administration used to be very limited. In his first two years, Calderón extradited 178 criminals to the U.S., eighty-three in 2007 and ninety-five in 2008. The bilateral cooperation deepened in these matters, since the U.S. Government surrendered to Mexico forty-three suspects (Grayson 2010, 107).

Despite domestic and international measures to confront organized crime and drug-related violence, in 2010 three new conflicts emerged that intensified the conflicts among criminal organizations. The first one is related to the breakdown of the Golfo-Zetas alliance. Due to the extradition of Osiel Cardenas to the U.S. in 2007, the internal structure weakened and some mid-level leaders started to fight for the control of the cartel. It has been argued that the Zetas demanded more participation in the drug shipment business, since it has been more lucrative than the extortions and kidnappings they used to carried out in order to compensate their salaries. Thus, the Zetas started to contest plazas already taken by the Gulf cartel: Nuevo Laredo, Reynosa, Matamoros, Tampico, Monterrey, Saltillo, Piedras Negras, Veracruz and Boca del Río. The second conflict is the one related with the dismantling of the Beltrán Leyva Organization (BLO) after the assassination of their leader Arturo Beltán Leyva in December 2009 by the navy in the city of Cuernavaca. Several organizations have resulted from this breakdown i.e. “La Barbie” group, “Cártel Independiente de Acapulco,” “La Mano con ojos,” “Los

Rojos," "Guerreros Unidos," among others, started to fight for the regions that traditionally were controlled by BLO: the states of Guerrero, Morelos and Estado de México. Finally, the third conflict took place between the *Jalisco Nueva Generación* and the Resistance cartel for controlling the states of Jalisco and Colima due to its importance in terms of drug consumption and the methamphetamine production (Valdés Castellanos 2013, 404-407).

As a balance of the Felipe Calderón administration (2006-2012), the Trans-border Institute estimates that the extradition of high-profile drug leaders more than tripled the number during the previous Fox's administration. However, in terms of violence, at the end of his tenure period, in 2012, it was estimated that between 45 and 60% of all the intentional homicides committed in the country were drug trafficking and organized crime-related. Moreover, the violence in this year dispersed geographically and was concentrated in the central and the eastern border region and the central Pacific coast states (Molzahn, Rodríguez and Shirk 2013, 1-2).

3.3 Conclusions

The history of drug trafficking sheds light on the different kinds of relationships that the state and organized crime have developed throughout the years. Though some scholars have formulated several typologies on this relationship, three periods in the previous overview standout. The first one took place after the Mexican Revolution, when organized crime was able to expand due to a lack of resources and power to enforce the law by the Mexican government. The key participation of local security agents and governors, particularly in the northwest region allowed the rise and development of what

later would be known as the Sinaloa Cartel, one of the most dominant criminal organizations in Mexico.

In a second period, from the 1950s to 1985, the relationship between the state and organized crime was characterized by its coherence and centralization, due to the ability of the government, mainly through the DFS, to negotiate and establish understandings with drug leader Félix Gallardo, who had the ability to conglomerate the families into one relatively unified organization. Under this period, the government controlled the regions and the activities in which the illegal activities were carried out by organized crime. However, this structure suffered a substantial change with the dissolution of the DFS in 1985, and the fragmentation of the Félix Gallardo organization after his arrest in 1989.

Finally, the third period took place during the 1990s with the fragmentation of organized crime into several organizations and the democratization process that the political system underwent since the PRI lost the first governorship in 1989. The democratization of the political system at the three levels of government and the dismantling of security agencies such as the DFS and the PJF broke previous pacts agreed between the state and organized crime which increased the uncertainty over the relative freedom in the performance of illegal activities. As pointed out by many scholars, the democratization process that finished with more than 70 years of the hegemonic single party rule by the PRI (Institutional Revolutionary Party) did not translate into a strengthening of the state and local governments. Even worse, states and municipalities inherited the old corrupted institutions that were created during the PRI era. Thus, “while institutions are in a more democratic environment, this does not necessarily means greater effectiveness” (Aguirre and Herrera 2013, 228).

This political alternation took place at the same time that organized crime transformed its traditional forms of doing business. On the one hand, the Gulf Cartel innovated the illegal market with the appearance of the Zetas that took the conflict among criminal organizations to unimaginable levels of violence. The rival organizations faced the necessity to incorporate similar private armies into their structures. On the other hand, the Zetas, due to its modus operandi of subjugating local criminal gangs and intimidating police forces through a systematic use of violence, have also increased the levels of violence. They have diversified their illegal activities by incorporating kidnappings, extortions and "*cobro de piso*" as another way to exert violence to the civil population.

It is calculated that between 2007 and 2012, more than 60,000 organized crime related homicides were committed and more than 25,000 persons have disappeared. In 2011, Tijuana, Reynosa and Matamoros, left the ranking of the 50 most violent cities in the world, while Monterrey and Veracruz were included in the ranking. In 2012, Acapulco replaced Cd. Juárez as the most violent city in the country (SJP 2012, 2013). Thus, if violence is endemic to the border region, how can we explain that cities that were long thought to be safe havens from organized crime activities have experienced a substantial increase in the levels of violence? The next chapter will address this question and will quantitatively analyze why municipalities experienced an increase in the levels of violence during the period 2007-2012.

Chapter 4. Organized Crime Violence at the Subnational Level. A Quantitative Empirical Analysis across Mexican Municipalities 2007-2012

In this chapter I will present the description of the dependent and independent variables, their operationalization and the regression analysis employed. Then, I will discuss the main results based on the interpretation of the two main variables under analysis: state capacity and number of DTOs to generate different levels of violence.

4.1 Data

This chapter undertakes a large-N comparative quantitative analysis of drug-related violence in Mexico at the municipal level (2,487) for the period between 2007 and 2012. The reason to focus on this period is because in December 2006 the federal government started counting and releasing information regarding homicides related to drug-trafficking activities. Before this year there is no available information. In addition, this period coincides with the six-year presidential tenure of Felipe Calderón Hinojosa. Multilevel analysis will be employed in order to examine the hierarchical structure of the data. The use of this method offers the advantage to capture changes in government strength as well as in the organizational dynamics of organized crime over time and across municipalities taking into consideration the variability that arises with each level of the nested data.

The dataset includes 14,922 observations with 12 variables. In some of the models estimated, the number of observations is reduced due to missing values for some of the variables. The sources for the dataset come from public official figures and think tank such as the Technical Secretary for the National Security Council (SNSP), the National Institute of Statistics, Geography and Information (INEGI), United Nations Development Program (UNDP), National Population Council (CONAPO), National Council for the Evaluation of Social Development Policies (CONEVAL), the National Institute for Federalism and Municipal Development (INAFED), the National Health Information System (SINAIS) and the Research Center for Development (CIDAC).

This dataset also expands the analysis at the empirical level by creating an index of state capacity at the local level in Mexico. Following the conceptualization and methodology by Luna and Toro (2014), my index incorporates three indicators: law enforcement; financial autonomy; and infrastructure for each of the 2,487 municipalities in Mexico for the six-year period under study. To the best of my knowledge this effort has not been done before.

This dataset includes a total of 12 variables, which correspond to the dependent variable, the independent variables, and the control variables. These variables are the following: 1) Drug-related homicide rate, 2) Lagged drug-related homicide rate 3) Index of state capacity, 4) Number of DTOs, 5) Military presence, 6) Coordination among the three levels of government (local, state and federal), 7) Electoral competition, 8) Public expenditures per capita, 9) Drug consumption, 10) Distance to the United States, 11) Gini Coefficient/Human Development Index, and 12) Urban area.

It is noteworthy that there is a lack of information at the local level in Mexico. For example, essential information for this study such as security spending or the number of police/military personnel as a share of total security forces is not available at the municipal level. In an effort to continue with the investigation by municipality, the analysis relies on proxies in order to capture some of the variables.

4.1.1 Dependent Variable

The dependent variable employed in this analysis is the organized crime homicide rate (the number of organized crime homicides divided by the population multiplied by 100,000) across the 2,487 municipalities in the six year time period 2007-2012. The data was obtained from *Base de datos de fallecimientos por presunta rivalidad delincuencial* (from now on *Base de fallecimientos*) released by the Mexican Presidency. The information of this database was gathered by the *Consejo Nacional de Seguridad Pública* (CNSP), a governmental body in which different agencies and Ministries in charge of intelligence, security and law enforcement issues participate.[8]

The homicides recorded in this database were classified into three categories: 1) Executions; 2) Confrontations; and 3) Aggressions. "Execution" is the common modus operandi of criminal organizations; the bodies found usually present signals of torture or are missing one member of the body. The "confrontations" category involves the casualties derived from fights among members of different drug trafficking organizations.

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[8] The agencies that participate in this collaborative task were: the Ministry of the Interior (Secretaría de Gobernación (SEGOB), Ministry of National Defense (Secretaría de la Defensa Nacional, SEDENA), Ministry of the Navy (Secretaría de Marina, SEMAR), Ministry of Public Security (Secretaría de Seguridad Pública), Office of the Attorney General (Procuraduría General de la República, PGR), the Center for Investigation and National Security (CISEN) and the National Center for Information, Analysis and Planning to Fight Crime (CENAPI).

Finally, the "aggressions" category relates to the casualties that resulted from battles between the criminal organization and the authority (Ríos 2012a).

The CNSP took into consideration some characteristics in order to categorize the homicides as linked to drug trafficking. For example, the bodies had to fall into two of the following criteria: 1) the victim presents impacts of a firearm, 2) the victim presents signs of torture, 3) the victim was found in a different place from where he/she was killed or inside his/her vehicle and/or 4) the victim was found with materials traditionally left by the organized crime, including gags, sheets, etc. 5) the victim was killed in a penitentiary and it is presumed that criminal organizations were involved, and 6) under special circumstances (i.e., the victim was kidnapped and then killed or the victim was found with a message – *narcomensaje* –) (Molzahn, Ríos and Shirk 2012, 5).

The database contained information about these homicides from December 2006 to September 2011 at the municipal level, when the Federal Government stopped releasing this data. Therefore, homicides falling under the last quarter of 2011 and the whole year of 2012 are based on information about intentional homicides that meet the first characteristic (victims with impacts of firearms) from the *Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública* (SESNSP) the agency from the Ministry of the Interior in charge of the implementation of public policies related to security devised by the CNSP. The information available from the SESNSP is the only one that provides the number of intentional homicides with details about the particularities of the death at the municipal level. This is the reason why I use it to complete the lack of information for the last quarter of 2011 and the year 2012. Furthermore, the correlation between the number of drug-related homicides from *Base de fallecimientos* and homicides with impact of

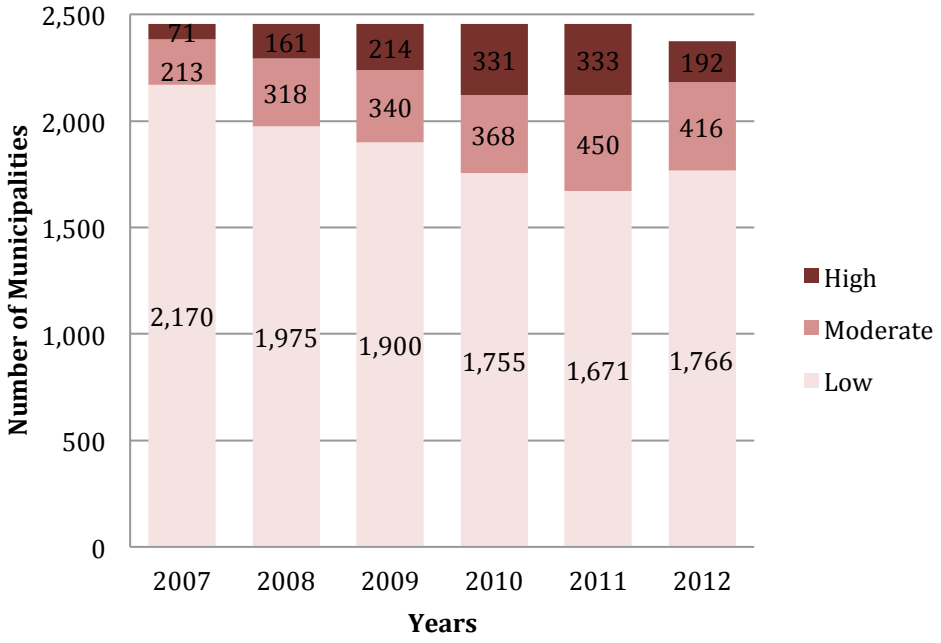
firearms from *Secretariado Ejecutivo* in the period 2007-2012, is of 94.88% which shows the strong similarity between the two types of homicides.

Although the information from the *Base de fallecimientos* has been highly criticized, for this analysis, the most important critique is related to the fact that the designation of what constitutes as drug-related homicide comes from an inference based on characteristics that the victim presented, and not from a judicial investigation. Therefore, there are some arbitrary factors at play in the selection of these homicides (Hope 2012). Keeping in mind these caveats, I use these data because they are the only sources that provide this type of detail on homicides at the municipal level. Even though the information may not be accurate in terms of the exact number of organized crime-related deaths, it is, nonetheless, helpful to analyze tendencies of violence at the municipal level.

The United Nations Office on Drugs and Crime (UNODC) classifies the intensity of violence into three categories based on the murder rate: 1) High homicide rates greater than 20, 2) Moderate homicide rates between 3 and 20, and 3) Low homicide rates below 3 (UNODC 2014). As previously mentioned, the six-year period under study includes 14,922 observations, but due to missing values in this variable, the observations are reduced to 14,644. For all these observations, only 1,302 municipalities showed a high drug-related homicide rate, which thus represents only 8.8% of the total observations. For the moderate category we have 2,105 and for the low category 11,237 municipalities (representing 14.3% and 76.7% of the total, respectively). These figures show that the violence related to drug trafficking is highly concentrated in very few areas of the territory.

From the 1,302 municipalities with high levels of drug-related homicides and the 2,105 with moderate levels, 95% and 100% are considered to be urban, respectively. Thus, this indicates that organized crime violence is a phenomenon that takes place mainly in areas of considerable urbanization. In addition, it is relevant to analyze the tendencies throughout the years. Figure 3.1 shows the number of municipalities by the three levels of violence in each of the years under study.

Table 4.1 Level of Organized Crime Homicide Rate by Municipality, 2007 to 2012

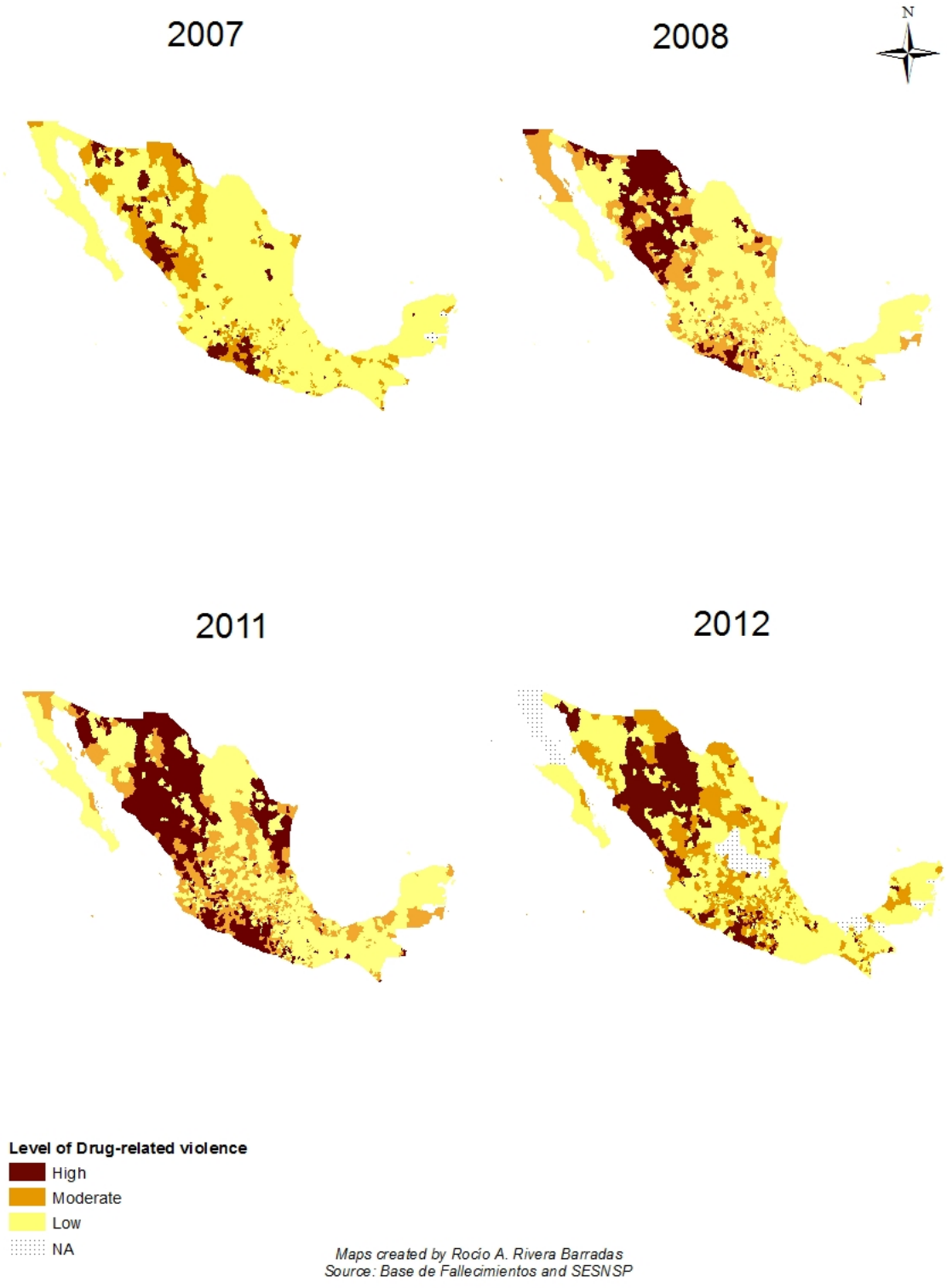


Author's own calculation based on UNODC 2014 and *Base de fallecimientos* and SESNSP

In 2007, only 71 municipalities presented high levels of violence, but by 2011 the number of municipalities in this category increased by 369% (333). For the moderate category, the increase from 2007 to 2011 was 112%. As a parallel, the municipalities in the low category decreased over time. This tendency reveals that the organized crime violence increased more significantly in the high level category than in the moderate. As we can see in Figure 3.1, there is a slight decline in 2012. The number of municipalities that presented high and moderate levels of violence showed a decrease of 16% and 7.2%, respectively. This tendency follows the same direction as the figures at the national level, which point to a reduction in 2012 in all kinds of homicides as shown in Figure 3 in the previous chapter.

As we can see in Map 4.1, there is a diverse distribution in the municipalities with high levels of drug-related violence. In general, from 2007 to 2012 drug related violence intensified significantly across the country. Data for the states of Baja California, San Luis Potosí and Tabasco were not available for 2012. Interestingly, regions that used to have low levels of violence (yellow color) in 2007 experienced a significant increase that changed their category to moderate violence (which makes it worth reiterating that this category includes drug-related homicide rates from 3 to 20).

Map 4.1 Level of Organized Crime Violence, 2007-2012

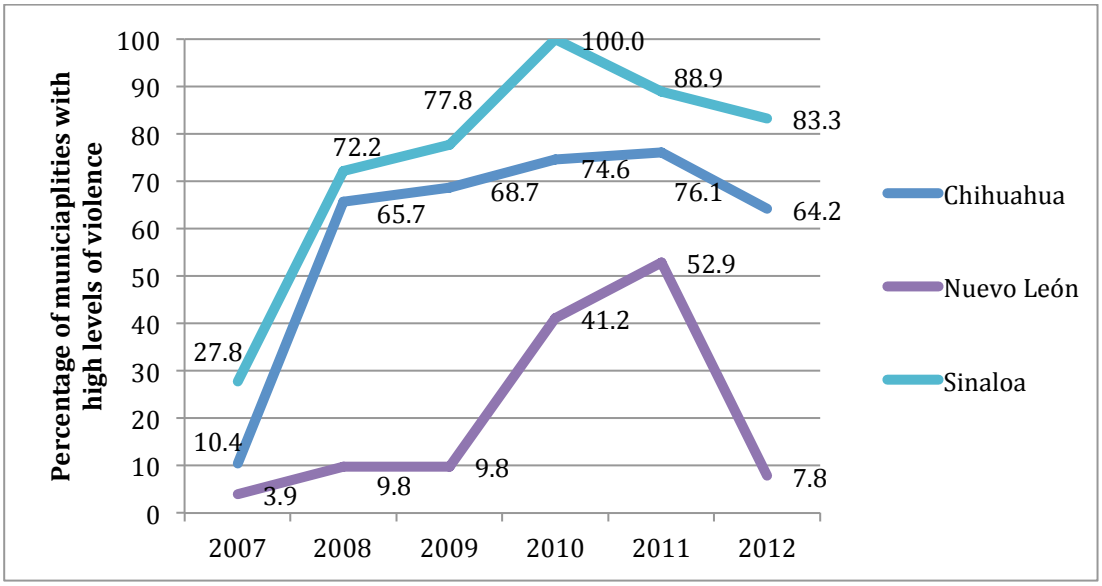


In 2012, the northwestern region of Mexico (the states of Sinaloa, Chihuahua, Coahuila, Durango and Nayarit) and in the south (the states of Guerrero and Michoacán) had an astonishing increase in the levels of violence. What is more alarming is the fact that this violence has expanded into other regions in the center and southeast Mexico (more orange regions). Only the state of Oaxaca and Yucatán (primarily comprised of rural municipalities) show a stable low level of violence in these years.

In addition to this significant variation within the country, we see that there is also an important variation within each of the 32 Mexican states in terms of levels of drug-related violence. This is best captured in Figure 3.2. As we can see in 2007 the state of Nuevo León had only 2 out of its 51 municipalities with high levels of drug-related violence. By 2011 almost 53% of its territory (27 municipalities) presented high levels of violence.

The case of Chihuahua and Sinaloa are also interesting to analyze. In 2011, 76% of the municipalities in Chihuahua presented higher levels of violence; meanwhile, in 2010 the state of Sinaloa had 100% of its territory under this category. As we can see, the violence related to organized crime presents significant variations within the country, within the Mexican states and moreover, throughout the years.

Figure 4.1 Municipalities by State with High Levels of Violence 2007-2012



Author's own calculation based on UNODC 2014 and *Base de fallecimientos* and SESNSP

If these are some states with significant variations within their territories, it is worth exploring which have been the municipalities identified as the most violent ones in the six-year period analysis. Table 4.1 depicts the 12 most violent cities in the country according to, *Seguridad, Justicia y Paz,* in 2011 (SJP 2012). I took this sample and expanded the timeline to show the importance of looking at the violence at different periods of time. As we can see, this data show some characteristics of the violence in this six-year period. First, in 2011, Cd. Juárez, which was known as the most violent city in the world, was replaced by Acapulco, a city that is 1, 356 km away from the border. Second, there are cities that have been traditionally more violent since the beginning of the Calderón administration, for example Culiacán, Sinaloa and Cd. Juárez. Third, the highest increase in the violence occurred in the year 2011 for most of these cities (which

also reflects the national tendency). Finally, some cities that were long thought to be safe havens from organized crime activities, showed an extraordinary increase in the levels of violence, from being categorized as having low levels (less than 3 in the drug-related homicide rate) to high levels (more than 20). This is the case of cities like Cuernavaca, just 70 km from Mexico City; Monterrey, the third largest city in the country, which is well known for its industrial sector; and Veracruz, the first port of the country, located at the east with access to the Gulf of Mexico.

Table 4.2 Organized Crime Violence Rates by City from 2007-2012

City	2007	2008	2009	2010	2011	2012	State	Region
Acapulco	9	9.8	21.2	52.73	132.8	126.6	Guerrero	South-West
Cd. Juárez	10	96	158	191	99	16	Chihuahua	Border City
Chihuahua	3.8	37.6	51	81	60	29	Chihuahua	North
Cuernavaca	2.8	3.3	5.7	37	17.6	44	Morelos	Center
Culiacán	31	71	58	71.6	60	56.6	Sinaloa	North-West
Durango	4.6	18	21	27.3	74	9.8	Durango	North-West
Mazatlán	5.2	18.7	22.8	74.4	52	15	Sinaloa	North-West
Monterrey	5.8	2.5	2	15.7	49	40	Nuevo León	North
Nuevo Laredo	6.7	1.8	3	29	36.4	5.1	Tamaulipas	Border City
Tepic	1.4	3.3	3	63.1	62.8	11.2	Nayarit	West
Torreón	2	10	22	51.3	92	55	Coahuila	North
Veracruz	4.8	0.3	5.6	1.6	29.6	6.4	Veracruz	South-East

Author's own calculations based on *Base de fallecimientos* and SESNSP

4.1.2 Independent Variables

4.1.2.1 Lagged Dependent Variable

The inclusion of the drug-related homicide rate in its lagged form helps us to address two situations: first, it captures a path dependent phenomenon, in which municipalities with higher levels of drug-related violence in the past tend to continue at this level in the following period. Second, the lagged variable addresses problems of endogeneity with respect to the militarization hypothesis. If the deployment of the military increases the level of violence, it does so because in the first place the higher levels of violence in a municipality pushed the government to send troops. Therefore, the state increases its presence precisely in the places that experienced high levels of violence in the former period.

4.1.2.2 Index of State Capacity

The index of state capacity at the local level is constructed by multiplying[9] three indicators: law enforcement efficiency, financial autonomy, and infrastructure. Several scholars have identified numerous dimensions of state capacity that when combined portray a more accurate definition (Kurtz and Schrank 2012). Just to mention briefly, some authors understand the capacity of the state along three dimensions: extraction, coercion and administration (Hanson and Sigman 2013); coercion, infrastructure and extractive capacity (Luna and Toro 2014); territorial penetration, autonomy from non-state actors and bureaucratic capacity (Giraudy 2012); or security, administration and

[9] Several scholars (Giraudy 2012, Soifer 2012, Luna & Toro 2014) following Goertz (2006) on the necessary and sufficient rule of aggregation, have identified the necessity to multiply rather than adding the different dimensions in order to preserve the idea that a strong state should retain the three characteristics simultaneously.

extraction (Soifer 2012). As we can see, all of these works identify almost the same dimensions as part of their state capacity definition. Based on this commonality, the three indicators selected provide an overall picture of state capacity at the local level and the different variations that we could find among the municipalities in Mexico.

The reason to create the index by multiplying the three dimensions follows the approach of 'diminished subtypes' elaborated by Collier and Levitsky (1997) in which the objective is to allow differentiation and at the same time to avoid conceptual stretching. This strategy allows having "the differentiation between strong and weak states, while also maximizing empirical and analytic differentiation among cases that fall in the 'grey zone' of state strength" (Giraudy 2012, 606). In addition, the advantage of the diminished subtypes relies on the fact that:

> [they] should be regarded not as full instances of the root concept of state capacity, i.e., instances where the three core dimensions are present. Instead, [they] should be understood as less than complete instances of strong states because they lack one or more components, […] and as more than complete instances of weak states, because they have one or more core dimension present (Giraudy 2012, 606).

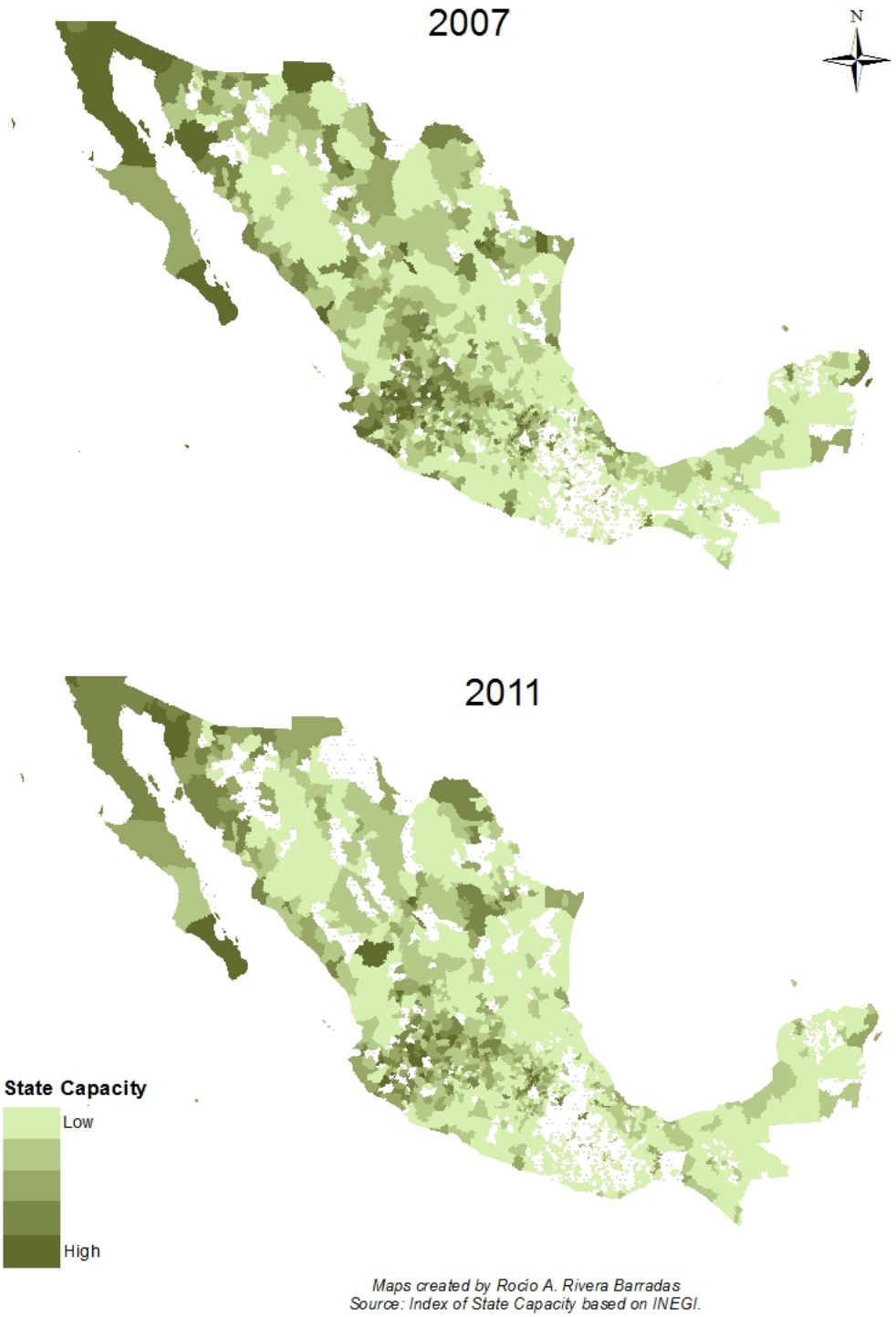
Thus, following this approach we will have: a) a description of the different degrees of state capacity of the local governments in Mexico across the territory and b) a description of how the local governments increased or decreased their strength state capacity each year from 2007 to 2012. This index will facilitate an analysis of the changes that the governments suffer in the three dimensions and more importantly how these fluctuations moderate the levels of organized crime violence.

The index takes the values from 0 to .59, since the three dimensions are measured as a share. In particular, these indicators were selected over others (i.e., security spending, police officers) because they were available at the desired level of

disaggregation and they are measured on the same scale; therefore, the index does not suffer inconsistencies from different measures. The mean is .0529 with a standard deviation of .0681. This reveals that on average, the municipalities in Mexico have low state capacity.

The maps below show the variation at the municipal level in terms of state capacity for the selected years. The darker areas depict municipalities that present higher levels of state capacity. The white areas represent the municipalities that lack one of the dimensions, and as a result do not have an assigned value. In 2007, for example, the lighter areas, which represent the municipalities with lower levels of state capacity, were located in mainly four regions: 1) In the northeast, covering the states of Durango, Chihuahua and Sinaloa, the region known as the "Golden Triangle", one of the areas most traditionally regarded for drug-related violence. 2) In the northeast, the region covered by the states of San Luis Potosí, Tamaulipas and northern Veracruz. 3) In the southwest, the states of Guerrero, Oaxaca and Chiapas. Oaxaca is mainly covered by a white area, due to the high number of municipalities in this state that are rural areas and are also ruled by "usos y costumbres," and 4) the Yucatán peninsula occupied by the states of Campeche, Quintana Roo and Yucatán. It is interesting to note that the dark spots in this region are traditional tourist destinations such as Cancún, Tulúm, Chetumal and the municipalities in Campeche that received considerable resources due to the oil industry.

Map 4.2 Levels of State Capacity by Municipality, 2007 and 2011



Regarding the areas that present a higher level of state capacity, we found three main regions: 1) the state of Baja California and some parts of Sonora in the north, sharing the border with the U.S. 2) In the western region, the states of Jalisco, Guanajuato, Aguascalientes and Zacatecas show high levels of state capacity and 3) in the middle of the country, with Mexico City, Querétaro and Estado de México. By 2011 we can appreciate that in general, this tendency has been maintained, though the darker regions had been reduced. In addition, the municipalities on the border with the U.S. saw a reduction in the level of state capacity. This is the case of Cd. Juárez, which experienced a decrease in the index of state capacity. In 2007, it presented an index of .2977 and by 2012 it was reduced to .0559.

One finding that this analysis shows is that the state in Mexico does not present the same degree of weakness along the territory. This means that there are some regions, states and municipalities that show a better performance in state capacity. Identifying this condition is essential to understanding the role of the local government in mitigating the levels of drug-related violence.

After analyzing the regional patterns in the strength of local governments, it is worth exploring how specific municipalities have behaved in terms of their governmental institutions. Particularly, the ones that have experienced a significant increase in the violence related to organized crime activities. In this sense, we can take a sample of some cities. If we analyze the 12 most violent cities in 2011 (SJP 2012), the year that is considered the most violent, we can see the change throughout the years in terms of state capacity:

Table 4.3 State Capacity at the Local Level in Mexico, 2007-2012 for Selected Cities

City	2007	2008	2009	2010	2011	2012
Acapulco	0.16	0.17	0.09	0.09	0.12	0.09
Cd. Juárez	0.29	0.45	0.16	0.15	0.13	0.05
Chihuahua	0.21	0.18	0.11	0.17	0.00	0.004
Cuernavaca	0.33	0.22	0.16	0.11	0.06	0.08
Culiacán	0.17	0.22	0.17	0.15	0.11	0.10
Durango	0.13	0.17	0.12	0.21	0.27	N/A
Mazatlán	0.26	0.28	0.11	0.23	0.14	0.17
Monterrey	0.25	0.23	0.19	0.20	0.16	0.19
Nuevo Laredo	0.05	0.06	0.03	0.03	0.04	0.04
Tepic	0.06	0.06	0.04	0.04	0.04	0.03
Torreón	0.24	0.17	0.20	0.19	0.19	0.18
Veracruz	0.16	0.13	0.11	0.13	0.09	0.09

Author's own calculation based on the index of state capacity estimation

This table shows the great variability across municipalities and across time. In general, we see that municipalities like Nuevo Laredo in the state of Tamaulipas and Tepic in the state of Nayarit are the two municipalities with the lowest state capacity degree in contrast with the rest of the selected cities. In addition, this level does not change over time.

There are some cases that showed a significant deterioration, or that remained stable during these years. Interesting are the cases of Cuernavaca and Ciudad Juárez. Though both cities presented the highest values of state capacity in 2007, 0.33 and 0.29, respectively; they experienced a dramatic decrease throughout the years, reaching considerable low values such as 0.08 and 0.05 in 2012, respectively. In similar fashion, Veracruz and Chihuahua have seen a constant decrease in the level of state capacity. On

the other hand, Monterrey, maintained a relatively stable state capacity, though in 2011 the most violent year, it reached its lowest value of 0.16.

As we can see, there is a considerable fluctuation within the municipalities across time and also across the territory. Therefore, the purpose is to understand how these changes impact the levels of drug-related violence. It is expected that as state capacity increases, the level of violence will increase too up to a certain point, and after that it will decrease, thus following a U inverted shape.

In the following section I will explain the characteristics of the three elements that compose the state capacity index. I decided to include these elements because they reflect the direct responsibility of the local government. Some other indicators were evaluated (i.e. number of physicians per capita, number of schools per capita, federal transfers, social programs) but they had the disadvantage of including federal or state participation. Other security indicators were considered, such as the number of police officers; however, the data is not available for all the years and not for all the municipalities. Military capacity was not included in the index because it reflects the efficacy of the federal security agencies rather than the municipal authority's effectiveness. Thus, the indicators proposed aim to narrow the responsibility of local governments as much as possible.

4.1.2.2.1 Law Enforcement Efficiency

An ideal indicator to capture law enforcement efficiency would be to estimate the accurate level of impunity. The higher levels of impunity in Mexico have been one argument that many authors constantly point out as one main reason behind the high

levels of violence. If an individual knows that the probability of getting punished is low, then the incentive is to continue with the criminal behavior. According to a report by the Mexican NGO, Security, Justice and Peace, the level of impunity in Mexico was 92.55% in 2011. This means that less than 10% of presumed criminals were convicted (SJP 2013).

It is difficult to estimate the precise level of impunity at the local level due to the lack of data. Nevertheless, we can get an approximation by looking at the ability of the local governments to carry out judicial investigations of alleged criminals. State authorities are in charge of prosecuting crimes that are under "*fuero común*" which are the kind of crimes that directly affect the population – i.e. homicide, robbery, rape, assault, etc. On the other hand, the federation is in charge of prosecuting crimes known as "*fuero federal*," which are crimes that affect the economy, health, security and in general the federation patrimony (Magaloni 2012, 93).

I will be analyzing crimes (homicides) related to *"fuero común"* for two reasons: first, because it sheds light on the ability of the local law enforcement and security agencies to provide justice to its population instead of relying on the federal government, and second, because it is the indicator available at this level of disaggregation that best represents the dimension on security/governance. Even though the municipality is not directly in charge of prosecuting these crimes because they fall under the jurisdiction of the *procuraduría del estado* (state attorney's office), the fact that this variable is disaggregated at the municipal level shows the performance of the state in that locality. Due to overlapping responsibilities between the state and the municipalities in terms of security and law enforcement, the phenomenon under study becomes more complex.

Nevertheless, including the performance of the law enforcement agencies in each municipality helps to reveal the degree of weakness in state capacity even though this task is in charge of the state level.

The law enforcement efficiency indicator is constructed based on the number of people convicted as a share of the number of people charged with crimes.[10] This means, that from the total number of alleged criminals the government initiates a judicial process against a portion of them and, finally, only some face justice. This indicator is measured as a percentage. A higher indicator suggests better performance from the law enforcement institutions in that municipality.

From 2007 to 2012, in average 26.8% of the municipalities had less than 50% in the law enforcement efficiency indicator. This means that half of the presumed criminals were actually convicted. Interestingly, in average 42.7% of the total municipalities in Mexico from the period under study showed a better performance, having more than 50% of criminals convicted.

Table 4.4 Law Enforcement by Percentage of Municipalities, 2007-2012

	Less than 50% of criminals convicted	More than 50% of criminals convicted	NA
2007	27	54.4	18.5
2008	27.5	56.3	16
2009	25	47.1	27.7
2010	23.8	48.2	27.8
2011	29.9	40.4	29.6
2012	28.1	40.3	31.4

Source: INEGI, *Estadísticas judiciales.*

[10] It could be that the number of people processed is measuring the same increase in the number of drug-related homicides. In order to avoid this problem, the index of state capacity is calculated by taking out the law enforcement dimension. Nevertheless, the regression analysis shows the same results.

As we can see from the table, this indicator varies over time. In 2007, 54.4% of the Mexican municipalities presented a law enforcement indicator higher than 50%. However, this number was reduced to 40.3% in 2012. This means that during these years, law enforcement institutions reduced their ability to convict alleged criminals. On the other hand, municipalities with less than 50% of convicting alleged criminals in 2007 represented 27% of the territory, while for 2012, this number increased to 28.1%.

As shown by this analysis, there is a widespread difference in the efficacy of the law enforcement institutions within Mexico. The local governments do not provide the same degree of justice and security to their populations. It is also necessary to mention that this indicator is not perfect and presents some inconsistencies (i.e., due to delays in reporting the conviction, some municipalities have levels above 100%[11]). However, it gives a more empirical support to the argument on the weakness of the rule of law as a factor enabling levels of violence. Moreover, it shows that state capacity in this dimension is not uniform across the country.

4.1.2.2.2 Financial Autonomy

The second dimension on state capacity refers to the capacity of the state to carry out one of its most essential tasks: collect taxes. The ability to extract more revenue is associated with a greater state capacity. For instance, the ratio between the actual tax revenue by the expected tax revenue is associated with a lower probability of internal conflict (Hendrix 2010, 276). This indicator is measured as the own-source tax revenue as a share of the

[11] Therefore, they are treating as missing values.

total municipal budget. Financial autonomy has been identified as one factor that impacts the levels of urbanization and industrialization but also enables a prioritizing of public services (Aguilar-Gutiérrez 2010).

As mentioned in Article 115 of the Mexican Constitution, municipalities are in charge of the public security and the preventive and transit police. Thus, the state and municipal authorities provide most of the public security services, accounting for 90% of the total police forces[12] in Mexico (Guerrero 2011b, 20). The municipal preventive police accounts for 39.85% of the total number of police officers (Sabet 2010). As we can see, public security heavily relies on the local government. Due to the lack of figures on public security expenditures at this level of disaggregation, the financial autonomy of the municipality pictures a proxy on the ability of the local government to use available resources to confront the immediate problem of increasing levels of insecurity.

In this sense, the local governments' ordinary budget is comprised of three elements: 1) Their own fiscal effort, 2) Non-conditional transfers from the federation (a.k.a. *Ramo 28*), and 3) Conditional transfers from the federation (a.k.a. *Ramo 33*). Thus, the financial autonomy indicator will be taken as a measure of the financial strength of the local government to confront pressing issues.

As we can see from Table 4.4, on average, 75% of the municipalities have 25% of their budget coming from their own-tax revenue efforts. This shows that the municipalities' budgets rely heavily on the transfers from the federation. In addition, we can see that the number of municipalities that have a strong tax capacity (their own-tax efforts represent more than 75% of their ordinary budget) are less than 1% of all municipalities.

12 Total number of police forces includes the federal, state and local level.

Table 4.5 Financial Autonomy by Percentage of Municipalities, 2007 to 2012

	Less than 25%	Between 25 and 50%	More than 50%	NA
2007	72.6	8.4	0.005	18.3
2008	79.6	7.1	0.004	12.7
2009	80.3	6.7	0.003	12.5
2010	77.9	6.7	0.002	14.9
2011	79.2	6.4	0.003	13.9
2012	64.6	4.3	0.002	30.7

Sources: INAFED, *Indicadores e Ingresos Municipales*.

4.1.2.2.3 Infrastructure

State capacity can be also measured by how able the government is in providing basic public goods to its population. In this case, the percentage of households with access to drainage in the municipality will be used. This indicator has been identified as a good measure of public utility coverage since "the Mexican Constitution (Article 115) explicitly assigns to municipal governments the exclusive responsibility for the provision of water and sanitation" (Cleary 2007, 286).

From 2007 to 2009, one fourth of the territory had only half of the households with access to drainage. This number decreased from 2010 to 2012. As a parallel, in 2007-2009, 72.6% of the municipalities had more than half of the households with access to drainage. This number has increased 10% since 2010.

Table 4.6 Households with Drainage by Percentage of Municipalities, 2007-2012

	Less than 50%	More than 50%	NA
2007	25.6	72.6	1.6
2008	25.6	72.6	1.6
2009	25.6	72.6	1.6
2010	16.4	82.1	1.4
2011	16.4	82.1	1.4
2012	16.4	82.1	1.4

Source: INEGI, Households with access to drainage

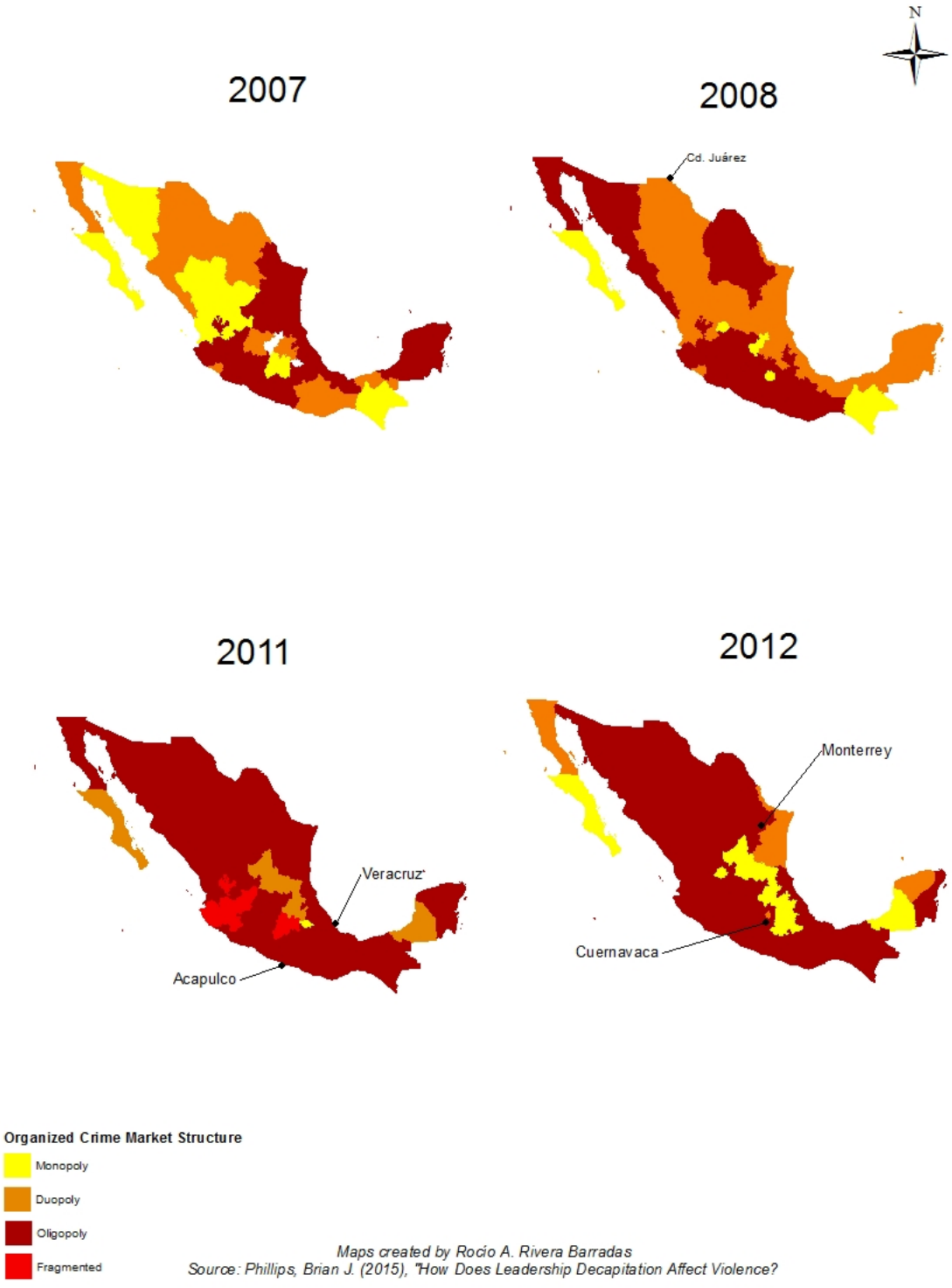
This indicator is positively correlated with financial autonomy in 39%, which suggests that municipalities that are more able to obtain own-source tax revenues are at the same time better at providing infrastructure. Furthermore, the law enforcement indicator also presents a positive correlation with both, financial autonomy and infrastructure indicators in 19% and 25.5%, respectively. This suggests that urban municipalities are the ones who in general, tend to present a better state capacity index.

4.1.2.3 Number of Drug Trafficking Organizations (DTOs)

As mentioned in Chapter 2, competition among DTOs for territory and valuable *plazas* spurred the levels of violence. In 2006, there were 6 major DTOs, in 2008-2009, 8 in 2010 there were 10-11, and by 2011 this number increased up to 16, which was the year with the most number of drug-related homicides. By 2012, the number of DTOs decreased to 10 (Guerrero 2012b).

According to Ríos (2012a), Mexico's violence is due to what she calls the "self-reinforcing violent equilibrium" which consists of two elements: first, the levels of violence increase due to changes in the structure of the illegal market from oligopolistic to one of competition; and second, due to battles between drug cartels, the government decides to confront traffickers by sending the military and as a consequence, escalating the total number of drug-related homicides.

Map 4.3 Competition among DTOs, 2007 to 2012



Maps created by Rocio A. Rivera Barradas
Source: Phillips, Brian J. (2015), "How Does Leadership Decapitation Affect Violence?

In order to capture the degree of competition among DTOs, I will rely on the number of drug trafficking organizations by state from 2007 to 2012 (Phillips 2015). As mentioned in Chapter 2, it is expected that this variable will present an inverted U shape with respect to the drug-related homicide rate. Thus, lower levels of violence will be located in regions where there is only one larger organization controlling the market (monopoly), followed by an increase in the regions were the market is contested between two and six organizations (oligopoly) and then, a decrease in the areas where more than seven smaller criminal organizations are present (fragmented).

As we can see from the maps above, the structure of the illegal drug market has changed noticeably over time. In 2007, only one drug cartel controlled the states of Baja California Sur, Sonora, Nayarit, Zacatecas, and Durango in the northwestern region; the states of Tlaxcala, Estado de México in the center and the state of Chiapas in the south. It is interesting to notice that by 2011, which is considered the most violent year, the monopoly market had virtually disappeared, with the exception of state of Tlaxcala. By 2012, the middle region of the country and the state of Baja California Sur in the north and Campeche in the south were controlled by one organization.

By 2008 the competition among DTOs extended across the territory. The areas that were previously controlled by one organization now became contested regions. These areas were two organizations (duopoly) were dominating (orange) covered virtually half of the country, mainly in the northern region, the middle, and all the states in the Gulf of Mexico route (Tamaulipas, Veracruz, Tabasco and the whole Yucatan Peninsula).

Especially interesting is the drug market configuration in the 2011 map. As we can see the monopoly and duopoly areas have almost disappeared. The dark red area that covers almost the entire country shows that between three and seven drug cartels were fighting for control. This means that in the most violent year, almost all the country could be characterized as having an oligopoly drug market structure. The state of Jalisco, Estado de México and Mexico City had the presence of eight to nine criminal organizations (red bright areas) characterizing a highly fragmented market.

In 2007, there were few very concentrated areas that were contested by organized crime. But by 2008 the competition among DTOs extended to other regions mainly due to the deployment of the military (this was the case of *Operativo Chihuahua* launched in 2008), thus causing the "cockroach effect" (Bagley 2012). As the government started to put pressure on one area, the criminal organizations were pushed to move into other regions that did not have a constant presence of the army or navy.

It is interesting to notice that by 2010 the states of Tamaulipas, Veracruz and Tabasco next to the Gulf of Mexico suffered an increase in confrontations among DTOs. This phenomenon has been identified as a consequence of the split between the Zetas and the Gulf Cartel. At the end of 2009 and beginning of 2010, the Zetas, which were founded by former soldier Arturo Guzmán Decenas as the armed force of the Gulf Cartel, decided to separate and became an autonomous organization. Therefore, the Zetas began to contest the regions in which traditionally the Gulf Cartel had established its operations (InSight-Crime 2014a)

From 2007 to 2008, the state of Morelos was characterized as a monopoly, thus having relatively low levels of drug-related violence. Nevertheless, in 2009, members of

the navy assassinated Arturo Beltrán Leyva, leader of the Beltrán-Leyva Cartel in the city of Cuernavaca leading to the organizations fracturing into different cells such as *Guerreros Unidos* and *Los Rojos,* which operate and contest the states of Guerrero and Morelos (InSight-Crime 2014b).

Another example is the case of the port of Veracruz in the east, which not only became contested by the Zetas and the Gulf Cartel, but also by a third group. In 2011, the group known as the *Mata Zetas* (Zetas killers) declared publicly a war against the Zetas stating that they were going to get rid of them. Some analysts pointed out that the *Mata Zetas* were in fact the *Cártel de Jalisco Nueva Generación* (Jalisco New Generation Cartel), which is a branch of the Sinaloa Cartel (Loret de Mola 2014). Therefore, a third criminal organization disputed the territory.

4.1.2.4 Military Presence

During Felipe Calderon's administration, the government carried out a strategy known as "joint operations" (*operativos conjuntos*) in which personnel from the Ministry of National Defense (SEDENA), Ministry of the Navy (SEMAR) and Ministry of Public Security (PFP) were deployed to regions that experienced an increase in the levels of violence due to confrontations among cartels (Guerrero 2011b). From 2007 to 2012, these joint operations took place in 13 out of the 32 Mexican states (Baja California, Chihuahua, Coahuila, Durango, Guerrero, Michoacán, Morelos, Estado de México, Nuevo León, Sinaloa, Sonora, Tamaulipas and Veracruz).[13]

[13] The information on the joint operations is taken from Escalante (2011), Merino (2011), Guerrero (2011) and Jiménez (2012).

Some recent works have emphasized the importance of the militarization strategy carried out by the governments to confront the cartels as one variable responsible for the increase in violence (Escalante 2011; Merino 2011; Guerrero 2011a; Ríos 2012a; Espinosa and Rubin 2015). Thus, this variable will be included in the analysis. In addition, the presence of the army and the navy are also measures for state capacity.

Due to the sensitive nature of these operations, the government does not release detailed information. Even though the military is sent to contain organized crime in the municipalities that have seen a rise in the levels of violence, the government launches the operations by state. Therefore, we do not have information about how many personnel have been deployed and to which specific locations.

Also, the inclusion of this variable is particularly relevant, since the deployment of the army and the navy could be seen as a measure of state capacity, in this case coercive capacity. Though the focus of this research relies on the strength of local government, the effects of the militarization strategy should be addressed. Due to the importance of this variable in the analysis, I rely on a proxy to capture the military presence. This variable is coded as 1 if the municipality belongs to a state in which these joint operations took place, and 0 if otherwise. I acknowledge that this is not an accurate measure but, due to the constant movement and patrol by the army and navy in the disturbed areas, I believe we can approximate the military presence by using this indicator. In addition, the multilevel method allows us to incorporate covariates at each level of nesting.

4.1.2.5 Coordination among the Government and Electoral Competition

The hypothesis related to democratization will be measured a) as the coordination among the three levels of government; this is, if the municipal, state and federal government have the same political party in office (Ríos 2012b) and b) as the degree of electoral competition in a municipality through the margin of victory between the winner of the local election and the second-place party (Osorio 2013).

In addition to the previous variables that have been used by these scholars, I will add three more in order to broaden the possibilities of coordination among the levels of government. These new types of coordination will include 1) Federation-State, 2) State-Municipality and, 3) Federation-Municipality.

Therefore, total coordination, will take the value of 1 if the three levels of government had the same political party that year and 0 if otherwise. The second type of coordination will be measured as 1 if the federal government and the state shared the same political party in the executive office and 0 if otherwise. The third type will take the value of 1 if the state and the major of a particular municipality belonged to the same political party and 0 if otherwise. Finally, the last type of coordination will take the value of 1 if the same political party governed the federation and the municipality. We would expect that in the years where the government coordinated in the three levels, the levels of violence would be lower.

On the other hand, the electoral competition variable goes from 0 to 1, in which the smaller the margin, the higher the electoral competition between political parties in that municipality. In a context of political conflict there is a higher probability of law

enforcement confrontations. Therefore, we would expect an increase in the levels of violence (Osorio 2013).

4.1.2.6 Public Expenditures per capita

The amount of public investment that the local government spends in the construction, maintenance, extension and conservation of public works will be employed. It is expected that the higher the amount per capita is spent in public investment, the lower the levels of drug-related violence.

4.1.2.7 Drug Consumption

The increase in drug-related homicides in Mexico has generated a debate on the nature of the problem in the country. Some analysts (Arzt and Vázquez 2010) have emphasized that due to the strong measures that the U.S. implemented at the border following the 9/11 terrorist attacks, criminal organizations confronted the necessity to create a domestic market in Mexico. Even though drug-dealing violence is still moderate, it could become pervasive. This variable will be measured as the number of cocaine overdoses per municipality. If this is true, we would expect higher levels of violence in the municipalities with higher number of cocaine overdoses.

4.1.2.8 Distance to the United States

Regarding the transit hypothesis, for years the most contested *plazas* have been the points of entry to the U.S. Traditionally the closeness to the U.S. has been identified as one key argument behind the rising levels of violence, highlighting that the organized criminal

groups still fight for the control of transit routes rather than for domestic drug consumption areas. In order to test this hypothesis, the distance to the U.S. measured in km will be used. We would expect that the closer the municipality to the U.S., the higher the levels of violence.

4.1.2.9 Control Variables

Regarding the literature on criminology, a series of structural or socioeconomic variables that spur the levels of violence have been identified. Therefore the analysis will include the following measures: a) Gini coefficient/ Human Development Index (HDI), and b) Urban area. The Gini coefficient measures inequality and goes from 0 to 1 in which the higher the number, the more disparate the distribution of income in that municipality. Therefore, we would expect a positive relationship between the Gini coefficient and the levels of drug-related violence. The HDI goes from 0 to 1 and measures three dimensions of human development: life expectancy, years of schooling and standard of living. Thus, we would expect a negative relationship between levels of drug-related violence and human development. In which the municipalities with better levels of human development, with an index closer to 1, will present lower levels of violence. In the case of the urban area, this variable follows the standards established by INEGI, which categorizes a municipality as urban if it has more than 2,500 inhabitants. In this sense, this variable takes the value of 1 if the municipality meets this criterion and 0 if otherwise.

4.2 Model

The model estimated is a multilevel/hierarchical in which the structure of the data is nested across multiple levels of analysis. The multilevel model has several advantages for this research. First, it allows capturing the effects that vary by group (Gelman and Hill 2007, 6). In this case, the repeated measures of the levels of drug-related violence in each year during the 2007-2012 period (level 1) would be nested within the municipalities (level 2) and the municipalities would be nested within states (level 3).

In order to analyze the level of violence across municipalities, it is imperative to take into account that the municipalities within states could be sharing unobserved similarities, and therefore the error term could be correlated. Thus "multilevel statistical models are needed to account for statistical dependencies that occur among clusters of hierarchically organized data" (Johnson 2010, 620). The advantage of this model is that I can include municipality-level predictors as well as state-level predictors. For the purposes of this research the variables 'Number of DTOs' and 'Military Presence' (which are at the state level) are particularly relevant since the first one represents the illegal drug market configuration and the second one is also a measure of state capacity. Therefore, I consider relevant to include these state-level predictors in the model.

Thus, the equation model would be:

$$LogDRHomicideRate_{tij} \sim \mathrm{N}\ (\mu_{itj}, \sigma^2)$$

where *t* is the index for years, *i* is the index for municipalities and *j* is the index for state and:

$$\begin{aligned}\mu_{itj} = \beta_0 + \beta_i + \beta_t\ + \beta_j\ + \beta_1(LaggedDV)_{itj} + \beta_2(StateCapacity)_{itj} \\ + \beta_3(StateCapacity * StateCapacity)_{tj} + \beta_4(CompetitionDTOs)_{tj} \\ + \beta_5(CompetitionDTOs * CompetitionDTOs)_{tj} \\ + \beta_6(Military\ Presence)_{tj}\ +\ \beta_7(Coordination)_{itj} \\ + \beta_8(ElectoralCompetition)_{itj} + \beta_9(LogPublicExpenditures)_{itj} \\ + \beta_{10}(DrugConsumption)_{itj} + \beta_{11}(DistanceUS)_{itj} \\ + \beta_{12}(Gini/IDH)_{it} + \beta_{13}(Urban)_{itj}\end{aligned}$$

where:

$$\beta_t \sim \mathrm{N}\ (\ 0, \sigma_t^2\ )$$

$$\beta_j \sim \mathrm{N}\ (\ 0, \sigma_j^2\ )$$

$$\beta_i \sim \mathrm{N}\ (\ 0, \gamma_i^2\ )$$

First, I will present the model with the political variables (the different degrees of coordination among the levels of government and political competition) in order to analyze which ones are more significant so they could be incorporated in the following model. The results are presented in Table 4.6. All the models were estimated using the *xtmixed* command in STATA due to the hierarchical nature of the data. In addition, all models incorporate years, state and municipality effects.

Table 4.7 Coordination and Electoral Competition Models

Variables	**Model I Electoral Competition**	**Model II Total Coordination**	**Model III Federation-State**	**Model IV State-Municipality**	**Model V Federation-Municipality**
Fixed Effects					
Total Coordination		-.0357			
		(.0407)			
Federation-State Coordination			-.2196		
			(.0290)* **		
State-Municipality Coordination				.0282	
				(.0228)	
Federation-Municipality Coordination					-.0107
					(.0256)
Electoral Competition	.1608				
	(.0815) **				
Intercept	1.0617	1.0890	1.1386	1.0695	1.0878
	(.1888)* **	**(.1885)*** **	**(.1836)*** **	**(.1890)*** **	**(.1887)*** **
Random Effects Variance Component					
State effect	.08170	.08132	.06807	.08196	.08145
Municipality effect	.68239	.68444	.69791	.68286	.68440
Years effect	.26972	.26942	.23024	.26999	.26968
Residual	1.0401	1.0390	.91352	1.0387	1.0390
Observations	**12115**	**12130**	**14644**	**12130**	**12130**

***Significance Level of 1% ** Significance Level of 5%
Standard errors in parenthesis.

As we can see from the table, the electoral competition variable, along with the federation-state coordination were significant. In the case of the electoral competition, the coefficient presents a positive sign, which denotes that the closer this variable is to 1 the higher the levels of violence. This would imply that municipalities highly controlled by only one political party that have not seen a real and considerable electoral participation

by other political parties will present higher levels of violence in contrast to the municipalities that are more democratic.

Regarding the different degrees of coordination, the results show that only the federation-state coordination matters. The negative sign suggests that when there is a coordination between the federal government and the state, this is, the president and the governor belong to the same political party, the higher the chances are to lowering violence levels.

As a result, only the political variables that were significant in the above models will be incorporated in the full model. Four models are estimated. The null Model which includes only random effects. Models I and II are estimated with the index of state capacity including the Gini coefficient and HDI[14], respectively. Model III employs GDP per capita as an alternative measure of state capacity (Fearon and Laitin 2003), showing similar results as Model I including both U-inverted shapes. The three full models include all the predictors. The results are discussed based on Model I since according to the AIC and BIC statistics is the best model. Results are reported in Table 4.7.

[14] HDI and the index of state capacity present a correlation of .43, which would imply that both could measure the same phenomenon. This positive correlation is expected due to the fact that there is a high probability that strong local governments tend to invest more in the three dimensions measured by the HDI.

Table 4.8 Organized Crime Homicide Rate Multilevel Model

Variables	**Null Model**	**Model I**	**Model II**	**Model III**
Fixed Effects				
Lagged DV		.2802	.2683	.2632
		(.0122)* **	**(.0122)*** **	**(.0108)*** **
State Capacity		3.105	2.1044	
		(.5690)* **	**(.6348)*** **	
State Capacity squared		-5.850	-4.058	
		(1.864)* **	**(1.944)*** **	
Number of DTOs		.1616	.1700	.1705
		(.0423)* **	**(.0422)*** **	**(.0385)*** **
Number of DTOs squared		-.015	-.014	-.014
		(.0052)* **	**(.0051)*** **	**(.0046)*** **
Log GDP per capita				10.99
				(4.416)* **
Log GDP per capita squared				-.4730
				(.1840)* **
Military Presence		.2146	.2393	.1493
		(.0592)* **	**(.0590)*** **	**(.0541)*** **
Federation-State Coordination		-.2857	-.2715	-.2868
		(.0601)* **	**(.0598)*** **	**(.0539)*** **
Log Public Expenses		-.0507	-.0257	-.0796
		(.0213)* **	(.0221)	**(.0177)*** **
Electoral Competition		.1510	.1405	.0612
		(.0997)	(.1001)	(.0898)
Distance to the U.S.		.0001	.0001	.0000
		(.0001)	(.0000)	(.0000)
Drug Consumption		.0090	.0089	.0101
		(.0052)	(.0053)	**(.0036)*** **
Gini		1.239		1.809
		(.3458)* **		**(.3164)*** **
HDI			1.366	
			(.2963)* **	
Urban area		.3878	.4229	.3187
		(.0897)* **	**(.0902)*** **	**(.0565)*** **
Intercept	1.0780	-.2223	-.9455	-63.816
	(.1789)* **	(.2883)	**(.3662)*** **	**(26.483)*** **
Random Effects Variance Component				
State effect	.698081	.380782	.388847	.479231
Municipality effect	.229521	.045210	.057347	.059115
Years effect	.058139	.025036	.043047	.025759
Residual	.917791	1.16381	1.15438	1.19620
BIC	42755.69	21690.44	21711.76	26996.93
Observations	**14644**	**7055**	**7059**	**8697**

***Significance Level of 1% Standard errors in parenthesis.

4.3 Results

Due to the transformation of the dependent variable into its logarithm form, the coefficients in Table 5 are presented in log form. Therefore, in order to interpret their effects on the dependent variable, they need to be exponentiated (except for the public expenses coefficient which is in its log form). The model is divided into two parts: the fixed and the random effects. The first contains all the covariates under analysis, representing the inference of the model's intercept and slopes, which averages all municipalities. The random effects section estimates the variability accounted for by each level or group level errors (Huber 2013).

If the outcome of interest is the drug-related violence across municipalities, then, including the state-level error term allows the levels of violence to vary by state, thus also capturing other unobserved differences at the state level. Thus, the state-specific error component remains constant across municipalities, while the municipality residual is a municipality-specific component, which varies between municipalities. The year variance component shows the variance between the years. I include these three random effects in order to control for the unobserved factors that are shared by the observations that make them interdependent.

The full model includes all the possible explanations associated with violence related to organized crime. Regarding the impact of each of the covariates, first an increase in one percent of the lagged dependent variable is associated with a 32.3% increase in the levels of violence (.2802(exp) – 1). In general, this means that there is a considerable path dependency or inertia in terms of violence. The municipalities that

presented significant levels of violence in the previous years are more prone to present higher levels of violence in the current year.

The state capacity index follows an inverted-U shape since the squared variable shows a negative sign. This means that at intermediate levels of state capacity, the levels of violence will rise. As discussed in Chapter 2, this is an expected situation due to the fact that these municipalities are precisely the most attractive for organized crime due to the bureaucratic apparatus and the expected protection that they can take advanced of. Moreover, at higher levels of state capacity, the levels of violence tend to decrease.

The impact of the number of DTOs present in the state also follows an inverted-U shape. Thus, the regions with a monopoly will present lower levels of violence with respect to the regions under oligopoly market structures. Then as the number of DTOs increases, resembling a fragmented market, the level of drug related violence decreases again.

An interaction term between state capacity and number of DTOs was estimated but it was not reported due to the lack of significance. This result suggests that the effect of the number of DTOs in the levels of violence is independent of the level of state capacity and vice versa. Therefore, in section 4.4 I will discuss the impact of these two variables together at different levels in the levels of violence.

Another relevant variable in explaining the levels of violence is the deployment of the military by the federal government. In this model, the effect of carrying out a joint operative in a particular state increases the levels of violence by 23.9%. This positive relationship supports the findings by Ríos (2012a), Merino (2011) and Escalante (2011),

which through other statistical techniques found that the militarization strategy has contributed to raising the violence.

Interestingly, from the results above, I do not find evidence that electoral competition in the municipality affects levels of violence. Though this variable is not significant, it presents a positive sign, suggesting that, the closer the victory margin, the lower the levels of violence. However, due to the lack of significance, we cannot say anything relevant about the impact on the outcome. Regarding the different types of coordination, the full model includes the federal-state coordination, which is significant and presents a negative sign. This means that, if the Mexican president and the governor of a particular state belong to the same political party, the levels of violence would decrease by 33%.

Public investment per capita shows a negative sign, which suggests that the higher the amount of public investment, the lower the levels of violence. Since this variable is in its log form, the interpretation of the coefficient is straightforward. If the municipality doubles the public investment per capita, then a reduction of 5% in the levels of violence is expected.

Two variables that capture part of the economic chain of drug trafficking are the distance to the U.S. and the levels of drug consumption in the municipality. The first one illustrates the conventional role that Mexico has played in this economic chain as the main transit point to the U.S. Traditionally, the cities with higher levels of drug-related violence were located at the border with the U.S. However, the fact that this variable does not present a negative sign or a significant impact shows that the nature of the problem in Mexico may have changed significantly. This finding suggests that, as pointed out by

several analysts (Guerrero 2012b) organized crime in Mexico has diversified its illegal activities and even though they still rely on drug trafficking, they now extensively participate in other illegal activities such as extortion, kidnapping, human trafficking, piracy, among others.

In addition, there have been some hypotheses suggesting that criminal organizations fight for controlling municipalities because these localities are important in terms of consumer profits. Though the drug consumption variable, measured as the cocaine overdoses in the municipality presents a positive sign, it does not have statistical significance. This would imply that the drug consumption market in Mexico has expanded and that it is also relevant in explaining the rise in the levels of violence. Thus, these two variables taken together support the argument that the traditional role played by Mexico in the drug-trafficking chain has changed.

The control variables included in the model present the relationship as expected. The Gini coefficient presents a positive sign, which implies that the higher the inequality in the municipality, the higher the levels of violence. It has a level of significance of 99%. According to the results, a change in one unit in the Gini coefficient is associated with an increase of 245%. This result supports the findings of recent papers that have addressed the link between inequality and crime (Fajnzylber, Lederman and Loayza 2002; Whitworth 2012) and in particular drug-related violence in the case of Mexico (Enamorado et al. 2014)

The second control variable is urban area. According to the results, a municipality that is considered to belong to this category will see an increase of 47% in the levels of

violence. This finding goes in the same line as the criminology studies which point out that crime is a phenomenon mainly of urban localities.

As an alternative measure to the Gini coefficient, model II incorporates the Human Development Index. Interesting, this variable presents a positive sign, which would imply that the higher the degree of human development in a municipality, the higher the levels of violence. Moreover, Model III employs GDP per capita as a proxy for state capacity. It presents the same inverted-U shape as supporting the findings of Model 1. The only difference is in the drug consumption variable, which retains the positive sign increasing its level of significance.

4.3.1 Model Fit

The null model is estimated by only including the total variance divided into three parts: the year variance, the municipality variance and the state variance without any predictor. The advantage of estimating this model relies on its ability to provide information about the amount of variation that exists within and between groups (Johnson 2010).

We can analyze the R^2 by comparing the total variance from the random-effects parameters between the null and the full model. By calculating the formula:

$R^2 = 1 - \frac{\sigma_t^2 + \sigma_j^2 + \gamma_i^2\ Full}{\sigma_t^2 + \sigma_j^2 + \gamma_i^2\ Null}$, suggested by Snijders and Bosker (2012), Model 1 with all the covariates presents an $R^2 = 0.5324$, which means that the full model explains 53% of the total variation, which shows that the inclusion of all the covariates improved the explanation in the levels of violence. The AIC and BIC statistics show that Model 1 is better in contrast with the other two models.

It is important to mention that Model 1 presents half of the observations due to the missing values in the index of state capacity variable (9,505 observations). This significant reduction is related to the fact that not all the municipalities present a value in the three dimensions covered by the index. Therefore, when one dimension is missing, the index yields no result. It is relevant to mention that only the state of Oaxaca has 3,600 observations, of which 2,641 (73.3%) constitute missing values.

To address this problem, and in order to increase the number of observations, I estimated three models using each of the indicators separately, as a proxy of state capacity, and without including public expenditures and electoral competition indicators since these two have also several missing values (2,428 and 2,718, respectively) and do not constitute variables of interest. The models including law enforcement, financial autonomy and infrastructure each substantially increase the number of observations to 9,043, 10,237 and 12,184, respectively. Interestingly, the results hold with financial autonomy but fail to do so in the case of law enforcement and infrastructure.

Finally, another conceptual challenge is related to the relationship between state capacity and organized crime. As we have seen in Chapter 3, the history of organized crime in Mexico has shown how, through different periods of time, governmental policies have shaped the structure of criminal organizations. The present analysis assumes that the strength or weakness of local government does not influence the configuration of organized crime. Statistically, this is confirmed by the lack of collinearity between these two variables in the model.[15]

[15] The variance inflation factor (vif) test for all the predictors presents a value between 1.03 and 1.26, which shows that there is an absence of multicollinearity.

However, it should be recognized that larger policies implemented at the federal level have proven to have an impact on organized crime size and shape. For example, the kingpin strategy carried out by President Felipe Calderón has fragmented larger cartels into medium and smaller sized organizations that can affect the drug market by disrupting monopolies (Guerrero 2011a).

4.3.2 State Capacity and Number of DTOs Effect

As mentioned previously, the main argument of this dissertation is that state capacity and the configuration of the drug market differently impact levels of drug-related violence. In order to interpret the effects of the two inverted-U shapes, I will estimate the predicted values of drug-related homicide rate at different values of state capacity and the drug market.

The following table presents the predicted values for organized crime related homicide rate when the index of state capacity takes the value of 0.05 (mean) which represents and extremely weak state capacity; 3 which represents an intermediate level of state capacity, and 0.59 which is the maximum value representing a strong state capacity. The drug market configuration takes the values of 1 (monopoly); 6 (oligopoly), and 9 (fragmented). The predicted values presented in the table set the rest of the covariates at their means.

Table 4.9 Predicted Values for Organized Crime Homicide Rate

State \ Market	Monopoly	Oligopoly	Fragmented
Weak	3.16	4.20	3.47
Intermediate	4.12	5.47	4.52
Strong	2.24	2.97	2.45

From the table we see the changing effects in the degree of local state capacity in the different drug market configurations. Taking the effect of state capacity by itself, we see that there is an increase in the violence when the index changes from the minimum to the intermediate value. There is a notable reduction when state capacity is equal to the maximum value. This result shows that the lower levels of drug-related violence are found precisely in the municipalities with a strong and consolidated state capacity.

By analyzing the different drug market configurations, the findings suggest that the lower levels of violence are found in the states that a) have a monopoly and b) have a fragmented market. From these two, the best scenario in terms of levels of violence is the monopolistic market.

On the other hand, highest levels of violence are found in regions that have an oligopolistic market regardless of the level of state capacity. This means that for any level of local government strength, an oligopolistic market may tend to be the most violent scenario that a government could face. In regards to the other two configurations, the fragmented market present higher levels of violence than the monopolistic but lower than the oligopoly.

After this general discussion of the effects of these two variables separately, it is worth analyzing the effect state capacity and the number of DTOs together may have on

producing different levels of organized-crime violence. According to the table, the best scenario would be a municipality that resembles a monopoly market-strong state capacity since it shows a homicide rate of 2.24. The second and third best scenarios may be found in the municipalities with a fragmented market-strong state and an oligopoly market-strong state. These results show that the strength of the local government, when it reaches higher levels, always mitigates the effects that the different organized crime's configurations have on violence.

With respect to the worst cases, we have three scenarios. First, a municipality that resembles an oligopoly market-intermediate state capacity presents the highest drug-related homicide rate of 5.47. The second worst case may be a municipality under a fragmented market-intermediate state capacity and the third worst case, the municipality that resembles an oligopoly market-weak state capacity.

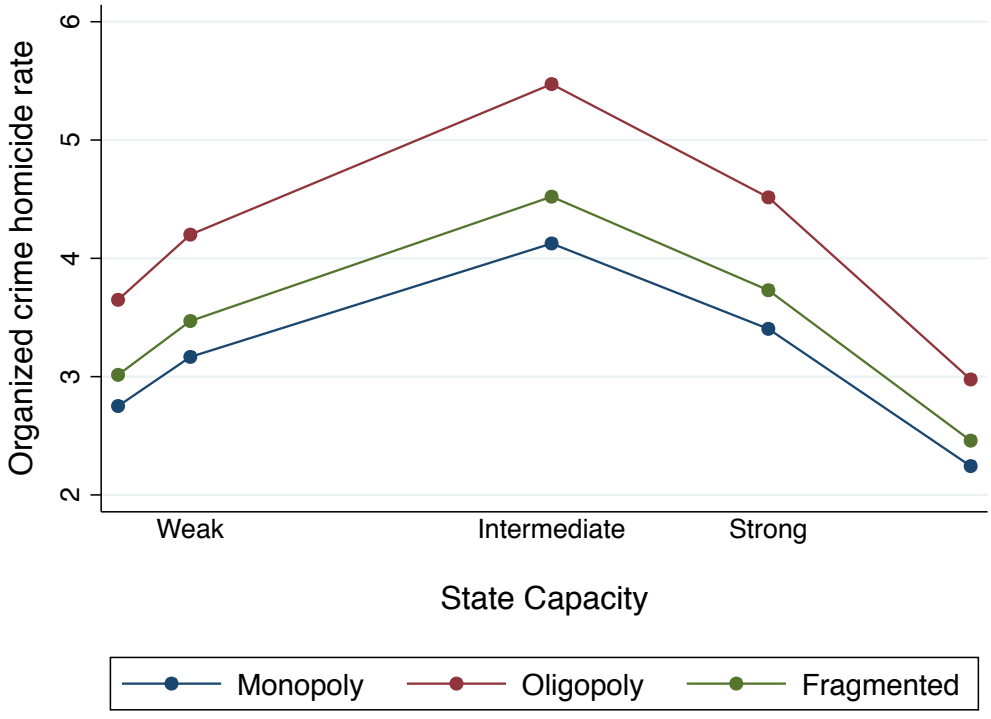
An alternative method to look at the effects of both variables in the levels of violence is by analyzing the difference in the predicted values. For instance, if we take the most violent scenario, an oligopoly market-intermediate state capacity, and state capacity reaches the maximum value, then there is a 45.7 % reduction in organized crime homicide rate. If the value of state capacity is maintained at the intermediate level, but what changes is the drug market configuration, from an oligopoly to monopoly then, the violence reduces by 24.6%.

If we analyze the effect of the drug market configuration, we see that if a municipality with intermediate levels of state capacity under a monopoly changes to an oligopolistic or fragmented market, then the level of violence would increase by 32.7% and 9.7%, respectively. This supports the hypothesis that the highest increase in violence

may be found under the oligopolistic market structure when larger organizations with similar power capabilities fight to control the market.

As we can see in Figure 4.3, the oligopolistic market (red line) is always the most violent configuration than the fragmented or monopolistic market. As mentioned previously, the monopoly configurations is the one that produce lower levels of violence. In addition, the graph shows the inverted-U shape of the relationship between state capacity and levels of violence. This means that at lower levels of state capacity there will be lower levels of violence, as the local government strengthens its bureaucracy and capacity violence increases but when it reaches well-consolidated levels of capacity, it starts to drop again until even lower levels of violence.

Figure 4.2 Organized Crime Homicide Rate Predicted Values Based on State Capacity and Drug Market Configuration



As we can see, if local state capacity takes the highest values, levels of violence decrease significantly. Los Cabos in Baja California Sur, San Andrés Cholula in the central state of Puebla, or even Ciudad Juárez in 2008 shared this value in the state capacity index. Tijuana, which has been considered one of the most successful cases in reduction of organized crime related violence, in 2010 presented a state capacity index of 0.56, closer to the maximum value.

4.4 Conclusions

Several conclusions arise from these results. First, even though the strength of the local government increases violence at the beginning it tends to decrease when reaching higher levels of state capacity. This lowering effect happens regardless of the type of configuration drug market assumes. This means that it always makes sense to strengthen and consolidate the capabilities of local governments because it mitigates organized crime-related violence. In addition, public expenditures per capita, a variable that shows the degree of social investment by the local government also reduces violence.

It is important to acknowledge a caveat regarding this inverted-U shape. Perhaps, low levels of violence found in municipalities with weak state capacity might respond to some omitted variable. It might be the case in rural areas that the reasons behind the absence of violence in these particular municipalities are low levels of inequality, poverty, and in general, a low degree of development. In Oaxaca, for example, almost half of the municipalities (46.6%) are rural areas and show low levels of violence.

Second, the analysis suggests that a change in the organized crime market configuration has relevant effects on violence. The number of criminal organizations

present in a particular region makes a difference. Particularly interesting is the finding that when there are seven or more criminal organizations the levels of violence decrease. In this sense, the strategy carried out by President Felipe Calderón of confronting drug cartels and trying to divide them up in smaller organizations in principle made sense. Nevertheless, this strategy should have been complemented by a substantial strengthening of local governments, which did not happened.

Third, and related to the previous point, is the fact that organized crime in Mexico, has diversified its illegal activities. The finding that the distance to the U.S. is not significant and that the drug consumption is positive suggests this transformation. Due to the diversification of illegal activities, there has been a substantial increase in kidnappings, extortions, robberies and crimes that follow under the "*fuero común*" category and that present even more challenges to local governments. As we have seen, under the period of study the average of the municipalities in Mexico show a very low degree of state capacity.

Fourth, a key variable that should be taken into consideration but that is difficult to estimate is the role of corruption and collusion between local governments and criminal organizations. Though in principle it would be reasonable to give more resources to municipalities, to improve law enforcement agencies and police forces, if the degree of corruption is high, then, the strengthening of local governments may not have any impact.

Fifth, the presented predicted organized crime homicide rates would seem lower due to the fact that the analysis was done by setting all the covariates at their means. Acknowledging that violence is a multi-causal phenomenon it is important to keep in

mind that levels of violence will change when other variables take relevant values. For example, if there is military presence, if the society is highly unequal, if there is a lack of political coordination between the federal and the state government, etc., then, we would expect a considerable variation in violence.

Finally, the statistical results presented in this chapter show that there is a significant correlation between the strength of local government and the ability in lowering the number of homicides linked to organized criminal activities. However, the causal mechanisms have yet to be identified. Thus, in the next chapter three cities Monterrey, Veracruz and Cuernavaca will be analyzed in order to disentangle the different dimensions of state capacity and how changes in the drug market configuration impact organized crime related violence.

Chapter 5. Monterrey

As mentioned in Chapter 1, Monterrey experienced a substantial increase of 737% in organized crime homicide rate in the period 2006-2012. Yet, it saw a reduction of 17.15% in the level of violence from 2011 to 2012. The purpose of this chapter is to provide a detailed description of the processes and changes in state capacity and the structure of the illegal market, and their implications on the varying levels of violence experienced by Monterrey. First, I will present a brief overview of the municipality and the most relevant episodes of violence. Second, I will analyze the configuration of the illegal market. Third, I will discuss local and state governmental efforts as well as the military operations carried out. Finally, I will discuss other relevant variables i.e. the role of civil society and provide conclusions.

5.1 Overview

Monterrey is the capital city of the state of Nuevo León, located in the northeastern region of Mexico. According to the Global Index of Competitiveness released by EGAP, Nuevo Leon ranks as second in the index just after the Federal District (Garduño Rivera et al. 2013, 33). In 2012, it had the second highest GDP per capita, around $13,000 USD (IMCO 2014). Nuevo León has been known as the industrial heart of Mexico since important companies (i.e., Cemex, Femsa, Vitro) in steel, cement, glass, manufacture, and service sectors are located in the state.

In the case of Monterrey, the city ranks fourth according to the Urban Competitive Index created by the Mexican Institute of Competitiveness. This

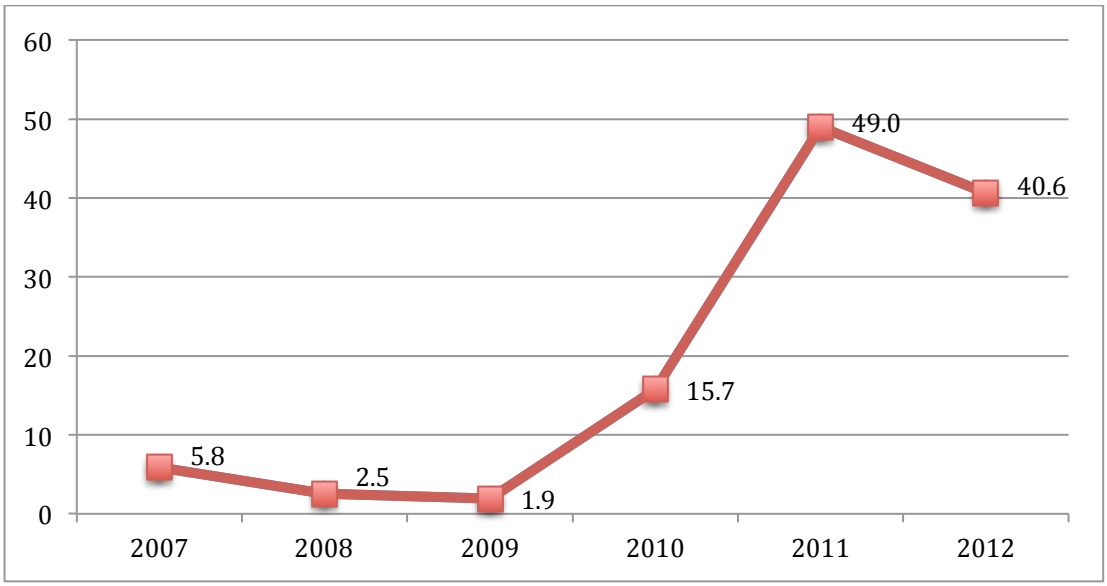
metropolitan zone is the third largest in the whole country in terms of population and the second most important in terms of economic productivity due to its highest concentration of Latin America and Mexican companies and prestigious universities, second to only after Mexico City's metropolitan area. Monterrey has become an important manufacturing and financial center and has taken advantage of its proximity to the U.S., which is located only 223 kilometers away from the border. Monterrey also has an income per capita of $267,000 Mexican pesos ($17,000 USD), a figure that doubles the Mexican average (IMCO 2014, 106).

Due to Monterrey's economic importance for the country and the long stability it had shown in previous years, the rise in drug-related violence came as a surprise. As shown in Figure 5.1, Monterrey began to experience the increase in violence in the year 2010 with a drug-related homicide rate of 15.7. By 2011, their worst year, the homicide rate reached 49 per 100,000 inhabitants, increasing 212% from the previous year. Then, it experienced a reduction in the following year. Therefore, it became puzzling why this city that for decades was considered peaceful and had been one of the most economically prosperous areas in Mexico suddenly experienced an astonishing increase in organized crime related homicides.

Though 2011 has been the most violent year in Monterrey and the state, organized crime related violence started to increase in previous years. In particular, crimes against local authorities became more conspicuous. In 2006, the directors of the municipal police forces of San Pedro Garza García, Sabinas Hidalgo, Santa Catarina and Linares (part of the metropolitan area of Monterrey) were assassinated (Medellín Medonza and Murillo Martínez 2010, 137). Also, the director of the agency of investigations of the attorney's

state office, Marcelo Garza y Garza, was murdered by a *sicario* (hired assassin). The year before, he arrested 20 suspected criminals that presumably were linked to the Sinaloa Cartel (Noroeste 2006).

Figure 5.1 Organized Crime Homicide Rate in Monterrey, 2007-2012



Source: Own calculation based on *Base de Fallecimientos* and *SESNSP*

In October of 2008, the U.S. Consulate located in Monterrey was attacked with a grenade and gunshots (El-Universal 2008). In 2009 a grenade was launched against the local facilities of *Televisa,* the main television network in Mexico. That same year a group identified as *Los Tapados* "The coverers," took over the streets of Monterrey, blocking main avenues and demanding the retirement of the army from the state. It seems that this group was linked to criminal organizations (Medellín Mendoza and Murillo Martínez 2010, 142-145).

In 2011, 555 organized crime-related homicides were committed in Monterrey, while in the metropolitan area (which includes 12 municipalities: Monterrey, Apodaca, Guadalupe, San Nicolás de los Garza, General Escobedo, San Catarina, Juárez, García, San Pedro Garza García, Cadereyta Jiménez, Santiago and Salinas Victoria) this number rose up to 1253 (Presidencia de la República 2011a; SESNSP). This is the reason why in 2011 Monterrey was ranked as the 10th most violent city in Mexico (SJP 2012, 5).

Not only did the number of homicides increase, so did the number of disappearances. Between 2007 and 2011 more than a thousand people were reported as missing (Emmott 2011). According to the NGO *Seguridad, Justicia y Paz*, from 2006 to 2012 the number of kidnappings in the state increased by 4,632 percent (SJP 2013, 9). In terms of extortion, in 2012 Monterrey presented a rate of 5.19 per 100,000 inhabitants (SJP 2012, 43).

Though violence in its different forms rose in Monterrey since 2006, it is 2010 and more noticeably in the year 2011 that the city faced several tragic events against civilians and local authorities. On March 19, 2010 two students, 23 and 24 years old, from the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) were killed in a confrontation between the army and criminals presumably linked to a drug cartel. The mayors of the municipalities of Villa de Santiago and Dr. González were killed in August and September, respectively (Contreras and Zamora 2013, 134).

In January of 2011, Arturo de la Garza, a stockbreeder, businessman and former local and federal congressman was assassinated. In February, Homero Salcido the director of C5 (the state security and intelligence agency) was murdered and later burned in his vehicle. That same month, Jaime Rodriguez, mayor of García (a municipality in the

Monterrey metropolitan area) suffered two attacks from a criminal organization (Contreras and Zamora 2013, 135).

On May 22, four people were killed at the entrance of the famous Café Iguana located in *Barrio Antiguo* in Monterrey and later three bodies were stolen (CNN-México 2011). The most striking event happened on August 25, however, when an armed group attacked the Casino Royale, burning its facilities and killing 52 people who were inside. More shocking was the fact that at least in the Iguana and Casino Royale cases, the participation of police officers from the state and local police force was confirmed (Cantú 2012; CNN-México 2011).

Between December 2010 and June 2011, five people were hung in pedestrian bridges on important avenues. On July 8, 2011, 25 people were shot and 21 died in the bar *Sabino Gordo* in Monterrey by an armed group. That same month the mayor of Escobedo was attacked in front of her house with a homemade bomb. In the month of October, 14 people were injured in the municipality of Guadalupe in the main square with grenades (Contreras and Zamora 2013, 136).

These incidents showed that the violence in Monterrey was carried out against civilians, local authorities, businessmen and members presumably of criminal organizations. According to Cayuela-Gally (2011), the importance of Monterrey for organized crime relies in five characteristics: 1) its proximity to the Texas border; 2) it is a financial center in which there is the possibility to launder money; 3) due to its high level of economic prosperity it's a good place for drug lords' families to live there; 4) the universities and rich neighborhoods generate a potential domestic market; and 5) it represents an economic loot for extortions, kidnappings and robberies.

5.2 Organized Criminal Market

According to Valdés Castellanos (2013), in 2010 the levels of violence dramatically increased in the whole country due to three main conflicts among organized crime groups. The first one was between the Zetas and the Gulf Cartel, mainly affecting the states of Tamaulipas and Nuevo León, and to a lesser extent the states of Veracruz, San Luis Potosí, Coahuila and Zacatecas. The second one took place in the states of Guerrero and Morelos, states that were disputed by smaller organizations that split from the Beltran Leyva Organization (BLO). Finally, the third conflict occurred between the Jalisco New Generation Cartel (a group of the Pacific Cartel) and the Resistance, a group derived from La *Familia Michoacana* (403-407).

Though the conflict in Monterrey escalated in 2010 after the separation of the Zetas from the Gulf Cartel, the area gradually had become violent in previous years. Since 2000, the Sinaloa Cartel started to have presence in the state of Tamaulipas. Alberto Nájera, a journalist from *La Jornada* released information that in the late 1990s Joaquín "*El Chapo"* Guzmán met with leaders from the Beltran Leyva Organization and the Juárez Cartel with the aim to gather forces to confront the Gulf Cartel and take over Tamaulipas (Valdés Castellanos 2013, 396).

Then, Arturo Beltrán Leyva, who in 2001 worked for the Juárez Cartel in Nuevo León, became Joaquín Guzmán's representative in the region. He decided to establish his residency in Monterrey's metropolitan area, specifically in the wealthy San Pedro Garza García (Osorno 2013, 77-78). There was a tacit agreement that San Pedro Garza García was going to be controlled by BLO and that another eight municipalities, including Monterrey would remained under the Gulf Cartel control (Osorno 2013, 56-57).

The apprehension of the Gulf Cartel's leader, Osiel Cárdenas Guillén in March 2003 triggered two events that would have terrible consequences for the northeastern region. First, internal fights in the organization emerged. His brother, Ezequiel Cárdenas Guillén, "*Tony Tormenta,"* and Eduardo Costilla, "*El Cos,"* remained as the main leaders. However, two other members felt they should have had more participation in the decision-making process: Miguel Ángel Treviño, "*El Z-40*," and Heriberto Lazcano, "*El Lazca*," both the leaders of the paramilitary organization the Zetas (Valdés Castellanos 2013, 251).

Second, with the Gulf Cartel leaderless, the Beltrán Leyva Organization decided it was a good time to compete for Tamaulipas. The border city of Nuevo Laredo became the main target. Thus BLO and Edgar Váldes Villareal "*La Barbie"* started recruiting people from Michoacán and *maras salvatruchas* from Central America in order to confront the Zetas – which at this time remained as the armed force of the Gulf Cartel – (Valdés Castellanos 2013, 307).

Sinaloa's strategy to conquer this territory included, in addition to corrupting public officers at the three levels of government, a direct confrontation with the Gulf Cartel. It is worth remembering that by this year, the Zetas had successfully recruited 300 former soldiers from the *Grupo Aeromóvil de Fuerzas Especiales* (GAFE) – a Mexican army special force that were trained by American and Israeli militaries – and *kaibiles* soldiers from Guatemala. This innovative feature took the Sinaloa Cartel by surprise. They were engaging in a war with a group of men that had received military training which meant that they knew how to survive in the worst circumstances, how to design and execute attacks, how to interrogate, how to construct explosives, how to develop

intelligence and counterintelligence schemes, how to use of communication devices, among other war tactics (Valdés Castellanos 2013, 255).

Therefore, and not surprisingly, the Zetas successfully killed the men that were hired by Sinaloa Cartel and its allies. Their bodies were thrown outside the security houses of the Sinaloa Cartel, and on one occasion were left with a message: "Chapo Guzmán and Arturo Beltrán. Send more assholes like these ones so we can continue killing them" (Cázares 2004).

Regardless of this bloody experience with the Zetas, in 2005 Joaquin "*El Chapo"* Guzmán decided to attack the Gulf Cartel again. In retaliation, the Gulf and the Zetas expanded their activities in Guerrero (which used to be controlled by Sinaloa). In 2007 the Beltrán Leyva Organization separated itself from the Sinaloa Cartel and decided to ally with the Zetas. They reached an agreement in which BLO was going to operate in the metropolitan area of Monterrey, while the Zetas would operate in the rest of the cities in the north of Nuevo León, Coahuila and Tamaulipas (Osorno 2013, 85-86).

According to Fernández Menéndez (2012) the split between the Zetas and the Gulf Cartel started in February of 2009 with a confrontation in Reynosa, Tamaulipas. In the same month, *Los Tapados* –linked to the Zetas– took over the streets of Monterrey for four days, blocked the main avenues and attacked governmental agencies, demanding the withdrawal of the army. This group also killed a detective from the local police who arrested one of their members (Reforma 2009b).

On October 29, 2009, Héctor *"El Negro"* Saldaña –who used to work of the Beltrán Leyva Organization in Nuevo León and who presumably threatened mayor Mauricio Fernández from the wealthy municipality San Pedro Garza García– was killed

in Mexico City. The news was released by the same Mauricio Fernández in an event in which Rodrigo Medina, Governor of Nuevo León and several members of the state government were present. Interestingly, he announced the news before the authorities had located the body (Proceso 2009 2009). It was revealed that the body was found with the following message: "For being kidnappers. Attn. The chief of chiefs." The chief of chiefs was Arturo Beltrán Leyva, *el Negro's* boss (Osorno 2013, 85).

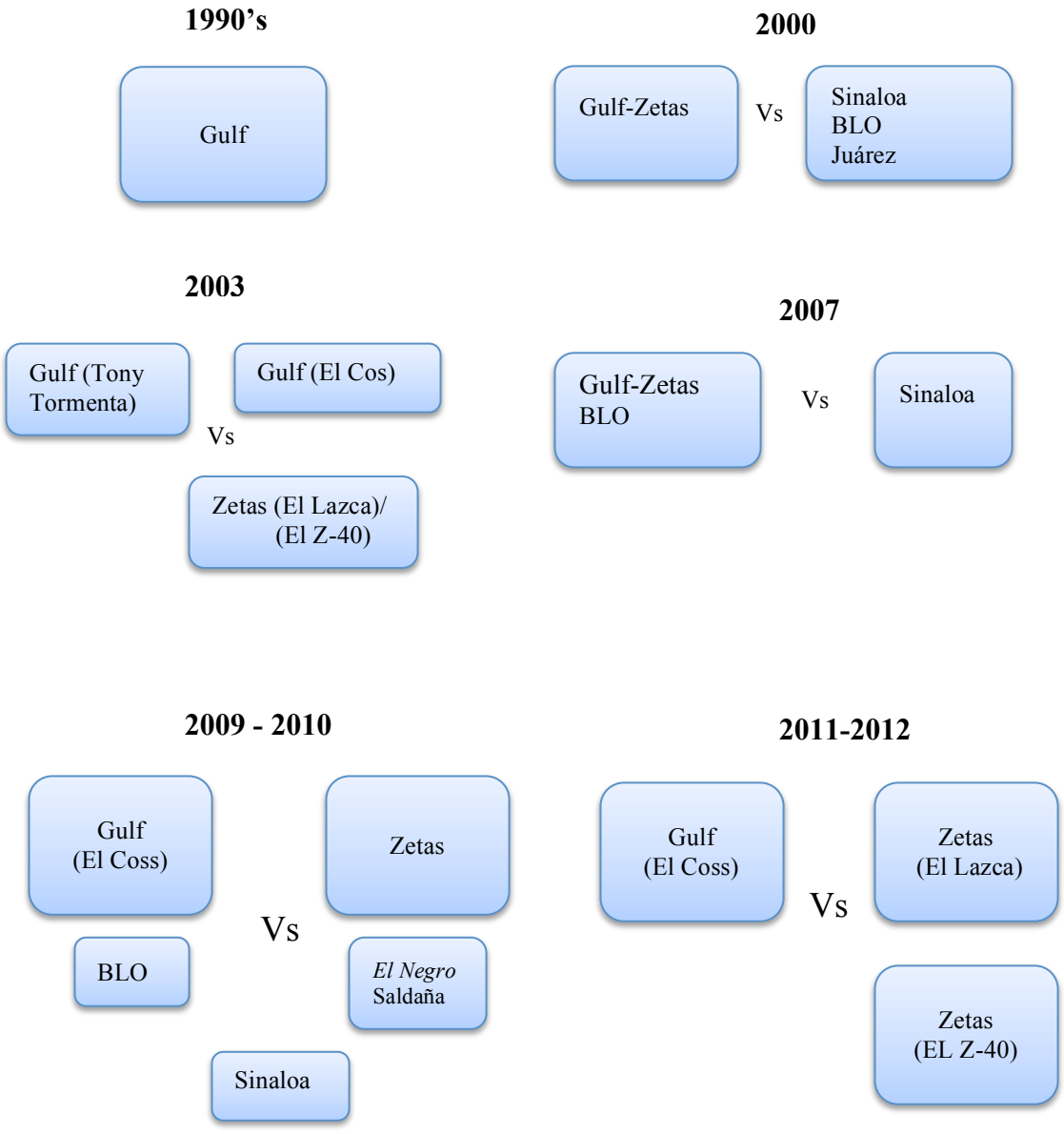
The Zetas began recruiting teenagers from the neighborhood *Independencia* in Monterrey. The houses in this part of the city are located on a mountain, which as referred by the journalist Diego Osorno (2013, 48), resembles the favelas of Rio de Janeiro. This neighborhood is very easy to identify because of the notable contrast with one of the most developed municipalities in Mexico and Latin America: San Pedro Garza García. Thus, the Zetas took advantage of the abysmal and remarkable inequality in this area. As mentioned by Osorno, the Zetas recruited people from *Independencia* to participate in the famous demonstrations by the previously mentioned *Los Tapados* to demand the withdrawal of the army (Osorno 2013, 49). Another *modus operandi* of the Zetas has been their constant extortion to small legal and illegal merchandisers in which the small businesses of the *Reforma* street in Monterrey have been victims (Osorno 2013, 52).

Thus, three key configurations in the number of criminal organizations made 2009 a critical year for Nuevo León and its capital city Monterrey. First, the ambitious efforts of Joaquín "*El Chapo"* Guzmán in the region created a confrontation with the Gulf-Zetas that left hundreds of dead bodies due to the military-style training of the Zetas. Second, in 2009 the Zetas separated from the Gulf Cartel, allegedly due to refusal of the latter to

meet the demand for more participation in the drug business of the former. As mentioned by several analysts, before this critical year, the Gulf Cartel allowed the Zetas to engage in kidnappings, extortions and *cobro de piso* (right-of-way tax) as a "raise" in their salaries. Consequently, as the Zetas became a drug cartel on their own, they continued with these criminal activities against the civilian population. Finally, the metropolitan area of Monterrey became a contested territory between Héctor *"El Negro"* Saldaña and the Beltrán Leyva Organization. Though at the beginning *"El Negro"* Saldaña used to work for BLO, the conflict arose when he took by force San Pedro Garza García, decided to commit kidnappings and extortions (activities that BLO did not want to get involve with) and stole a cocaine shipment (Fernández Menéndez 2012, 212-213). All of the conflicts among these five organized crime groups and the extremely violent performance of the Zetas triggered an unprecedented high level of violence in one of the most prosperous cities in Mexico.

From the aforementioned events, I argue that the following market configuration characterized Monterrey. The market resembled a monopoly in the 1990s; then it changed to an oligopoly after 2000 with the arrival of Sinaloa into the region and remained like this until 2012 with the presence of the Zetas and the Gulf Cartel. After the disintegration of BLO and the capture of "*el Negro*," the dispute remained between the Zetas and the Gulf Cartel. However, in August 2012 the Zetas suffered a split between the fraction of "*el Lazca*" and "*el Z-40.*"

Figure 5.2 Configuration of the Illegal Market in Monterrey 1990-2012[16]



Source: Author's own elaboration

[16] The size of the box reflects the relative criminal organizations' presence in the region.

5.3 State (In) Capacity

The purpose of this section is to analyze the weakness of the state government in terms of its bureaucratic and military capacity. Particular emphasis will be placed on local and state institutions, as well as the main politicians in office during the period of analysis (2007-2012).

The turbulence experienced in 2009 was a consequence not only of the confrontations among organized crime, but also of the electoral process to renew the Governor and the mayors of the 51 municipalities of Nuevo León and the widespread corruption of the police forces. José Natividad González Parás (PRI) was the Governor of Nuevo León from 2003 to 2009. In October 2009, Rodrigo Medina de la Cruz also from the Institutional Revolutionary Party became the new Governor for the period 2009-2015. The National Action Party (PAN) maintained its control of Monterrey with Adalberto Madero as the mayor from 2006-2009 and later Fernando Larrazábal from 2009-2012. In 2009 the PAN also won four other municipalities that are part of Monterrey's metropolitan area.

5.3.1 State Government

The Governor José Natividad González Parás from the PRI held the office from 2003 to 2009. His administration faced serious allegations of corruption and a deep involvement of some members of his office in drug cartels. In March 2007, dead bodies were found with a message in an ice pick saying: "State Attorney General, don't play the fool, this will continue until you stop protecting the people of Hector Huerta, Chapo Guzman and the Barbie pretty boy...especially you (Rogelio Cerda - Lieutenant Governor-),

until all your children are dead […] PS. This is just the beginning" (El-Norte 2007a). Later in July 2007 Rogelio Cerda resigned his position stating there was a negative media campaign against him (García 2007).

But this perception was also shared by the U.S. General Consul of Monterrey who reported this case to Washington confirming the alleged links between public officers and the Sinaloa Cartel:

> Post's (US General Consul) contacts in the law enforcement community have long rumored that Secretary Cerda, the second-in-command in the Nuevo Leon State Government, has been involved in corrupt activities involving Governor Natividad Gonzalez Paras's brothers and members of the Sinaloa drug cartel operating in the state. Local police have confided in Post's law enforcement officers that they have little support from the Nuevo Leon state government. Similarly, they have also said that Attorney General Trevino and the head of the Nuevo Leon State Investigative Unit, Hector Santos, are completely paralyzed with fear and intimidation (Wikileaks 2007b).

In addition, González Parás received complaints from the private sector about the need to professionalize and clean up the police (García, Charles and Ortega 2009). In September 2008, the state congress approved the new public security law for Nuevo León in which the *Consejo Ciudadano de Seguridad Pública* (Citizen Council for Public Security) was established. The aims of this body focused on creating and organizing proposals related to public security and also to evaluate and follow up on programs and public policies. The second Council's president elected was Carlos Jaúregui, who in January 2009 was also the president of the *Consejo Cívico de Instituciones de Nuevo León* (Civic Institutions Council of Nuevo León) CCINLAC (Galarza 2009). According to its webpage, this organization includes the participation of a variety of civil associations such as non-governmental organizations, private sector organisms, neighborhoods, professionals and assistance associations, and sports and clubs.

As part of the pressure exerted by the civil society to the Governor through the movement *Iluminemos Nuevo León* (Let's light up Nuevo León), in 2008 the state government implemented the initiative "Semáforo delictivo" (Crime Stoplight). According to Nuevo Léon Seguro webpage, this program releases criminal statistics monthly at the state, municipal and neighborhood level. It is seen as an accountability tool that also helps to better decision-making procedures to reduce the criminal activity.

Though during González Parás' administration the new security law was enacted, problems continued to emerge among different police corporations. Particularly striking was the confrontation between local and state police corporations and the federal police on June 9, 2009. Local and state police officers were protesting against the operatives that the federal forces carried out days before that ended with 93 members of the local police forces being arrested (Carrizales 2009).

In terms of victimization rates, Nuevo León and Monterrey experienced a remarkable change. In 2004, Nuevo León's crime rate was lower (8,046 crimes per 100,000 inhabitants) than the national rate (11,246). In addition, 41% of people living in Nuevo León said they felt unsafe, in contrast with Sinaloa and Colima in which 73 and 19 percent, respectively, said they felt unsafe (ICESI 2005b). Among the 13 cities that concentrated around 53% of the crimes committed in 2004, Monterrey was the city with the lowest crime rate, 10.6%, even lower than the national rate of 13%. Likewise, Monterrey was the municipality that showed the best percentage in terms of perception of security and very interestingly, it was also the city that trusted more its local police (ICESI 2005a).

Since 2007 the surveys showed that the levels of security had worsened. In this year, Nuevo León ranked 6th out of the 32 states in Mexico in terms of the crime rate per 100,000 inhabitants (ICESI 2008) The National Survey on Insecurity (*Encuesta Nacional sobre Inseguridad* ENSI) conducted by INEGI also showed that during 2009, 36.8% of the population surveyed in Nuevo León said they received "deficient" or "very deficient" treatment when presenting a complaint to the local law enforcement agency (*Ministerio Público*); whereas, 22% said they received a "good" or "excellent" service. In a remarkable contrast, in Yucatán, one of the safest states in the country where no one said they received a very deficient attention, 24.7 % received deficient attention while 49.2%, almost half of the people surveyed, stated that they received good or excellent attention (INEGI 2010). These numbers show that during the last year of Natividad González Parás, one third of the population in Nuevo León had a poor perception about the performance of law enforcement institutions. At the national level, the local law enforcement institutions are the worst evaluated with 56.6% of the population saying the *Ministerios Públicos* have a low effectiveness or no effectiveness at all (INEGI 2010).

Thus, the new Governor Rodrigo Medina de la Cruz from the PRI (2009-2015) received a state that had already experienced an important weakening in the levels of security. This crisis was reflected in the continued changes that the State Department of Public Security suffered during his administration. Five different persons held the position in a period of five years. Two out of the five secretaries had been civilians and the rest had a military career. From 2009 to February 2011, two civilians were in charge of the public security in Nuevo León. After this date, three generals were in charge:

Jaime Castaneda Bravo, Javier del Real and Alfredo Flores Gómez substituted as head of the Department (Mendonza-Luna 2014).

Medina's administration also faced important allegations of corruption. On February 20, 2012, the chief administrative official of Apodaca's prison, Gerónimo Miguel Andrés Martínez, was removed from his position due to his alleged responsibility in the jailbreak of 30 prisoners in addition to another 44 that were killed. He had already faced charges of corruption during his position as chief administrative official in Santa Martha Acatitla Prison in Mexico City (Cepeda 2012). Despite these allegations, Governor Rodrigo Medina appointed Andrés Martínez. It was later revealed that Miguel Andrés Martínez, along with other prison officers, received money from the Zetas to facilitate the escape of the prisoners and carry out the assassinations against members linked to the Gulf Cartel (Cepeda and García 2012).

All of these problems were reflected in perceptions of the security environment in the state. In ENVIPE 2012[17], 17.9% said they strongly trusted the state police in Nuevo León in a notable contrast with the navy and army, which received 82.7 and 79% of trust, respectively. In terms of law enforcement agencies, 48.7% of the population said they trusted the *Ministerios Públicos* little or nothing at all (INEGI 2012b).

Governor Rodrigo Medina presented the project of the new Police Force in May 2011 with the aim to start its operations in September of the same year. According to Jorge Domene, the spokesman in security matters, the objective was that the new police force substituted the soldiers that had been deployed in the state. *Fuerza Civil's* budget was estimated in 500 million pesos ($33 million USD) for salaries and benefits (García

[17] According to the methodological note in ENVIPE 2012, the information was collected from March 5 to April 30, 2012.

2011). The so-called *Fuerza Civil* includes the collaboration of the private sector, local universities and the state government. As of today, the training of new police officers takes place in the new *Universidad de Ciencias de la Seguridad* (University of Security Sciences). More than 2,500 officers have been recruited (El-Norte 2012b).

In a personal interview, Professor E (Mexico City, July 2014) said that this civil force has nothing of "civil training"; rather it is more like a military-style corporation. In fact, training is carried out by the Ministry of National Defense (SEDENA), the Superior Academy of Public Security (belonging to the Federal Ministry of Public Security) and the University of Security Sciences (*Universidad de Ciencias de la Seguridad*)" (Gobierno del Estado de Nuevo León 2011, 159).

The University of Security Sciences was created with the sole purpose of professionalizing the police corporation. Therefore, police officers are trained in a variety of subjects which are related to law, criminology, communication, psychology, police administration, computer science, physical training, ballistics and police tactics, among others. The U.S. government has also participated in teaching courses on police survival and law enforcement and the community. In addition, the university is also responsible for training the municipal police corporations in the state (Gobierno del Estado de Nuevo León 2011, 164-165). According to Guerrero (2015), thanks to the highly professionalized model of *Fuerza Civil*, the state of Nuevo León can rely on an effective and trustworthy corporation trained to prevent common crimes as well as to be able to react in risky situations. Police salaries are higher than the average and they receive a series of benefits for their families such as scholarships, health insurance and housing aid in neighborhoods intended for police officers only.

Another important consequence of the establishment of the new Civil Force has been its ability to increase people's trust and to encourage them to report crimes. But, according to Alfonso Verde, head of the Nuevo León Citizen Security Council, "The new police officers were good at patrolling, military-style, through the streets, but 'they don't make contact with the population.' Nor are they charged with investigating crimes, a task still reserved for the state prosecutors' office" (Fausset 2013). In addition, since the implementation of the *Fuerza Civil,* the army presence has substantially decreased. The military units that used to patrol Monterrey have been reduced by 80% (Mural 2012).

In the same interview, Professor E argued that the private sector had presented the project of *Fuerza Civil* to Governor Medina and that he did not have much of a choice but to accept it. Actually, "six of Monterrey's biggest companies put their human resources staff at the disposal of government to develop the recruiting and screening protocols and to devise the career path and incentives to draw in applicants" (Fausset 2013). This activism shows the importance of the civil society and the business sector in the improvement of the security environment in Nuevo León and Monterrey. This participation is unique in this region and has had a direct impact on the professionalization of the police in the state. The role of the private sector will be discussed in detail in section 5.4

5.3.2 Local Government

The attack on the Casino Royale in October 2011 that left 52 people dead involved the former mayor of Monterrey, Adalberto Madero (PAN 2006-2009). The corruption of the local security forces during his administration, along with the inability of the government to implement effective control, catalyzed episodes of violence. It was during these years and due to a policy promoted by President Vicente Fox, that the local government granted (questionable) authorizations to establish gambling houses (Fernández Menéndez 2012, 221-227). Moreover, Adalberto Madero apparently received a monthly percentage from casino revenues and $2.5 million USD in 2006 for his campaign from the Rojas brothers (José and Arturo Rojas) who were considered the largest casino operators and allegedly had ties to the Beltrán Leyva Organization (Wikileaks 2009a).

In 2007, the chief of Monterrey's transit police renounced his position due to allegations that he was directly involved in extortions from citizens during alcohol operatives. In April 2009, the local newspaper *El Norte*, reported that members of the transit police collected 10.5 million pesos per month (around $700 million USD) in extortions. In addition, the mayor was accused of misappropriation of municipal funds. In 2008, the Federal Audit Office demanded the devolution of 212 million pesos ($15 million USD) that were underused by his administration. In 2010, the State Audit Office found irregularities in the municipal finances for 34 million pesos ($2.5 million USD) (Estrada 2011). Furthermore, the business community released a public statement accusing Madero and his collaborators of engaging in extortion practices against the construction, commercial and service industries by requesting money in each of the several administrative processes (Tapia 2008a).

The general U.S. consul in Monterrey, Bruce Williamson reported: "we have heard reports of drug cartels directly communicating with apparently honest local police, indicating some level of official tolerance of narcotics trafficking activity." This directly alludes to an event that happened on August 22, 2007, in which armed men entered a jail in San Nicolás, part of Monterrey's metropolitan area, and forced the policemen to release a prisoner, who was later killed. "The brazenness of this assault speaks volumes about how local police are intimidated" (Wikileaks 2007a).

The next mayor of Monterrey, Fernando Larrazábal also faced allegations of corruption. Videos were released in which his brother Jonás Larrazábal is seen receiving significant amounts of money inside some casinos. Jonás Larrazábal said that the money was a payment for his selling of *Oaxaca*-style cheese to the casinos' owners. This case was known as the "quesogate." It seems that while Fernando Larrazábal used to fight against some irregular casinos, the municipal authority closed others. Thus, Jonás Larrazábal extorted the latter ones so they could operate again (Fernández Menéndez 2012, 226-227).

Local officials have been also linked to organized crime activities. In March 2010, the navy arrested Rogelio González Heredia, el Roy, who was the Chief of the Alcohol Department in Monterrey. This area is in charge of granting authorization of *giro negro* (illegal) establishments. According to the state government, there was a dispute between the Zetas and the Gulf Cartel for controlling this business in order to be able to sell their drugs (Campos Garza 2012). One month later, 107 out of 700 police officers of Monterrey were fired due to human rights complaints and because they did not pass the vetting procedures (EFE-News 2010a) Therefore, it is not a surprise that 47.5% of people

in Monterrey said they trusted the local police little or nothing at all (INEGI 2011b). It is important to mention that the state police and the local police oversee public security in Monterrey in 2/3 and 1/3, respectively, thus, the police state presence has grown in the municipality (El-Norte 2012a).

The case of Mauricio Fernández Garza, mayor of San Pedro Garza García, deserves special attention. Although these events did not take place in Monterrey, as mentioned previously San Pedro Garza García belongs to the Metropolitan Area of Monterrey. The actions of Mayor Fernández Garza also illustrate the alleged collusion between organized crime and the local government.

In 2003, when Mauricio Fernández from the PAN (who later would become Mayor of San Pedro Garza García from 2009-2012) was running for Governor of Nuevo León, he met with members of the Beltrán Leyva Organization. They brought suitcases full of money to contribute to his campaign looking for Mauricio Fernández's promise to ignore the Sinaloa-BLO drug-trafficking activities in the state (Osorno 2013, 82). This event shows first that the Sinaloa Cartel was deeply committed to fight for this area against the Gulf Cartel not only by establishing their residence in the region but also by trying to corrupt high-level politicians.

As we have seen, the competition among criminal organizations and the apparent support by the state and local governments in favor of one group increased the levels of violence. The state and local authorities have faced serious allegations of corruption, extortion and misappropriation of funds. In addition, in most of these cases, the police forces had to be dismantled in some municipalities, and the army or the navy had to intervene. As a response, the government strengthened the state police through the

creation of the civil force with the support of the private sector. In the next section, the military capability in Nuevo León and Monterrey will be analyzed.

5.3.3 Military Capacity

Several joint operatives between the army, navy and the federal police took place in the state of Nuevo Leon as a response to the violence generated by the drug cartels. In February 2007, in a Security Council meeting, the Minister of National Defense (SEDENA), General Guillermo Galván Galván stated that 2,035 soldiers were sent to the region for an Operation called Nuevo León-Tamaulipas (Michel and Vicenteño 2007) As stated by SEDENA, "these operations will be maintained for indefinite periods under an inter-institutional scheme with the participation of the three levels of government" (SEDENA 2009, 106).

Between 2007 and 2008 the apprehensions and drug seizures increased and with it the retaliation by the organized crime units. In October 2008, eleven members of the army were murdered in Monterrey in a matter of six days. The perpetrators used *kailbil*-style forms to kill them. Each body found had between 15 and 35 injuries made with knives (Tapia 2008b). By the violent form of the killings, it is presumed that they were carried out by the Zetas.

In August 2010, the business community, through different associations (Caintra, Coparmex and Ccinlac) demanded an increase in the number of troops from the army and the navy in the state. Moreover, they also demanded an urgent purging of the local police force from the state government (Reforma 2010b). Thus, not surprisingly in November 2010, the joint operation for the Northeast (*Operación Coordinada Noreste*) took place. It

involved the deployment of members of the army, the navy and federal police along with an emphasis in a stronger coordination between state and federal forces (CNN-México 2010).

During President Felipe Calderón's administration, the navy took a more active role in the combat against organized crime. In December 2009, the marines carried out an attack against members of the Zetas in a ranch located near el *Cerro de la Silla.* The purpose of this operative was to capture Ricardo Almanza, "*El Gori,"* the chief of the Zetas in Monterrey who was presumed responsible for the death of retired General Juan Arturo Esparza García who was in charge of García's municipal local police. The battle lasted 45 minutes with civilians injured and killed (Barría 2009). From this episode Javier Oliva, a security expert in Mexico stated that "the extensive use of the army force and the soldiers produce what is called equipment exhaustion, thus it needs to be replaced and refreshed and the navy –though with only 20 thousand members– could carry out important operatives" (Reforma 2009a).

Aside from the expected erosion of the army's capacity due to the continuous confrontation with organized crime, there have been allegations of the unwillingness by the army to carry out operatives against key drug cartel members. The U.S. General Consul in Monterrey conveyed to the State Department that despite having information on the location of "*El Gori*," the Mexican army refused to act:

> In Nuevo León, the public has applauded the army, with many business and civic leaders noting that over the past eighteen months it has been the only local institution capable of directly confronting the cartels. In this case, despite having intelligence as to Ricardo Almanza's location, army officials declined to take action, claiming his hideout was too well fortified. In contrast, after navy officials learned of his whereabouts, they sent the marines to arrest him - the first such marine action in the state. The army was apparently unaware of the marines' activities until they called the army for support during the operation. Afterwards, army generals complained to Post [US General Consul] that the navy action had made them look ineffective. (Wikileaks 2009c)

In November 2011 the navy captured five members of the Zetas, and among them was the alleged criminal "*El Charly*," who was in charge of the Zetas payroll in at least 10 municipalities, including Monterrey. The other members arrested used to rent properties and acquire vehicles for the criminal group (EFE-News 2011a).

The army and the navy have effectively carried out many arrests against organized crime, particularly the Zetas. The problem is that when the navy withdraws from a specific region, the crime increases again. This was sustained by local congresswoman Imelda Alejandro de la Garza (PAN), who emphasized that after the navy arrived in certain municipalities in Nuevo León, the criminals stopped fighting for the *plazas.* Nevertheless, "the same day that the navy left, the extortions and kidnappings started all over again. […] in Anáhuac the robberies and extortions against stockbreeders have intensified too. This is a scenario that we haven't seen in two years" (Ramírez 2013b).

In addition, in October 2012, for the first time in history, a member of the navy, Admiral Augusto Cruz Morales, was appointed as the local Secretary for Security in Monterrey. Two other naval officers were assigned to the local Transit and Alcohol Departments along with an additional 18 naval officers for the administrative areas (Campos Garza 2012). It is also interesting to notice that members of the army took over the local security departments of other municipalities in Nuevo León, such as Escobedo and García (Reporte-Índigo 2012).

As previously shown, the military operations started to take place in 2007 and with them, the number of causalities also increased. The cases of Nuevo León and Monterrey have made evident the conflicts among governmental agencies, particularly

the army and the navy. It is also interesting to note that parallel to the creation of *Fuerza Civil*, the municipal government of Monterrey decided to appoint members of the navy to security posts. This shows a combination in which the bureaucratic as well as the military capacity has been strengthened in Monterrey.

5.4 Civil Society

According to a report from Human Rights Watch, members of the army and navy are associated with deaths and disappearances in Nuevo León. There have been serious irregularities in the investigations of these cases carried out by law enforcement institutions. Also, in many cases, the military court draws cases and do not carry out a deep investigation, which protects the soldiers that have committed human rights abuses against civilians (Human-Rights-Watch 2011).

The study by Silva Forne, Pérez Correa and Gutiérrez (2011) ranks the use of force employed by each security agency (federal policy, army and navy) in confrontations with presumed members of organized crime. From 2008 to 2011 the navy had the highest rate regarding use of force with 34.5 followed by the army and the federal police with 13.8 and 1.4, respectively.[18] These numbers show that for example, in the case of the navy, for every 34 "opposite civilians" killed in a confrontation, one member of the navy died. This would also represent on the one hand, the effectiveness of each security agency in combating allegedly drug-traffickers. On the other, it also shows the excessive use of force implemented against civilians. Moreover, during 2010 until May 2011 the states of Nuevo León and Tamaulipas presented around 60% of the civilians

[18] These numbers represent the proportion of the total number of civilians deceased over the total members of the navy, army or federal police deceased.

dead in confrontations with the army (Silva Forne, Pérez Correa and Gutiérrez 2011, 12-16).

The Citizens in Support of Human Rights center in Monterrey (*Ciudadanos en Apoyo a los Derechos Humanos*, CADHAC) monitors a close count of the disappearances that have taken place in Nuevo León. "Since 2009 to 2014 it has registered 1,249 missing persons, from which 26% correspond to enforced disappearances directly carried out by public servants, while 74% were allegedly carried out by organized crime" (CADHAC 2014, 15). However, the report also mentions that the years 2010 and 2011 show the highest numbers of forced disappearances, which correlates with the most violent years. For example, there have been "two cases of mass kidnappings of 40 to 50 young Mexicans during raids on working class districts in Monterrey in July 2010 and a string of individual cases over the past four years, often of men aged between 18 and 20 years old" (Emmott 2011). It is believed that they are taken to other parts of the country to work for organized crime.

In a personal interview with social activist A from Monterrey (Mexico City, May 2014) she showed more skepticism about the success in reducing the levels of violence. Even though the business community has participated in social and improvement of public spaces projects, they haven't been involved in victims of disappearances programs. "Perhaps they [the private sector] pay attention to the people that have been kidnapped or that have disappeared from the elite, but have not showed a willingness to look and see the person from the middle class that lost his patrimony by paying a failed rescue, or from the low classes which are in a permanent risk of being recruited by the organized crime." She stated that the importance of Nuevo León in terms of energy is the

reason why the industrial sector has invested money and resources to regain stability in the region.

The perception of the private sector regarding the security environment has been captured in the survey to companies carried out each year by INEGI known as *Encuesta Nacional de Victimización de Empresas*, ENVE. At the national level, Nuevo León shows the worst numbers for a security environment for the private sector. For example, in 2011, Nuevo León was among the five states with the highest crime rate per business unit (4.1 in average). Sinaloa and Morelos had the highest crimes rate with 5 and 4.3, respectively. Another important indicator is the one related to the possession of arms by the perpetrator. At the national level, from all the crimes committed in 2011, in 45.5% of the cases the perpetuator carried a gun. In a sharp contrast, Nuevo León showed the second highest number with 75.3% of the cases just after Sinaloa with 77.1% in which the delinquent carried a gun. Therefore, it is not surprising that in Nuevo León 93% of business units said they perceived the state to be unsafe. In a sharp contrast, only 31.1% of the companies in Yucatán shared the same perception (INEGI 2012a).

In terms of the evaluation by the private sector of security agencies, 83 and 75.2% of the companies surveyed in Nuevo León said they strongly trusted the navy and the army. The worst entities evaluated were the law enforcement agencies (*Ministerios Públicos* and *Procuraduría de justicia*) and the Municipal Police with 6.4 and 6.3 percent of trust, respectively. Not surprisingly, the Municipal and Transit Police are considered the most corrupt security agencies in Nuevo León (INEGI 2012a).

Due to these high levels of violence, *regiomontanos* (people from Monterrey) immigrated to the U.S., particularly families with substantial economic resources.

According to the National Association of Realtors (NAR), México is the third country from which people are buying houses in the U.S. The five cities that Mexicans have showed more interest in buying houses are San Diego, San Antonio, Laredo, El Paso and Houston. Texas represents 65% of the Mexican homebuyer preferences (NAR 2014, 30), the state that shares the border with Nuevo León. People from Monterrey prefer the closest cities like McAllen, Austin, Houston, Dallas and especially San Antonio. The Mexican diaspora in San Antonio has reached such an important number that a residential zone called Sonterra now is known as "Sonterrey" (Contreras and Zamora 2013, 125).

Though some of the families immigrated to the US, a part of the private sector decided to stay and start working with the state and federal government to improve the security environment. Lorenzo H. Zambrano, who at the time was the chief executive of Cemex, a global company in building materials, posted a message on Twitter: "He who leaves Monterrey is a coward. We have to take back our great city" (Emmott 2011). The private sector has also a great capacity of lobbying and a direct dialogue with the federal government. Just four days after the attack to Casino Royale, the CEOs of the most important companies in Nuevo León (Vitro, Alfa, Frisa, Proeza, Xignux, Lamosa y Cemex) met with president Felipe Calderón (Cantú 2012).

Leaders of the business sector in Monterrey have shown a close connection with important federal officials. Jorge Tello Peón, an important security adviser to Felipe Calderón, and former head of CISEN (Mexico's national intelligence agency), was appointed as Cemex's security director and collaborated closely with Governor Rodrigo Medina since October 2010 (Malkin 2012).

But the importance of the business community to address security issues in Monterrey does not only rely on its ability to talk directly to officers at the federal government, but also on its capacity to work with civil society on projects that involve the collaboration with local authorities. According to Conger (2014) in Ciudad Juárez and Monterrey, the private sector groups have been successful in pressing the government on security issues because they have articulated their demands through "umbrella organizations" which are "organizations that brought together business leaders and business and industrial organizations with civic organizations that included medical associations, human rights defenders, academics, and other activists" (174).

After 2008, with the *Let's Illuminate Nuevo León* movement, the private sector and the civil society started to launch a variety of initiatives. The Crime Stoplight project took place, which monitors crime statistics released by the state attorney general's office. The information's scope is at the municipal level; thus it constitutes a mechanism to hold the state and local government accountable for progress, trends or setbacks (García 2010).

In addition, the *Consejo Cívico* (Ccinlac) was reconstituted. As previously mentioned, this group includes not only business associations, but also a variety of civil groups such as neighborhoods and sports clubs: "The *Consejo Cívico* has become a legitimate spokesperson for the needs and concerns of civil society. The group serves as a bridge for building dialogues between the private sector and civil society organizations and the government and business" (Conger 2014, 194-195).

Not only did the private sector join forces with civil society to monitor the implementation of governmental security programs, but also it provided valuable

financial and human resources. For example, with the advice of human resources departments of the biggest companies in Monterrey, the recruits of *Fuerza Civil* were given "business-style psychometric tests" (The-Economist 2013). For example, the company Axtel provided a call center for the recruitment process, along with other corporations that donated equipment, even patrol cars (Conger 2014, 193).

A third important initiative implemented by the private sector, in particular by Cemex, was the creation of the Center for Citizen Integration (*Centro de Integración Ciudadana*, CIC). As stated in CIC's webpage, this is a web platform in which citizens can report any crime or problem they have witnessed. It includes reports about streetlights, potholes, assaults, or any other service that involves the participation of the government. Taking advantage of technology, citizens can send their report through Twitter, e-mail, mobile apps and SMS.

Two important advantages of this initiative are: first the fact that this web platform, called *Tehuan,*[19] is connected with the police corporation, thus they receive all reports in real-time. Second, citizens have access to a map of Monterrey's area in which they can identify the most dangerous or conflictive zones and the type of crimes that are committed more frequently in a particular street/intersection/park, etc. This tool not only serves as a bridge between society and government, but also it has empowered the citizens to openly denounce any suspicious activity (including police officers). By facilitating filing reports, the *cifra negra* (crimes that are not reported to the authority) can decline. In addition, this platform gives the option to make the report incidents anonymously, protecting citizens' identities.

[19] Tehuan means "us" (*nosotros*) in Náhuatl, which refers to the collaboration between citizens and government (CIC 2015).

A forth citizen initiative is the *Alcalde, ¿cómo vamos?*, (Mayor, how are we doing?) which according to its website, is a project launched by 40 social, academic and business organizations that established 10 concrete actions to be met by the mayors that took office in 2012 in Monterrey and the other nine municipalities that are part of the metropolitan area. These actions encompass three topics: 1) Security, 2) Transparency and, 3) Public Spaces. The 10 actions are: depuration of the local police, rewards to honest police officers, three officers per 1,000 inhabitants, analysis of crime trends, elimination of casinos, access to municipal public finances, improvement of public spaces with new programs, reforestation, more sports facilities and a bi-monthly meeting between the civil society and the mayor.

5.5 Conclusions

Violence in Monterrey is a consequence of three main facts: confrontation among criminal organizations; actions of the army against members of organized crime; and retaliation of drug traffickers against the army. The configuration of the illegal market supports the hypothesis that an oligopolistic market structure will present higher levels of violence. The internal changes in a larger cartel and the incursions of other organizations changed the configuration to an oligopoly.

Second, due to this violence, the federal government sent the military to address the problem, which as pointed out by Ríos (2012a) became another a source of violence due to the confrontations. In a third phase, the assassinations against soldiers increased as a form of retaliation by organized crime. As seen in this period, criminal organizations started to target public officials, particularly the chiefs of the security departments of the

municipalities. It seems that, due to the competition among cartels, the security officers were killed because they were protecting the rival cartel. The narco-messages left in some of the crimes confirmed this hypothesis. What is true is that the illegal activities of organized crime cannot be carried out without the explicit or tacit participation of local and state governments.

Local state capacity deteriorated in terms of financial autonomy and law enforcement efficiency with a decrease of 7% and 18%, from 2007 to 2012, respectively. However, in the last year from 2011 to 2012 the law enforcement efficiency indicator improved by 18%. In general, Monterrey was in a relative better position than the other two cities that will be discussed in Chapters 6 and 7. Nonetheless, the local government's weakness was lessened with the professionalization of the police force through the creation of *Fuerza Civil.* This supports the hypothesis that with the strengthening of state capacity, the levels of violence decreased. Monterrey represents a case that around 2009-2010 changed from an oligopoly market-intermediate state capacity to an oligopoly market-strong state by 2012.

A key and perhaps unique feature in Monterrey and Nuevo León is the strong and active participation of the private sector in reducing the levels of violence. Not only did they pressure the government, they invested their own financial and human resources in programs and projects that addressed the insecurity problem in the region. Perhaps the weight of the business community in Nuevo León is not seen in any other part of the country.

Chapter 6. Veracruz

Veracruz, as mentioned in Chapter 1, traditionally had a low homicide rate. However, from 2007 to 2012 it experienced an increase in organized crime homicide rate of 507%, 2011 being the most violent year. Following the national trend, from 2011 to 2012 Veracruz had a 78.29% reduction in the organized crime homicide rate. Thus, in order to explain the changes in the levels of violence, I will first present an overview of the city followed by a discussion on the configuration of the illegal drug market. Second, I will analyze the state capacity in the different levels of government, including the military action. Finally, I will discuss the role of civil society and provide conclusions.

6.1 Overview

The state of Veracruz is located in the eastern region of the country sharing a coastline with the Gulf of Mexico. It has the largest port in the country and the main entrance to the Gulf of Mexico, for containers traveling maritime routes to the U.S., Europe, Canada and South America. It is estimated that 30% of Mexico's maritime cargo is moved through this port, as well as 66% of the vehicles that are commercialized by sea (World-Maritime-News 2014) hence, its strategic importance. Veracruz is also the third state in oil production with 2.7% participation from the total country production. Almost 90% of Mexico's oil production takes place offshore in the seawaters of Campeche and Tabasco (Ramírez 2013a).

In 2006, Veracruz was ranked 7th (out of the 32 states) in efficient factors of production sub index (capital, labor, energy and land). Interestingly, for the same year,

Veracruz ranked 6th in the efficient government sub index that evaluates the capacity of the state to create, develop and retain companies and, thus, generate employment and social welfare (IMCO-EGAP 2006). In terms of the economy, the GDP has grown slowly in recent years. It is estimated that it only increased by 0.7% in 2013 placing Veracruz in the 18th position out of the 32 states in terms of GDP growth. The state ranks third in population within the country, and 22nd in GDP per capita, with $8,531 USD (the national average is $10, 632). In 2011 it registered a drop in formal employment, but in the year 2012, it experienced an annual increase of almost 6% (Banamex 2014, 203).

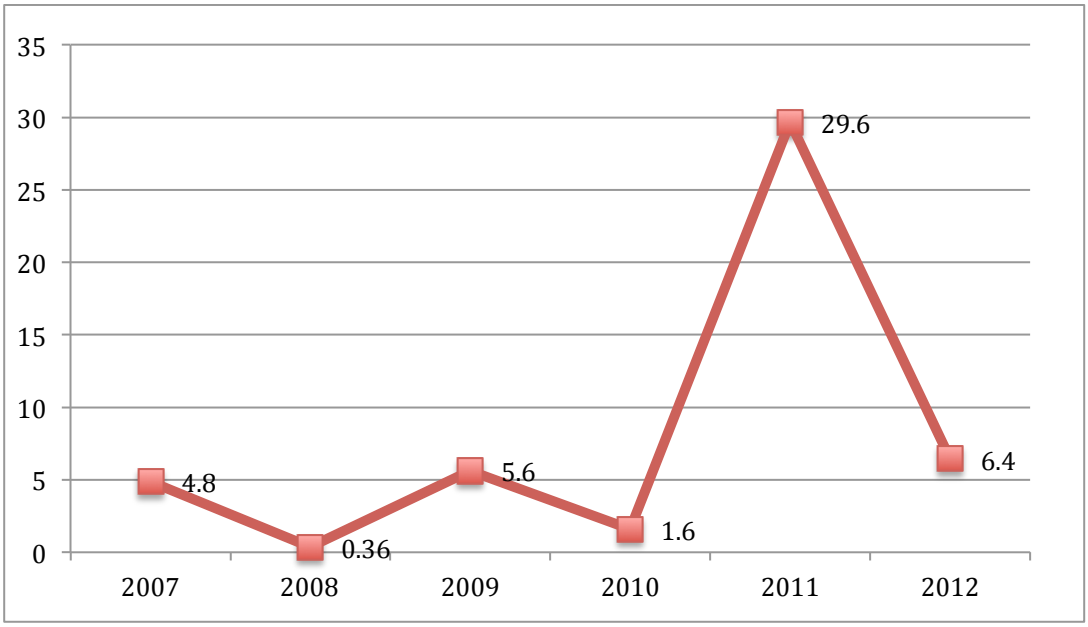
Though in economic terms the state was well positioned with respect to others, according to the IMCO, in 2012 Veracruz was the state that fell most positions in the competitive index due to poor performance in the Law sub index: "The homicide rate doubled, the kidnapping rate increased five times, the robbery rate increased by 24% and it had 20% of all the journalists killed or disappeared in the last five years" (Masse 2014). In 2006 Veracruz ranked 31st in the law enforcement sub index, which evaluates the level of corruption, the judicial system effectiveness, among others (IMCO-EGAP 2006, 50). This shows that the very defective performance of law enforcement institutions has been a recurrent problem.

Regarding the port of Veracruz, this city was ranked 16th out of the 77 most urban cities in the country in 2010. The index ranks the ability to attract and retain economic investments (IMCO 2014). From 2008 to 2012 the city advanced 17 positions in the rank, mainly to its improvement in the political system sub index[20] (IMCO 2014, 121). As shown in Figure 6.1, the city presented relatively low levels of organized crime violence

[20] As noted by the IMCO, between 2008 and 2010 the state of Veracruz changed a legislation that increased the governmental period of the mayors (now its for four years).

until 2011 when the rate increase almost to 30, then in 2012 it substantially decreased. Thus, the purpose is to understand why the spike took place in 2011 and how the local government was able to reduce the violence the following year.

Figure 6.1 Organized Crime Homicide Rate in Veracruz, 2007-2012



Source: Own calculation based on *Base de Fallecimientos* and *SESNSP*

If the Casino Royale attack was the last straw in the case of Monterrey, the same occurred in Veracruz on August 14, 2011, when hit men who were chased by soldiers launched a grenade in the Aquarium killing one person and injuring three more (two of whom were children). Though this was not an isolated event (many took place in previous years), its relevance stems from the fact that this attack was carried out against civilians in the tourist area of the city. Only one month later, the city would live through another atrocious episode: 35 bodies were abandoned in one of the major roads in the Veracruz-Boca del Río area (Fernández Menéndez 2012, 198).

Just as in Monterrey, in Veracruz the attacks against authorities and civil society by organized crime started to be more conspicuous years before, 2011. On April 13, 2007, an armed group attacked General José Arturo Quintero Ortega who at that time was the chief of the transit department in the municipality of Veracruz (Garduño-Rivera, Ibarra-Olivo and Dávila-Bugarín 2013). Only one month later, hit men killed the bodyguards of Enrique Peña Nieto's children during a visit to the city's tourist pier. Two days later, a box with a human head and two grenades were left outside a military station along with the following message: "We are going to continue, even with the arrival of the Federal Forces." The message was signed by the Z-40 (El-Norte 2007b).

In May 2008, an armed group entered the prison "Duport-Ostión" located in the municipality of Coatzacoalcos and released six prisoners who were allegedly linked to the Zetas-Gulf Cartel. This group entered the prison facilities wearing official uniforms of the Federal Agency of Investigations (*Agencia Federal de Investigaciones,* AFI) (Torres 2007). As in the case of Monterrey, local authorities in Veracruz have also faced problems with prisoners being released by presumed members of organized crime. This illustrates another sign of weak state capacity in the penitentiary system.

Due to the alarming levels of violence and the number of crimes that were committed using arms, the municipal government along with members of the army carried out a program with the purpose to exchange guns for home appliances (Lev 2008b). In 2008, according to a report by the Ministry of National Defense, the municipalities of Veracruz, Xalapa and Minatitlán registered the highest number of arms in the state (Notimex 2008b).

On June 27, 2009, the chief of the Inter-municipal police of Veracruz-Boca del Río zone disappeared. The operative sub-coordinator of the same police agency was killed along with his family when an armed group shot and launched grenades into his house (Lev 2008a). In the same month, the chief of Veracruz's port administration was kidnapped. It was estimated that between December 2005 and November 2009, 36 police officers were killed in the state (EFE-News 2009).

Due to this wave of violence, the tourist industry – a very important source of revenue for the municipality – recorded an important decline. The city of Veracruz registered a 32% decrease in the arrival of tourists (Carvajal 2009). According to Erick Suárez, president of the National Chamber of Commerce (*Cámara Nacional de Comercio*, Canaco), 2011 represented the worst year historically "Not even with the 2008 economic crisis, not even with all the last economic crises we have had the current situation" (Meré and Ramírez 2010).

The increase of violence experienced an astonishing rise in 2011. According to the Trans-Border Institute, "Veracruz presents an especially dramatic example, with drug-related homicides rising from an estimated 113 organized crime homicides from 2007 to 2010, to 888 such killings in 2011 alone. As a result, Veracruz moved from being the 16th most violent state in Mexico to the 6th place, in just one year. No other state experienced such a dramatic increase in the ranking of organized crime homicides in 2011" (Molzahn, Ríos and Shirk 2012, 16). If this was the situation in the state, the city was not left behind. It was noted that the city of Veracruz experienced in 2011 almost one confrontation or homicide per day (EFE-News 2011d). These events show how public security deteriorated since 2007. Some episodes against the civil population took place,

and attacks against local authorities, particularly in charge of public security, became more recurrent. The private sector started to experience a drop in revenues.

6.2 Organized Criminal Market

In terms of the dynamics of organized crime in the state, drug-related violence in Veracruz was detonated due to three main reasons: first, the struggle between the Gulf and the Zetas for controlling the territory, second, the unusual use of violence employed by the Zetas and third, the incursion of the Sinaloa Cartel into the state through the group known as the *Mata Zetas* (Zetas killers) that were part of its subsidiary Jalisco New Generation Cartel (*Cartel de Jalisco Nueva Generación*, CJNG).

In order to understand the vortex of violence in Veracruz it is imperative to analyze the organizational structure of the Gulf cartel. First of all, a crucial characteristic of this group is that its leadership was never exerted through family ties: "The fact that the leaders of a criminal enterprise share family connections among them is important because it guarantees the presence of one of the fundamental variables that explain the duration of an organization: trust and loyalty" (Valdés Castellanos 2013, 247). This is a clear difference with the more traditional drug cartels (Sinaloa, Juárez, Tijuana). Thus, the Gulf Cartel had to find a way to enforce agreements and punish traitors.

The second key characteristic of the Gulf Cartel's structure is its contrast to a toll cartel (like Juárez and Tijuana). This means that they never collected fees from other organizations in order to transport shipments to the U.S. Rather, the Gulf Cartel controls the whole state of Tamaulipas and all the crossing border points to the state of Texas, which makes control over the territory more complicated. In addition, the cocaine that the

Gulf Cartel transported arrived through the sea from Guatemala to Veracruz and the ports of Tampico-Altamira. Therefore, the group needed to expand their protection chain so the shipments could be smoothly transported by land through the states of Chiapas, Campeche, Tabasco, and Veracruz to finally arrive in Tamaulipas. Later, they also opened a route that started in Guerrero and Michoacán and crossed up to the neighboring states of Coahuila and Nuevo León and from there to Tamaulipas. Thus, its operation throughout the country explained the necessity to hire a greater number of personnel.

In 1999, Osiel Cárdenas Guillén became the leader of the Gulf Cartel after killing his partner and friend Salvador "Chava" Gómez. Due to his apparent paranoia of being killed by any of his employees, Cárdenas Guillén decided to create a personal squad that would function as his bodyguards. The purpose of this group would be also to act as informants of the activities by his closest collaborators inside the organization. Subsequently, the Zetas were created (Valdés Castellanos 2013, 251-252).

Arturo Guzmán Decena who was known as the Z-1, deserted from his position as lieutenant in the *Grupo Aeromóvil de Fuerzas Especiales* (GAFE), a special unit in the Mexican army to found the Zetas. According to several analysts the name is related to the code that the army uses in their radio communications (InSight-Crime 2014a). Guzmán Decena hired 50 former Mexican soldiers who belonged to this unit or to other battalions. In addition, they hired *kaibiles* from Guatemala. Thus, by 2003 Guzmán Decena had successfully recruited 300 Zeta members. Then, the local recruitment started with the use of billboards (*mantas*) with these messages: "The operative group the Zetas needs you, solider or former soldier." "We offer you a good salary, food and benefits for your family: do not suffer hunger and abuses ever again." These generated the need to

implement training camps in different states and Veracruz was one of them (Váldes Castellanos 2013, 255).

Due to the existence of the Zetas, the Gulf Cartel was able to expand its activity also into the Pacific route. The Lázaro Cardenas port in the state of Michoacán represented an invaluable opportunity to take control over the cocaine and methamphetamines shipments that were delivered through this access point. In addition, Michoacán had been traditionally a producer of marijuana and opium, which allowed the Gulf Cartel to enter the market of other drugs besides cocaine. Thus, the Zetas made an incursion into this important *plaza*[21] (Valdés Castellanos 2013, 254).

Though the fragmentation between the Zetas and the Gulf Cartel which took place between 2009-2010, it is worth remembering that the Gulf Cartel experienced internal disputes as shown in Figure 5.3 due to the capture of Osiel Cárdenas in 2003 and his extradition to the U.S. in 2007. Thus, the tensions for the leadership escalated during those years but materialized in 2009. Presumably, the rupture took place after the Zetas demanded more participation in the drug-trafficking business. At the beginning Osiel Cárdenas did not have the resources to pay for such a private army (salaries were around $2,000 USD a month), so the Gulf Cartel allowed the Zetas to finance their salaries through extortions, kidnappings, etc. (Váldes Castellanos 2013, 260). But these kinds of activities were far less profitable than just one shipment of cocaine. Therefore, the Zetas knew that the participation in the drug business was going to yield significantly more revenues.

[21] Though this event is not explored in the present study, it is relevant to mention that due to the presence of the Zetas in Michoacán, President Felipe Calderón decided to deploy the army in this state on December 2006. In addition, *La Familia Michoacana* emerged originally as a counterbalance to the Zetas in that state.

The Zetas split from the Gulf Cartel and started to contest the territories that were controlled by the latter, particularly Tamaulipas, Nuevo León and Coahuila. However, the Zetas did not have to fight only against the Gulf Cartel, but also with the Mexican Army. From July 26 to August 4, 2011 the Ministry of National Defense implemented the operative *Lince Norte* (Northern Linx) with the aim to weaken the operative and financial operations of the drug cartels working in the states of San Luis Potosí, Coahuila, Nuevo León and Tamaulipas. In particular, the Zetas received a hard blow since many high-level leaders were captured or killed; 196 alleged criminals were presented to the corresponding authorities along with 260 vehicles, 188 communication devices and 14 properties, among others (Valdés Castellanos 2013, 257).

According to Benítez Manaut, the increase of the violence in Veracruz was a consequence of the governmental combat in Tamaulipas against the Zetas (Reforma 2011). This is related to the so called "cockroach effect" which means that when a region is squeezed (i.e. due to governmental pressure), the criminals will move to another city or region (Bagley 2012). This is how the Zetas were pushed to incursion more deeply into the neighboring state of Veracruz. Additionally, according to a report from the Federal Police, in 2010, the Zetas became the criminal group with the most presence in the country –in 22 out of the 32 states– just followed by the Sinaloa Cartel which had presence in 20 states while the Gulf Cartel controlled only 6 states (Animal-Político 2011). Ríos and Dudley (2013) and Valdés Castellanos (2013) agree that the Zetas have been successful in expanding their activities across the country due to its new business strategy.

One of the innovations introduced by the Zetas, was its ability to successfully extort local gangs thanks to its military training. In this way, they were able to diversify their illegal activities. They operated in the following way: in a key city located in the transit route, for example, "they identified the local car thief, kidnapper, house thief, immigrant smuggling bands, they demanded a tax or fee so the local bands could carry out their activities in exchange for protection. If they refused to cooperate the leader was killed and the Zetas would take control over the group" (Valdés Castellanos 2013, 258). In addition, they were forced to sell their drugs and to demand fees from small businesses of "*giro negro*" such as casinos, table dances, cantinas, etc. In addition, *la Marca Zeta* (the Zeta brand) as mentioned by Ríos and Dudley (2013) conveyed the idea of terror and thus, people knew the consequences well if they did not side with them.

The diversification of the illegal activities of the Zetas involved kidnapping, extortion and piracy, but also human trafficking and oil theft. The kidnapping and assassination of 72 migrants originally from Central America that were found in San Fernando, Tamaulipas in August 2010 is just one example of the brutality exerted by the group. According to a *coyote* from El Salvador who was involved in smuggling the Salvadorian migrants to México, he spent the money that was going to cover the Zeta fee and as a consequence, he did not pay them. As revenge and in order to send a message, the Zetas killed the 72 migrants. In his words: "If you do not pay, you do not cross. Migrating through Mexico has a fare, and it is collected by the Zetas" (Jiménez 2011). Traditionally, Veracruz has been used as a route to enter into the U.S. because it is the shortest way. The cities of Coatzacoalcos, Acayucan and Tierra Blanca are key migrant cities that are part of the transit route (Martínez 2014). According to the Attorney

General's Office (PGR), the majority of the "security houses" in which the Zetas operate to kidnap and extort the immigrants are located in the state of Veracruz (EFE-News 2011c).

In July 2010, five people who worked for the Zetas and used to extract oil from the PEMEX pipes in Veracruz were captured. Forty-five percent of the total number of oil thefts in the country takes place in this state (Jiménez, Garduño, and Brito 2010). It was estimated that from 2004 to 2010 the organized crime subtracted $300 million USD from the oil theft activities. In the same month, five workers at PEMEX were abducted along with two others from a contractor (EFE-News 2010b).

Thus, the Zetas took over the state of Veracruz and started to participate in the aforementioned illicit activities. They started to inflict terror to the population. Due to their successful expansion throughout the country, they became a strong competitor for the Sinaloa Cartel. These events allowed the situation to escalate up to the point that on September 20, 2011, 35 bodies (presumably from the Zetas) were dumped in a very important avenue in Veracruz. Interestingly, the meeting that gathered state and federal attorney generals and judicial officials took place in that city on the next day.

The key of this atrocious event was the arrival of a new group into the state: the *Mata Zetas.* They claimed the torture and assassination of the 35 Zetas. In a video uploaded on "You Tube" on July 27, 2011 (two months before the dumping of the 35 bodies) the group addressed their message to Veracruz and to the country. In that video, 25 males appear with the faces covered and carrying weapons. They specified that they belonged to the *Cártel de Jalisco Nueva Generación* and that they were fed up with the kidnappings and extortions against Veracruz families carried out by the Zetas. They

denounced that the local and state police were working for the Zetas, even the Governor Fidel Herrera a.k.a. "Z-1". They further stated: "This is the time. We invite the *pueblo Veracruzano* to denounce the Zetas to the Sedena and the Navy; they are the only ones that until now, in this state, have not yet been corrupted with money offers […] We also want to congratulate all other groups that maintain a fight against the Zetas, their enemies are our friends" (El-Blog-del-Narco 2012).

According to Fernández Menéndez (2012) the entrance of the *Mata Zetas* on the stage was related to the desire of Joaquín *"El Chapo"* Guzmán to eliminate the Zetas. Though the Sinaloa Cartel has been very violent,[22] they never engaged in crimes that directly harmed civil society, such as kidnappings, extortions, *cobro de piso* or human trafficking like the Zetas have been doing. In addition, and as mentioned previously, the Zetas became a very powerful criminal organization that was contesting the influence of the Sinaloa Cartel across the country.

In a personal interview, a Naval officer (Veracruz, June 2014) stated that when the CJNG decided to contest the *plaza*, it was clear that they had come from a very different part of Mexico: "They were tall, stocky and fair-haired, quite different from the traditional *veracruzano*. They had new armament. It was evident that they were previously trained and came from other states." This fact could suggest that indeed, the *Chapo* Guzmán hired people originally from states in the western region of México (Jalisco, Sinaloa, Durango) who matched the physical features described by the marine.

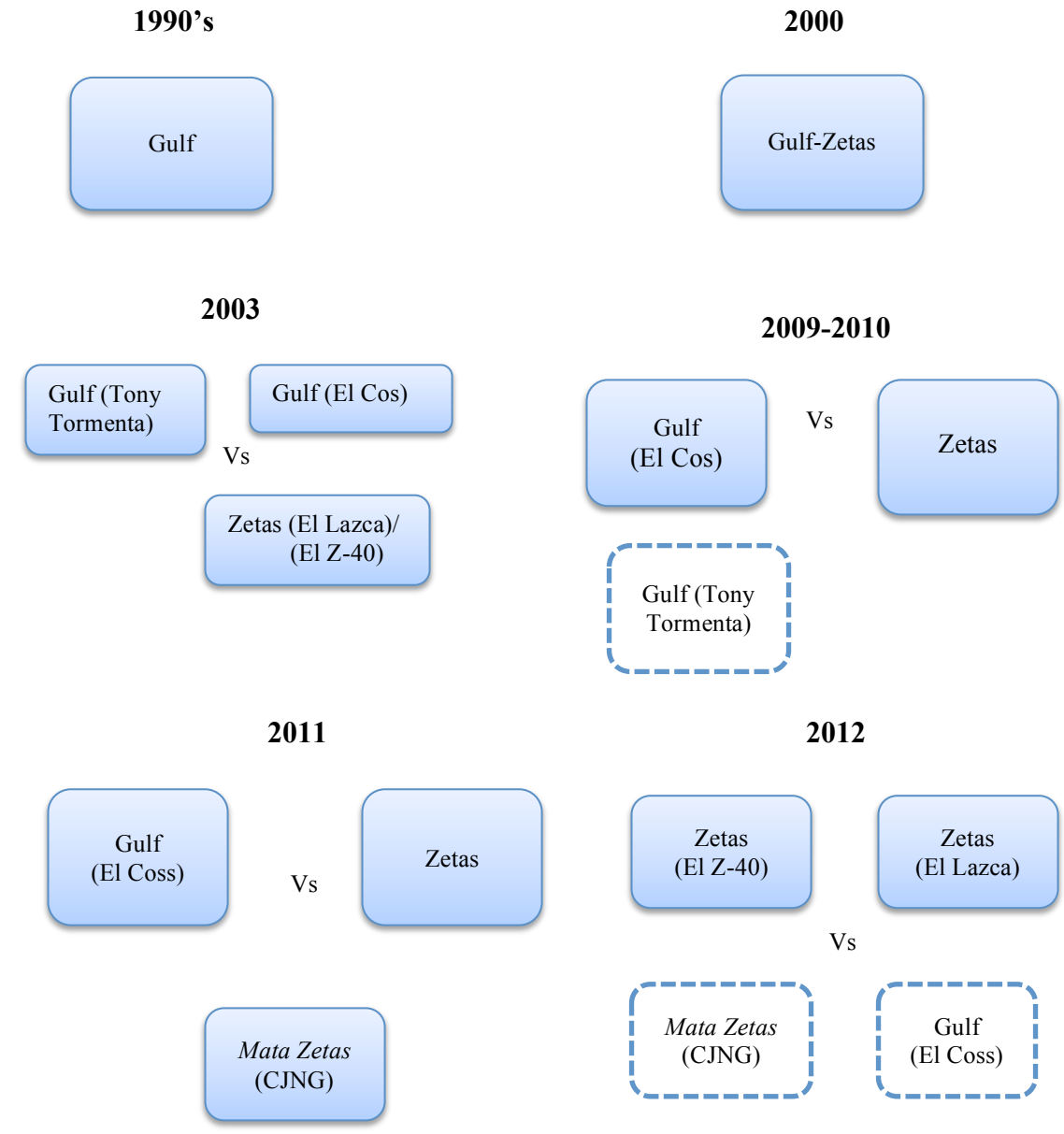
Moreover, the *Mata Zetas* resembled the idea of the paramilitaries in Colombia. The *paras* emerged in the 1980s as a reaction to the violence exerted by the Medellín

[22] One just needs to look at the high homicide rate in the states of Sinaloa, Durango and Chihuahua where the "Golden Triangle" –a key zone controlled by the Sinaloa Cartel– is located.

Cártel but also against the presence of the FARC and ELN. The *paras* had the support of public officials and even businessmen and landowners, but their most important ally was the Cali Cartel (Aguilar 2010). Even though there is no evidence that the *Mata Zetas* had links to any governmental agency, a security public officer from Veracruz used the same phrase "the enemy of my enemy is my friend" suggesting the idea that the Zetas became the government and the *Mata Zetas'* same target. It seems that the government could have allowed the presence of this group due to "similar" objectives. Though there is no evidence for that: the fact is that the presence of the *Mata Zetas* was a clear factor in magnifying the violence: "[…] Veracruz experienced an increase in drug related violence by the middle of 2011, making the total number of killings nearly 350, whereas in 2010 it was closer to 50" (Molzahn, Ríos and Shirk 2012, 25).

Figure 6.2 summarizes the changes throughout the years in the configuration of organized crime in Veracruz. Since the 1990s the Gulf Cartel had a monopoly over the region. Then, since 2009, with the split of the Zetas from the Gulf Cartel, the market resembled an oligopoly with confrontations between these two organizations notably increasing. As the market started to show signs of fragmentation and the number of criminal organizations multiplied in the region, the contestation over the *plaza* became more evident. The fight for Veracruz intensified with the arrival of the *Mata Zetas* in 2011. However, by 2012, their leader in Veracruz was captured (Animal-Político 2012a). The Zetas also suffered an internal fragmentation with "*El Z-40"* taking away the leadership from "*El Lazca*." (Animal-Político 2012b) In September 2012, "*El Coss"* was arrested, creating even more fragmentation in the market.

Figure 6.2 Configuration of the Illegal Market in Veracruz 1990-2012[23]



Source: Author's elaboration

[23] Dash lines indicate a criminal organization that disappeared.

6.3 State (In) Capacity

Veracruz is one of the ten states in México that has not yet experienced a political alternation in the state government. At the national level, Veracruz concentrates the 3rd largest electoral census, thus its importance for the PRI to maintain political control. Though, at the local level, the National Action Party has won important municipalities and seats in the congress (Fernández Menéndez 2012, 201). In this section, the main political and public policies in security during the period of analysis will be discussed.

6.3.1 State Government

According to Fernández Menéndez (2012), federal intelligence reports point out that, state authorities during the administration of Governor Fidel Herrera Beltrán (2004-2010) from the PRI allowed the Zetas to operate freely in Veracruz. It is even said that the Governor used to boast the peacefulness in the state –though related to the establishment of a monopoly and the fact that no other organization was contesting the *plaza* (Fernández Menéndez 2012, 199). The active participation or the indifference of the government let the Zetas operate in the state. During Herrera Beltrán's administration, kidnappings, robberies and extortions intensified. It was clear that only one group had the monopoly over the state and also there was not much interest to make this violence public (Fernández Menéndez 2012, 203).

A report from the U.S. Embassy, on Fidel Herrera's activities stated that some political analysts were "frustrated by his politically motivated moves: meddling in the operation of universities, seeking control of the state's newspapers, and buying off taxi drivers and other influential constituencies" (Wikileaks 2009d). Also, *Forbes* magazine

identified Fidel Herrera as one of the 10 most corrupt Mexican politicians (Forbes 2013).

In an investigation that took place in Austin, Texas, Carlos Hinojosa, the Gulf Cartel's accountant, testified that in 2004 he sent $12 million USD to the electoral campaign of Fidel Herrera. He also stated that once Herrera took office, the Zetas were able to control the state and that the Z-14 was the leader in the region until 2007 (Reforma 2013).

Aside from the supposed linkages between the Governor and the Zetas, law enforcement and security forces have shown a very poor performance in the last years. In 2009, from the total crimes reported, 36.7% of the people said they received a deficient or very deficient service from the *Ministerio Público*, while 29% said they received a good or excellent service. In the case of Veracruz, the most corrupted agencies identified by the population were in first place the transit police and second, the agents from the *Ministerio Público* (INEGI 2010). In a clear contrast, 44.6% said they trusted the navy and 41.1% said the same about the army (INEGI 2011b).

Thus, just as Nuevo León, Veracruz also began a process of militarization, by appointing former or active soldiers in high public security positions. Between 2004 and 2010, three Generals were in charge of the Secretary of Public Security. In addition, mostly all the regional delegates and the coordinates of the inter-municipal police forces were members of the army (Zavaleta Betancourt 2012, 65-66).

Fidel Herrera and the army inherited inter-municipal police forces that historically have faced many challenges regarding jurisdiction and resources. But he emphasizes that the problems emerged since the institutionalization of this kind of police force. They had an overload of duties and the implementation of the program faced resistance with

municipal political alternations (Zavaleta Betancourt 2012, 67-68). The arrival of members of the army to key positions in the inter-municipal police force did not stop the problems, and even worse, "the militarization of its leadership, was seen by medium rank officers as a political imposition, which generated an informal space in the decision taking procedure which compensated the low salaries, in an environment in which the crimes were growing, particularly the ones related to organized crime" (Zavaleta Betancourt 2012, 68).

Similar to Monterrey, Veracruz experienced protests against the presence of the army in the state. On February 17, 2009 around 300 people blocked four different tolls. They demanded the withdrawal of the military due to the constant abuses committed against citizens (La-Crónica 2009).

In addition, in 2008 there was a migration phenomenon in which the families of drug leaders (from Tijuana, Ciudad Juárez, Reynosa, etc.) moved to cities in Veracruz due to the governmental strategy pursued by the Federal Government that pushed them to relocate their residencies. Thus, cities like Xalapa, Veracruz, Orizaba and Córdoba became the new refuge for them (Martínez 2009, 177).

The next governor, Javier Duarte (2010-2016) also from the PRI received a state that faced several challenges on the security front. In 2004, Veracruz showed a low crime rate, it was ranked 31st out from the 32 states in the number of victims (ICESI 2005b). Between March and April 2011, a few months after Duarte took office, 64.8% of the population said they felt unsafe living in Veracruz. In a sharp contrast, only 26.6% people in Yucatán said they felt unsafe (INEGI 2011b).

What it is interesting to note though, is that the spike in violence coincided with the change in the state governorship. Javier Duarte started his administration on December 1, 2010. As pointed out by Fernández Menéndez (2012) Duarte's administration has been unfortunate in many aspects, but since the beginning it was clear that he wanted to pursue a strong commitment to reinstate security in Veracruz (203-204).

In October 2011, the federal and state governments implemented the operative "*Veracruz Seguro*" which also established the *mando único policial* (single police command) under federal authority. This operative consisted of three main elements: an increase in the federal presence with the army and the navy; a closer collaboration between federal and state governments; and the reconstruction of the local justice and law enforcement institutions (El-Informador 2011). It also included the complete dissolution of the municipal police forces. At that time Veracruz had only 4,000 police officers at the state level and all the local police was infiltrated by organized crime. The establishment of this plan was done in a timely manner in order to stop the deterioration of public security (Sousa Oliva and López-González 2010, 233-234). In 2011, Veracruz was the third entity to receive the largest amount of the Federal Fund for the Public Security of States with $341,876,124 Mexican pesos –around $23 million USD– (Presidencia de la República 2011b, 22).

The results of this operative in just three months included: the detention of 1,928 alleged criminals, the reduction in homicides, denounced extortions and reported robberies, by 62%, 64% and 51%, respectively. According to Admiral José Luis Vergara, "The majority of the results achieved had been able thanks to the citizens' trust to report

organized crime activities. [In these three months] we have received 4,000 anonymous crime reports" (Gómora and Ávila 2012). Due to the operative's success, in April 2012, the Governor of Veracruz, Javier Duarte, decided to implement the third joint operative against organized crime in the state, known as "Córdoba Seguro" after, "Veracruz Seguro" and "Orizaba Seguro" (El-Sol-de-Córdoba 2012).

In September 2012, 11 months after the implementation of the operative *Veracruz Seguro*, the Ministry of the Navy and the state government decided to renew the agreement that the navy would continue to coordinate the federal forces in the state and would remain in charge of public security in the port of Veracruz through the *policía naval* in the Veracruz-Boca del Río area. During these 11 months, the navy captured 212 members of the Zetas and 55 from the CJNG (Fernández Menéndez 2012, 204-205).

Parallel to the deployment of the military in Veracruz, in May 2011 the state received $2 million USD in order to implement the *mando único policial* (single police) statewide (Aranda 2012). However, the proposal that the state government centralizes the police force of all the municipalities have encountered resistances from some mayors, arguing that it would represent a setback in the faculties granted to the *municipios* (Torres 2011).

The process of restructuring the state police force in Veracruz included the vetting and clearance procedures for all the members. From January 2010 to October 2014, it was registered that Veracruz was the state presenting the largest number of police officers (46%) that failed these tests. Of the 12,595 police officers in Veracruz, 5,818 had to be fired. Sinaloa and Baja California had 41% and 37% of police officers who did not pass the tests (Roldán 2014). This fact shows the alarming level of the poor

professionalization in the state police forces. Though it is not covered in the present study, it is worth mentioning that in October 2014 the state government established the *Fuerza Civil* (like the one in Nuevo León) with 2,000 members, which were trained by the Ministries of National Defense, the Navy, the Federal Police and also by foreign institutions (EFE-News 2014).

6.3.2 Local Government

In the case of the city of Veracruz, the governmental periods coincided with the end of the state administration. Thus, Jon Rementería Sempé, Major of Veracruz from 2007 until 2010 and also from the PRI ended his term at the same time as the Governor Fidel Herrera. This fact would also explain why at the same time that the municipal and state government changed administrations, criminal organizations started contesting the *plaza*, due to the belief that new administrations would not continue with previous pacts.

In August 2008, Rementería announced that local government and federal authorities were investing $4 million USD in surveillance equipment for the city, police training, patrols, armament and bulletproof vests (Notimex 2008a). Though Rementería did not face direct allegations of involvement with organized crime like in the case of the mayors in Monterrey, members of the municipal police faced serious accusations. In fact, four members of the transit police were accused of carrying out kidnappings, extortions and *levantones* for the Zetas. They were linked to the disappearance of the chief of Veracruz's port administration (Reforma 2009c). These cases show that even if the municipal authority invests resources, it is not enough to combat organized crime if there are high levels of infiltration and corruption among police officers.

The deep involvement by the local police with organized crime activities was made evident in December 2011, when the state government fired the entire municipal police of the city, consisting of 800 officers and 30 administrative staff who allegedly had ties with the Zetas (Castillo 2011). This has been one of the most surgical methods to completely get rid of corrupt officers. Thus, the navy took over the public security of the city with 900 marines while the state trained new police officers (Hernández and Guerrero 2010).

If all the municipal police force was involved in illegal activities with organized crime, it is therefore not surprising that in 2010 only 0.9% of the population said they strongly trusted the local police. This is in contrast with the 50% and 34.6% that said they slightly or not trusted at all the municipal police (INEGI 2010). Additionally, the municipal government experienced a significant deterioration. From 2007 to 2012, Veracruz had a reduction of 30% in its financial autonomy. Moreover, in terms of law enforcement efficiency, Veracruz had a 20% decrease in this period. This means that fewer alleged delinquents were convicted from the total processed.

In a personal interview, Professor D (Veracruz, June 2014) from the a local university said that thanks to the presence of the navy the high-profile violence decreased, that is, the organized crime related homicides. However, due to the presence of the navy, criminals moved to near localities (Paso del Toro, Medellín, Soledad de Doblado, Tejería), which are in fact more rural areas. But for him, the violence only changed from high (homicides) to low profile (robberies, extortions, etc).

In Veracruz, the Zetas confronted a well-equipped and professionalized agency. In September 2011, the navy broke up a clandestine communication net in various cities

(including Veracruz and Xalapa) that consisted of high frequency repeaters, power amplifiers, antennas, solar cells and wiring which allowed the Zetas to have an efficient digital communication (SEMAR 2011).

Since 2011, with the beginning of the new administration both at the state and local level, the state government –due to the importance of the port as a tourist and commercial key place– subsumed the security police forces of the city. In a personal interview, an officer from the Secretary of Public Security (Veracruz, June 2014) of the state pointed out that since 2011 there was a dramatic change. All the municipal police forces were infiltrated so the task was twofold: first, clean all the police corporations and second, train and professionalize new police officers (known as *policía acreditable*). In order to achieve the second goal, the state government requested the support of the army and the navy, and so, the new state police officers were trained in the Naval Base of Champotón, Campeche. Thus they received a military training, which for the officer interviewed it was not the most accurate approach because the police forces are design to carry out other kind of tasks. "They should be closer to the citizens, and giving them a military training gives them the skills for confrontations and war, not for preventing crimes and improve the relationship with the citizens." For him this approach was a mistake, due to the lack of control over them afterwards. There is a latent risk that if they desert they can incorporate themselves in the groups of organized crime. The high levels of police desertion in the state represent an alarming phenomenon: "according to the national press, during the last decade 9,016 police officers have deserted in Veracruz, which is an extraordinary number that shows the constant rotation which is far away from high quality standards" (Zavaleta Betancourt 2012, 66).

6.3.3 Military Capacity

The participation of the navy grew during the Felipe Calderón administration. According to the sixth governmental report by the Ministry of the Navy, from September 2011 to July 2012 the navy carried out 26,073 operatives against drug trafficking which represented an increase of 33.3% with respect to the same period in the year prior (SEMAR 2012, 6). As previously mentioned, in October 2011, the federal government implemented the operative "*Veracruz Seguro.*" Its relevance relies on the fact that this is the first joint operative of its kind in which the navy is in charge and coordinates all the rest of the security agencies involved: the Army, the Attorney General Office (PGR), National Security and Investigation Center (CISEN), the Federal and State Police and the state's attorney general.

In a personal interview with Professor E (Mexico City, July 2014), he revealed that the Zetas mistake was to declare war on the marines. In December 2009, after the marines killed Arturo Beltrán Leyva in Cuernavaca, Morelos, the Zetas –at that time allies of the BLO organization– identified the name of one of the marines who died in the confrontation. In retaliation, they entered his home and killed his mother, brother, sister and aunt (Grillo 2011, 19). In addition, in August 2011, four marines disappeared in the port of Veracruz and apparently were abducted by members of organized crime (La-Razón 2011). Veracruz has traditionally represented the home state of the navy. The country's Navy Academy is located in Antón Lizardo, which is 32 km from the port of Veracruz. The role of the navy during past foreign interventions in the port shows the historical and cultural links to the state. Therefore, Veracruz has remained as a symbol of naval territory.

A journalist in Veracruz also shared that the Governor has a personal relationship with the navy, with someone of his family having a position in the Navy. The Governor offered to double the salary of the marines who were willing to go to the port of Veracruz to work public security duties. The agreement signed between the navy and the state government is considered confidential. The details about the personnel who are participating as the local municipal police could not be released in order to protect their life and integrity (INFOMEX 2012).

As previously documented, the navy has shown important successes in the contention of the violence in the city. However, a member of the navy lamented that the weakness of law enforcement institutions limits those achievements. He affirmed "we capture the criminals, we take them to the *Ministerio Público*, and they release them." A note published by the newspaper *Mural* confirmed his statements, in which it was documented that from October 4, 2011, when the operative *Veracruz Seguro* began, until December 31, 2011, "the navy had captured 1,350 suspected criminals. Only 644, 47.7%, were processed and presented to a judge, meanwhile the rest were released. [Furthermore,] 15 people were convicted, which represents only 1% out of the 1,350 alleged criminals captured or 2.3% out of the 644 processed criminals" (García and Jiménez 2011).

Another important achievement, perhaps less visible but highly important is the fact that since the navy took control over public security in the city of Veracruz, the citizens increased their reporting of criminal activities. This was related to the good image and strong sense of trust that the population has for the navy. This represents a key change in the improvement of security, because if there is no report on file, the authority

can not process the presumed criminals, and even if they are captured, they will be released immediately because of lack of reporting.

This shows that public security in Mexico, not only in Veracruz suffers from important inconsistencies in every procedure of the law enforcement chain. It is not enough to have professionalized police agencies. As shown by the work of the navy in Veracruz, the violence could be contained only temporarily and will not last if the *Ministerios Públicos* do not improve their efficiency.

In an interesting collaboration between the military and the police force, members of the state police have accompanied navy tasks in the port of Veracruz. While the navy is in charge of the "hard power," this is to repel confrontations and capture presumed criminals, the state police are in charge of crime prevention or "civil power." This model, according to an officer from the Secretary of Public Security of the state, combines the coercive capacity with the social prevention of violence. But this combination is different across the state of Veracruz. For example, the capital city of Xalapa concentrates more state police officers and it has no naval presence; in contrast Coatzacoalcos has a strong naval presence but virtually no crime prevention police. Interestingly both cities have not been able to achieve the results of the city of Veracruz.

In addition, the marine interviewed also highlighted the differences between the army and the navy: "the army has a more pyramidal structure and the navy has more freedom when carrying out operatives. Moreover, the navy has a strict process of recruitment thus it provides a different education and training, in which the majority of the members are technicians." He also pointed out to the extra income provided by the

government as an incentive and more importantly to the strict norms implemented by the navy: “The marines know that with a minimum fault they are out.”

Among its tasks, the navy coordinates the joint operative *Veracruz Seguro,* in contrast to other joint operatives in which the army and the federal police have taken the lead, like in the case of Chihuahua and Guerrero, respectively. In the case of Veracruz, this coordination consists in deciding which would be the priorities and the targets in the state after a weekly meeting that gathers all the aforementioned security and law enforcement agencies. Another characteristic of this operative is that the navy does not only coordinate all the agencies but also is deployed throughout the state. Parallel to this situation, the *mando único* takes place. This means that the state police are in charge of all the municipal police corporations. In the case of the city of Veracruz, the naval police substituted the inter-municipal police of Veracruz-Boca del Río and therefore it needs to closely work with the state police. In fact, when the naval patrol is sent to a particular location due to a call from a citizen, one member of the navy and one police officer go together.

After the events of September 2011, the state government took a drastic decision by dismissing the local police and requesting the navy’s participation in public security tasks. This model has proven to be successful due to the high professionalized training received by the marines. This agency was able to carry out detentions effectively precisely because it enjoys strong trust from the population. This example illustrates the importance of trusting the local police agency.

6.4 Civil Society

Though there has been an important increase in the number of civil organizations in the state – from 107 in 1998 to 1092 in 2011 – this multiplication has not been translated to a more conspicuous activism. In general, civic organizations maintain a lower public profile, have a minimum influence in governmental entities, keep a very low level of professionalization, and carry out their activities with extreme budget constrains (Hevia de la Jara and Olvera 2013, 177-178).

In the case of forced disappearances, the Movement for the Peace, with Justice and Dignity, led by Javier Sicilia, in 2011 was able to join some organizations that included in their agenda the issue about victims but they did not do it in a systematic or permanent way. There is no a single civil organization in Veracruz that oversees or monitors the performance of the police (Zavaleta Betancourt 2013, 306). What is even more dangerous is the fact that the state government is trying to co-opt civic organizations. The initiative to create a Security Citizen Observatory between the state university and the state attorney general's office runs the risk of loosing impartiality (Zavaleta Betancourt 2012, 69). Thus, there is a lack of accountability that sets the ground for continuing with human rights abuses and extreme uses of force.

The high level of labor and peasant corporatism, which has traditionally been linked to the PRI with a strong political force, weakened the autonomy of civil society. In addition, members see the associations as mere instruments to achieve public office appointments. Thus, the civil society in Veracruz could be characterized as disperse, fragmented, with a strong continuation of historical practices (Hevia de la Jara and Olvera 2013, 183).

Regarding the private sector's activism in Veracruz, the local business is seen as weak because the public sector exercises a major influence in the local market, thus creating a strong dependence on the government. The problem is that governmental companies (*paraestatales*) control the strategic industries in Veracruz such as oil production. In addition, the different business associations in Veracruz lack the unity and cohesiveness seen in other states due to the geographic dispersion within the state of the various associations. Local businesses have lost interest in participating in the associations because there is a wide perception that the leaders have been co-opted by political parties, which has been condemned by the members. Thus, business leaders have avoided actively participating in politics (Hevia de la Jara and Olvera 2013, 173).

An academic from a local university and a journalist agreed that the private sector does not serve as counterbalance to the government as in the case of Monterrey. In Veracruz, the businessmen are highly dependent on the state government. If they complain they do not do it in public. In contrast, in Monterrey the business community are highly critical of the government and they are not afraid of criticizing them in the newspapers.

It is also important to understand the difference between the private sector in the city of Veracruz and Monterrey. In the first case, the tourist and hotel sector greatly compound the private initiative, but in other parts of the state, the petroleum (Coatzacoalcos) and primary goods are the main source of income. In Monterrey and the state of Nuevo León, the industrial sector is predominant. Therefore, the leverage of each type of businessmen community is definitely different in each region.

Another important aspect in the civil society sector is the role played by journalists. Particularly, the alarming records of journalists that have been assassinated in the state deserve special attention. According to the National Commission on Human Rights in 2008, Veracruz ranked 3rd as the state with more journalists killed. In 2011, the state was identified by Reporters Without Borders "as one of the most dangerous places in the world for practicing journalism" (Molzahn, Ríos and Shirk 2012, 19).

Between October 2002 and May 2012, sixteen journalists were killed in Veracruz. The peak coincided with the 2011 vortex of violence experienced in the state. According to the chief of information of the newspaper *Notiver*, "the distrust to the state government is due to its indifference and inefficacy for more than one decade with its worst period during the Fidel Herrera administration." In this sense, journalists have declared that criminal organizations contact them to demand no pictures and no information about any violent event to be published. Some journalists even acknowledge that some of their colleagues were assassinated because they used to work for a particular drug cartel (Herrera 2013).

According to Ríos (2013), journalists are more likely to be killed in municipalities that a) are contested *plazas* by criminal organizations, and b) have presence of criminal organizations of recent formation, like in the case of the Zetas and the splinter groups from the Sinaloa Cartel. The Committee to Protect Journalists ranked Mexico 7th in its impunity index, just after countries like Iraq, Somalia, Syria, and Afghanistan. According to the ranking, Mexico is the most dangerous country in the Americas to be a journalist in which the crime remains unpunished (CPJ 2013).

6.5 Conclusions

The city of Veracruz represents a case in which the violence increased due to 1) a presence of an oligopoly in the region, 2) an alternation in the local and state governments and 3) the deep involvement of the municipal police with organized crime. The relative weakness of the state combine with an oligopoly in the illegal market made Veracruz to have the most violent possible scenario.

In terms of organized crime, Monterrey and Veracruz support the hypothesis that when the illegal market changes from a monopolistic to an oligopolistic structure, the levels of violence rise. In this case, the *Mata Zetas*, presumably belonging to the *Cartel de Jalisco Nuevo Generación* disputed the state with an already ongoing conflict between the Zetas and the Gulf Cartel. Additionally, these two cases highlight a relevant finding: the increase in the levels of violence can be a result of the particular dynamics inside a criminal organization not only related to the kingpin strategy pursued by the federal government.

Second, the political alternation experienced at the state level with the end of Governor Fidel Herrera's term (2004-2010) triggered a series of violent episodes due to the uncertainty brought by the changes in the governorship. This at the same time coincided with alternation at the municipal level. Interestingly, it is in the first year of the new administration when a spike in organized crime related violence is experienced and the presence of new actors such as the *Mata Zetas* began contesting the region.

Thirdly, state capacity was strengthened through the implementation of operative *Veracruz Seguro,* which represents a successful joint operation and the first one of its kind due to the navy leadership in the task force activities. It certainly creates a precedent

and an example of a good coordination among the main security agencies in the country. On the other hand, the arrival of the navy and the substitution of the municipal police of the port of Veracruz professionalized the corporation in charge of public security and the levels of violence decreased significantly. In general, we could categorize Veracruz as resembling an oligopoly market-intermediate structure after 2009 with the split between the Zetas and the Gulf. With the presence of the navy, two situations developed: on one hand the "cockroach effect" displaced organized crime, and on the other, since mid-2011 the Zetas Cartel suffered major setbacks that divided them up into cells. Therefore, by 2012 Veracruz could be characterized as a fragmented market-strong state capacity.

State capacity in terms of financial autonomy and law enforcement efficiency deteriorated under the period of study and did not have a substantial improvement in the last year. However, the presence of the navy strengthened the level of state capacity in the municipality. A key finding in the case of Veracruz is that the navy presence per se is not the solution. Although there has been a deployment of permanent marines in other cities like Coatzacoalcos or Xalapa, it has not been accompanied by the assignment of police officers in charge of crime prevention. Thus, it seems that the success of the city of Veracruz has been in part a combination of "hard" and "civil" power. The federal funds for security programs were maintained at the same amount during the 2007-2012 period. Interestingly Veracruz does not support the hypothesis that when a joint operative is carried out, the level of violence increases. On the contrary, this city contradicts the recent literature on militarization that emphasizes the risks of deploying the military in terms of violence. This represents a case to study more in depth.

Chapter 7. Cuernavaca

As part of Mill's method of difference employed in this research, Cuernavaca represents the case with a different outcome from the previous two cases. Though the three cities had low levels of organized crime homicide rate as explained in Chapter 1, Cuernavaca also experienced a substantial increase of 531% in the levels of violence. However, in contrast with Monterrey and Veracruz, Cuernavaca did not experience a decrease in 2012; instead, the organized crime homicide rate increased 149%. Moreover, the three cities share similar structural characteristics in terms of Gini and Human Development Index and in the three cases the federal government deployed military troops. Therefore, the purpose of this chapter is to account for why despite these cities sharing similar features, Cuernavaca presented a different outcome.

7.1 Overview

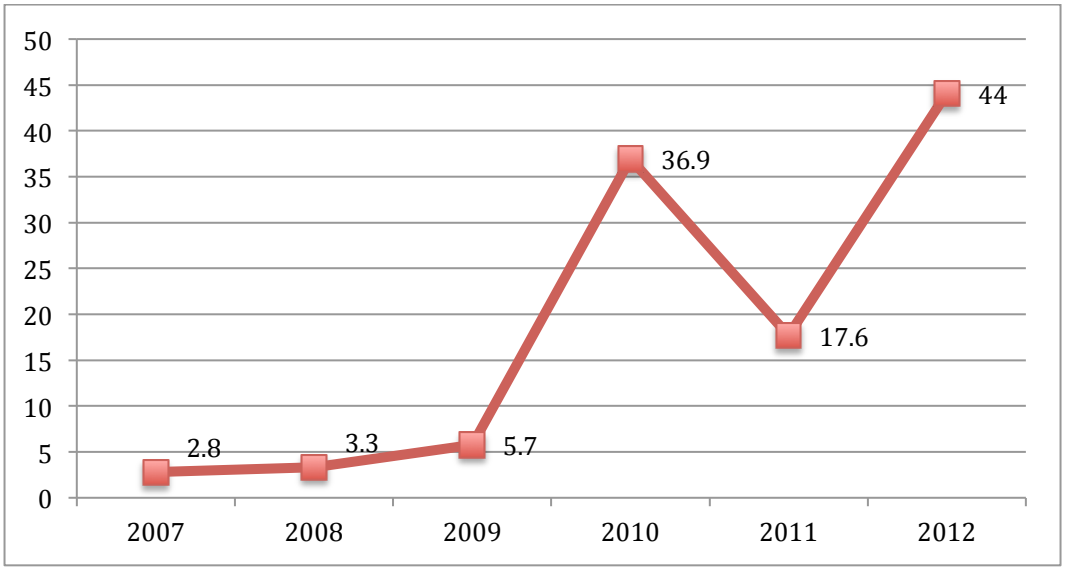
Cuernavaca is the capital city of the state of Morelos. It is located 80 km from Mexico City. Due to its proximity and permanent warm weather, the residents of Mexico City consider it as a vacation retreat. In 2010, 44.5% of tourists who visited Morelos stayed in Cuernavaca (INEGI 2010). In 2001 the state of Morelos was ranked as 13 in the competitiveness index, but by 2006 it dropped to 19 (IMCO 2008). More than 65% of the economic active population works in the informal sector. This number is higher than the national average of 57.9%. The average income of the population in the state is $5,790 USD annually (INEGI 2015).

Cuernavaca has a GDP per capita of $8,222 USD, which is higher than the state average but slightly lower than the national average (Banamex 2014). In 2007, the

municipality obtained 41.3% of their total revenue from their own fiscal effort. This number is quite impressive when compared to the national average of 9.43% for the same year (INEGI 2015). However, in 2012 this number dropped to 28.8%, which represented a decrease of 30% in their own income revenues.

In 2014, Cuernavaca ranked 38th in the general competitive index out of 78 cities evaluated. In contrast, it also ranked 77th in the Law sub-index, just followed by Acapulco. Thus, it is not surprising that, according to the NGO Security, Justice and Peace, Cuernavaca was 47th among the 50 most violent cities in the world in 2011 (SJP 2012).

Figure 7.1 Organized Crime Homicide Rate in Cuernavaca, 2007-2012



Source: Own calculation based on *Base de Fallecimientos* and *SESNSP*

As shown in figure 7.1, in 2007, the organized crime homicide rate was 2.8 per 100,000 inhabitants. By 2012, this number increased up to 44, which means that in only six years, the number of drug-related homicides committed in Cuernavaca increase in 1,471%. Since 2007 the homicides started to increase, with a drop in 2011, but a rise

again the following year. Thus, if the violence in the country started to decrease in 2012, why did Cuernavaca show a different pattern?

In 2012 Cuernavaca remained as one of the 50 most violent cities in the world. It moved from the 47th to the 18th position in only one year (SJP 2013). In 2013, Cuernavaca was ranked the third most violent municipality and finally in 2014 it surpassed Acapulco and was ranked the most violent municipality in the country. In contrast, Monterrey and Veracruz were able to lower their levels of violence so that by 2013 and 2014, Veracruz ranked 115 and 152, and Monterrey ranked 63 and 82 in the most violent municipalities ranking, respectively (SJP 2014, 2015).

Cuernavaca has witnessed several violent events directly linked to the presence of organized crime. Perhaps the most relevant was the detention of Arturo Beltrán Leyva in December 2009 by the marines with intelligence information provided by the U.S. Embassy. This event became a watershed moment in the reconfiguration of the illegal market in the southern region of Mexico. Due to the beheading of the organization, new groups splintered and started a turf war to control the *plaza*. This fight took place in the following months with violent events carried out by these groups.

For example, in October 2009, fifteen dead bodies were found in several locations across the state. Seven of them were found with a message signed by "the chief of chiefs" (Arturo Beltrán Leyva). Five months later, during three days in March 2010, an armed group carried out four incidents in which they burned houses and businesses. In one of them, they left a narco-message: "Edgar Valdez Villareal (Barby) this is how all the properties from authorities, businessmen and public officers that help you in the transportation and drugs selling will end […] Morelos will be clean up from this scourge,

the *plaza* is ours. Attn. The Company" (Gardenia Mendoza 2012). One month later, an armed group attacked the facilities of the Drug-Dealing Department and the headquarters of the Attorney General's Office (Reforma 2010a).

On March 29, 2011 an armed group killed seven people in Cuernavaca. One of the victims was Juan Francisco Sicilia, son of poet Javier Sicilia, who after his son's assassination initiated the *Movimiento por la Paz con Justicia y Dignidad* (Movement for Peace with Justice and Dignity) which will be further analyzed under the civil society section.

On August 24, 2012, two officers from the U.S. Embassy and one marine were attacked on the highway Mexico-Cuernavaca. Members of the federal police, which were without uniforms, attacked the armored vehicle with a diplomatic license plate. Several hypotheses have been laid out about this incident. The most credible is the one that states that the three officers were looking for *El H*, an informant from the BLO that the Americans were looking for. When the U.S. vehicle was detected by the BLO organization, they requested the support of the federal police to install a checkpoint and inspect the vehicle. When the marine did not stop, the persecution began (González 2010).

7.2 Organized Criminal Market

Eduardo Guerrero (2011b) identifies four types of criminal organizations in Mexico: national cartels, toll collector cartels, regional cartels and local gangs. In contrast to Monterrey and Veracruz, Cuernavaca was contested by the South Pacific and La Barbie cartels (regional) and some other local organizations (*Los Rojos*, *Guerreros Unidos*). As

we will see later, this fragmentation in smaller and less powerful organizations would have a significant impact in the levels of violence (homicide, extortions and kidnappings) in Morelos and particularly in Cuernavaca. In addition, the local drug consumption in resort destinations like Cuernavaca and Acapulco has been identified as another explanation for the increasing levels of violence. Apparently, these two cities represent valuable *plazas* due to the high levels of drug consumption (Ajenjo 2012).

Since the end of 2009, most of the violence in Cuernavaca has been linked to the fragmentation of the Beltrán Leyva Organization, and thus it is worth analyzing the evolution of this organization since its partnership with the Sinaloa Cartel. In 2001 when "*El Chapo"* Guzmán decided to strengthen his organization, he assigned three important tasks to the Beltrán Leyva brothers: 1) be in charge of a part of the cocaine transportation from Colombia, 2) reinforce the armed structure of the organization, and 3) guarantee the protection from politicians, police and public officials at the highest level of the government. Thus, BLO's influence and power grew considerably during this period (Valdés Castellanos 2013, 287-288). To improve the armed force of the organization, the BLO hired Edgar Váldez Villareal a.k.a "*La Barbie*," which had as his first task to displace the Gulf and the Zetas from Nuevo Laredo. Even though he failed, his reputation as a brutal criminal increased due to his ability to perform similar barbaric acts as the Zetas (Valdés Castellanos 2013, 287).

However, a series of betrayals and retaliations between *"El Chapo"* and the Beltrán Leyva brothers during 2008 would make the latter emerge as an independent organization. In January 2008 Alfredo Beltrán, the youngest of the five brothers, was detained. When Arturo Beltrán asked for help from *"El Chapo"* to rescue his brother, he

refused to carry out the operation. Later, in April 2008, Archivaldo Guzmán, *el Chapo's* son was released from prison, which increased Arturo's, suspicions that *"El Chapo"* had made a deal with the federal government. Since then, BLO separated from Sinaloa Cartel and Arturo Beltrán Leyva established himself in Cuernavaca as the leader of the organization (Pachico 2013).

Then BLO with Edgar Váldez, "*La Barbie*," started to consolidate their operations in Morelos, Guerrero and Estado de México. Yet, the organization stood by itself for a short period of time. The assassination of Arturo Beltrán Leyva at the end of 2009 triggered internal fights for the control of the organization. Thus, the South Pacific Cartel (*Cártel del Pacífico Sur*) led by Hector Beltrán Leyva, "*El H*" emerged in opposition to the organization directed by "*La Barbie*." Other smaller organizations also contested the *plaza* such as the Company and the Resistance (La-Crónica 2010).

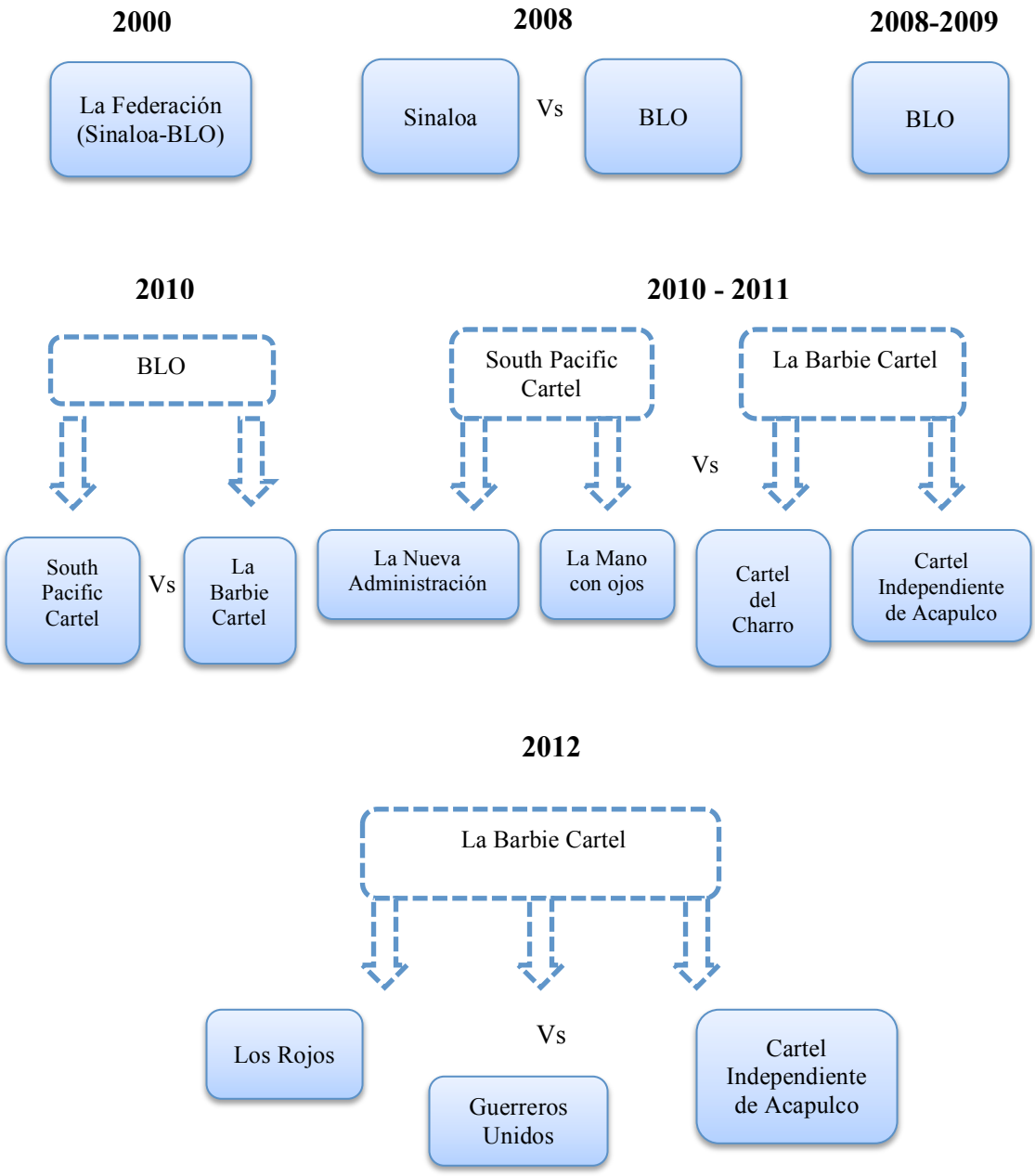
The federal government has weakened the structures of both, the South Pacific and the Barbie Cartel. In August 2010, Edgar Valdéz "*La Barbie"* was captured in *la Marquesa*, a locality in Estado de México. In September, the security chief of Héctor Beltrán was detained. In April 2011, Miguel Ángel Cedillo González, the leader of La Barbie's cartel in Morelos was captured (Rodríguez-Luna 2014, 241-242) Since then, what has been left of BLO has decided to ally with the Zetas (InSight-Crime 2014b).

In addition, and due to the constant volatility suffered by BLO, smaller criminal groups have emerged in the region. With the South Pacific cartel's declining, two new local groups emerged: *La Mano con Ojos* and *La Nueva Administración*. Furthermore, the Cartel *Independiente de Acapulco* and the *Charro* Cartel also arose (Morales 2011). Thus, between 2010 and 2011 there were six organizations fighting to control the region.

The Charro Cartel disappeared quickly in November 2010 with the arrest of "el Charro," Valdez's father-in-law (Guerrero 2011b, 30). *La Mano con Ojos* also dissolved in January 2012 (Herrera 2010). In addition, it has also been documented that due to the pressure exerted by the federal government in the neighboring states of Michoacán and Guerrero, the criminal organizations have migrated to the state of Morelos (Reforma 2012). This has been the case of two new organizations that started to dispute the territory in Morelos: *Los Rojos* and *Guerreros Unidos*. Both organizations have been identified as remnants of *La Barbie* Cartel (Villegas 2014).

Figure 7.2 shows the evolution of illegal market structure. After the rupture from the Sinaloa Cartel, and before December 2009 when Arturo Beltrán was killed by the marines in Cuernavaca, BLO exercised the monopoly in the region. Yet this rupture brought important confrontations but mainly in the state of Sinaloa (Santos 2014). After December 2009, the organization broke in two, disputing the trafficking of cocaine, methamphetamines, marijuana and opium and also the local markets of Acapulco and Cuernavaca. By 2010 again, the detention of "*La Barbie"* brought even more fragmentation to a region already heavily disputed, having at least six organizations. More recently, since 2012 the cells *Los Rojos* and *Guerreros Unidos* have been also fighting in the state of Morelos.

Figure 7.2 Configuration of the Illegal Market in Cuernavaca 2000-2012[24]



Source: Author's elaboration

[24] Dash lines indicate a criminal organization that disappeared.

7.3 State (In) Capacity

In this section different aspects of state capacity will be evaluated: the bureaucratic – state and local governments – and the military capacity. The following analysis will show that Cuernavaca represents the type of municipality that started to deteriorate through the years, from 2007 to 2012, facing several cases of corruption.

7.3.1 State Government

The violence and organized crime activities have been present in Morelos more noticeably since the administration of Governor General Jorge Carrillo Olea[25] (1994-1998) from the PRI. The Governor – who renounced his position in 1998 – faced the demand of the local Congress to leave his office due to the violence and the strong evidence of corruption among his collaborators. There was a formal accusation against the state attorney general Carlos Peredo and the former chief of the judicial police force, Jesus Miyazawa, for their presumed involvement in illegal activities such as kidnappings, robberies and murders (de Mauléon 2010). In addition, the Governor was accused of having ties with the drug lord, *El Señor de los Cielos,* Amado Carrillo (Robles 1998).

Since 2008, several high level public officers were linked to organized crime activities. In October 2008, the state Attorney General of Morelos, Andrés Dimitriades was assassinated by organized crime (Dillon and Pyes 1997). In May 2009, the Attorney General's Office apprehended Luis Ángel Cabeza de Vaca Secretary of Public Security in the state due to his ties with the Beltrán Leyva Organization (BLO). In September 2014 he was finally accused of organized crime activities and convicted to 10 years of prison

[25] Jorge Carrillo Olea was the first Director of the Center for Investigation and National Security (CISEN) and the first anti-drug czar in Mexico.

(Diario-de-Morelos 2014). But not only was BLO capable of infiltrating the state government of Morelos, but also at the federal level. In 2008, Noé Ramírez, the former Mexican anti-drug czar, was accused of having received money from the Beltrán Leyva Organization, allegedly $450 million USD per month (Rodríguez-Luna 2014, 243). In what is known as *Operación Limpieza*, several high-level public officials at the federal level were found having links to organized crime. Noé Ramírez was one of them, but also Víctor Garay, a former high commissioner of the Federal Police; Rodolfo de la Guardia and Ricardo Gutiérrez, former directors of Interpol (Reveles 2012, 172). These examples show the unstoppable corrupt power of criminal organizations, particularly, the Beltrán Leyva.

Also, it has been also documented that Genaro García Luna, the Secretary of Public Security (2006-2012) during the Calderón administration and known as the "Police of the President" met with Arturo Beltrán Leyva in October 2008. This meeting was possible after an armed group intercepted García Luna's bodyguards in the Cuernavaca-Tepoztlán road. After the bodyguards were taken down, the Secretary mysteriously disappeared for four hours (Reveles 2012, 131-133).

According to Granados Chapa, one explanation for the increase in violence in Morelos is the "confusion between criminals and the ones in charge of prosecuting them." At the end of the 90s, the chief of the ministerial police was imprisoned due to crimes committed and covered up; the chief of the anti-kidnapping unit was himself a kidnapper. And, more recently, when Arturo Beltrán Leyva was killed in one of his houses in Cuernavaca, the marines found in a notebook the bank account number of Governor Adame (Pachico 2013). These are just some examples of how there is an

extensive and deep involvement of state authorities in protecting and allowing organized criminal activities to take place.

Morelos has not only been a state with high visible cases of corruption in the government, but also the population poorly rates the treatment and the quality of the public services in the state. For example, according to the *Encuesta Nacional de Calidad e Impacto Gubernamental*, in 2013 Morelos was the second state that presented the highest percentage of people stating that the corruption in the state was very frequent with 56.1% (Michoacán had the highest percentage with 58.6). In contrast, only 18.8% of people living in Querétaro said the cases of corruption were very frequent (INEGI 2013b).

7.3.2 Local Government

In 2004, Cuernavaca had two out of ten households (19.5%) in which people had been a victim of a crime. This is higher than the national average (13%) but the city was below other more violent cities like Tijuana, Culiacan, Mexicali and even Acapulco. In Cuernavaca six out of ten people that denounced the crime to the local law enforcement agency said nothing happened after their report. Around 53% of the people said they felt unsafe living in Cuernavaca. This number falls in between two extremes: Ciudad Juárez and Monterrey, in which 80% and 30.2% said they felt unsafe living in that locality, respectively (ICESI 2005a). This number shows that, by 2004, Cuernavaca was located in the middle in terms of criminal activity and violence. Though, the panorama would change dramatically in the following years.

In 2011, among the most violent Mexican cities, Cuernavaca was ranked 12, while Veracruz and Monterrey 9th and 11th, respectively. Thus, in 2011 Cuernavaca was less violent that the other two (SJP 2012). However, in just one year Cuernavaca ranked 4th, while Monterrey and Veracruz left the list of the 12 most violent cities by occupying the 14th and 79th place (SJP 2013).

In terms of the performance of law enforcement institutions, according to the index of state capacity generated in Chapter 4, from 2007 to 2012, Cuernavaca experienced a 66% decrease in the law enforcement efficiency indicator. This means that the number of people convicted from the total number of processed alleged delinquents were decreasing over time. The opinion of the population supports this perceived deterioration in law enforcement application. For example, in 2009 none said they received an excellent treatment, while only 12.6% stated they received a good service from the *Ministerio Público*. In contrast 44% said they received a very deficient or deficient service. Therefore, it is not surprising that the *Ministerio Público* was identified as the second institution that demanded more bribes to the population (INEGI 2010). The municipal police have been also poorly evaluated. In 2010, 15.20% said they did not trust the municipal police (INEGI 2010). By 2011 this number more than doubled, since 33% said they did not trust this agency (INEGI 2011b). It is also noteworthy that from 2010 to 2012, the municipal police of Cuernavaca suffered a substantial reduction in the number of officers from 604 to 422, which represents a 30% reduction in the police force (INEGI 2011a, 2013a).

Two additional indicators show how the municipal government weakened from 2007 to 2012. In 2007, 41.3% of the municipal government came from its own fiscal

effort to collect taxes. However, its financial autonomy deteriorated throughout the years and by 2012 the local government was only able to collect 28.8% of total revenue (SIMBAD 2015 2007-2012). This perhaps is related to serious allegations made against the mayor Manuel Martínez for fraud and misappropriation of funds. Second, the number or persons convicted from the persons prosecuted also decreased within this timeframe. In 2007, the number was 87.8% while by 2012 it was only 29% (SIMBAD 2015 2007-2012). In addition, the federal government reduced the amount of money from the program SUBSEMUN *Subsidio para la Seguridad en los Municipios* granted to Cuernavaca by 36.2% from 2009 to 2012 (INFOMEX 2010 2011).

In December 2009, in the same month when *El Barbas* was shot down by the Mexican marines, the administration of Jesús Giles (PAN 2006-2009) as mayor of Cuernavaca also ended. When he was the Minister of the Interior in Morelos, he stated that Cuernavaca was facing a problem related to drug consumption for being a weekend tourist destination (Granados Chapa 2011). From 2009 to 2011 Manuel Martínez from the PRI held the local government. His administration suffered severe allegations of misappropriation of funds (Fierro 2005) that led to a criminal proceeding against Martínez and Rogelio Sánchez, who substituted Martínez during 2012, the last year of his administration (González 2012a). In January 2010, Miguel Angel Briones, a former police officer from Cuernavaca, who at that time was part of the security team of Arturo Beltrán, was captured in Mexico City. He was in charge of paying bribes to members of the local and state police and of coordinating the transportation of drugs in the state of Morelos (Blancas Madrigal 2010).

On May 19, 2011, soldiers arrested the second in command of the South Pacific Cartel and the chief of the security department of Cuernavaca, Juan Bosco (who was detained inside police facilities). The former stated that Bosco gave protection to the Pacific Cartel by warning ahead of time of any operative against them (EFE-News 2011b). Raúl Díaz Román, *El Hierro*, a former preventive officer of the Cuernavaca police was identified as the chief of the South Pacific Cartel in Morelos (González 2013). The aforementioned examples show how throughout the years, the Beltrán Leyva Organization was very successful in infiltrating the three levels of government. Even the local police officers were the lieutenant in Cuernavaca.

7.3.3 Military Capacity

Perhaps the most relevant military action against organized crime during the Felipe Calderón administration was the one performed by the Navy against Arturo Beltrán Leyva in an apartment building in Cuernavaca. This event is important for two reasons: first, it shows that the sharing of intelligence between U.S. and Mexican security agencies yielded successes. Second, it also shows the challenges, limitations and rivalries among Mexican Secretariats. In a detail account by the U.S. Embassy, it is the Navy's impact in the combat of drug trafficking due to its professionalized training:

> The successful operation against ABL comes on the heels of an aggressive SEMAR effort in Monterrey against Zeta forces (ref a) and highlights its emerging role as a key player in the counternarcotics fight. SEMAR is well-trained, well-equipped, and has shown itself capable of responding quickly to actionable intelligence. Its success puts the Army (SEDENA) in the difficult position of explaining why it has been reluctant to act on good intelligence and conduct operations against high-level targets. The U.S. interagency originally provided the information to SEDENA, whose refusal to move quickly reflected a risk aversion that cost the institution a major counter narcotics victory. SEDENA did provide backup to SEMAR during the firefight with ABL forces, but can take little credit for the operation. Public Security Secretary (SSP) Genaro Garcia Luna

> can also be counted as a net loser in the Mexican interagency following the ABL operation. SSP considers high-level Beltran Leyva targets to be its responsibility, and Garcia Luna has already said privately that the operation should have been his. (Wikileaks 2009b)

It is interesting to note that the population's strong trust for the army and the navy has deteriorated in the last years. In 2011, 50.9% said they trusted the army, but by 2012 this number dropped to 44.5%. Regarding the trust in the navy, in 2011, 54.6% said they strongly trusted this institution but by 2012, this number dropped to 51.2% (INEGI 2011b, 2012b). This would be related to the increase in the human rights violations that the population has suffered since military forces have been employed to combat organized crime. These numbers should raise concerns in the federal government as a sign of an eroding image of the army and the navy.

In April 2010 the government reorganized the security in the state through a scheme with the army, navy and the federal police. It was planned that the majority of the military operations were going to be carried out by the military zone 24 in Cuernavaca. The army coordinated this operation which included plane overflies, patrolling; check points and the deployment of 600 soldiers (Mural 2011).

Additionally, from May to November 2012, the federal government launched the operative *Morelos Seguro,* coordinated by the army, in which the government deployed even more soldiers: 1,500, 700 members of the federal police, 200 agents of the Attorney General Office and 1,400 state and municipal police officers (Jiménez 2010). The operative also created a new base of mix operations in order to increase patrolling in the state (Aguayo, Peña-González and Ramírez-Pérez 2014, 106).

Just as in the cases of Nuevo León and Veracruz, Morelos also included former members of the military in security posts. In 2011, after the assassination of Javier

Sicilia's son and six others, the Governor dismissed the Secretary of Public Security Gastón Menchaca Arias, who was a former general. He replaced him with another general, Gilberto Toledano Sánchez (EFE-News 2012). The secretary of public security in the state of Morelos had three different people between 2006-2012, two of them former members of the army. In 2010 the former colonel Roberto Guzmán was appointed as the chief of the transit department of Cuernavaca. This shows, once more the continuously militarization of the public security in the country.

7.4 Civil Society

After the assassination of his son, poet Javier Sicilia started the Movement for Peace with Justice and Dignity, a well-known organization in the country demands recognition for the victims of the drug war. The movement even included visits to various American cities to raise awareness about the implications of the "war on drugs" in Mexico and the responsibility of the U.S. as a consumer market.

On May 8, 2011 Javier Sicilia organized a march from Cuernavaca to Mexico City's main square. It gathered around 100,000 citizens that participated in the mobilization in order to demand "a new non-military strategy; a stepped-up effort to combat corruption and impunity; a focused attack on money laundering; immediate attention to societal problems that contribute to broken societies (e.g. education, health, employment); and participatory democracy" (Guadarrama 2011).

In an interview Sicilia stated that the purpose of the mobilization was to make "the drug war's victims' names and faces visible […] we made the rest of Mexico recognize that we have a national emergency to confront, and we got the nation and its

families together to question how the government was confronting it" (Edmonds-Poli and Shirk 2012, 196).

The movement by Javier Sicilia was very active in the creation of the General Law of Victims that was published in January and revised in May 2013. The law creates a National Registry of Victims and a National System of Attention to victims in which the three levels of government will participate in covering the damages. There is also a section about reparations to the victims. In general, the purpose is to provide more protection to victims of violent crime and human rights abuses (Aguayo, Peña-González and Ramírez-Pérez 2014, 102-103). Between 2011 and 2013, for example, the state Commission for Human Rights (*Comisión de Derechos Humanos del Estado de Morelos* CDHEM) made the largest number of recommendations to the municipal government of Cuernavaca and the *Procuraduría General de Justicia,* the state law enforcement agency. The year 2012 was the worst year, in which the CDHEM emitted 76 recommendations to local and state authorities (Padgett 2011).

Mobilizing resources to combat human rights abuses has shed light on two phenomenon, forced disappearances and violence against women. The problem of the forced disappearances grew tremendously in the period 2007-2012. The government has registered 25, 276 disappeared persons during these years. The worst year, related to organized crime violence was 2011 with 8,977 missing persons, then for 2012, this number decreased to 3,157. Though this was the national tendency, Morelos experienced a 106% increase from 2011 to 2012 (Villagran 2014, 136-137). In addition, another issue that has emerged in the state is the violence against women. The state attorney general office has received 1,200 reports of forced disappearances since 2011 (El-Economista

2011). According to the activist Cielo Preciado, who coordinates the Committee against Femicide in the state of Morelos: "It is clear that in the state of Morelos, the violence against women is systemic and reiterative. This has been a serious problem during the whole administration (2006-2012), we have counted 241 women victims of femicide in this period" (Polanska and Rodríguez-Luna 2012, 190). Though the link to organized crime is not clear, the fact is that due to the increase in crime violence in the state, women as a target have increased and there is a claim to the authorities to acknowledge a pattern.

The private sector has also been severely affected by the insecure environment in within the state. It is estimated that around 15% of the companies with a membership to Coparmex (*Confederación Patronal de la República Mexicana*) –who joins business from different sectors– left the state. Between 2010 and 2011, the restaurant and hospitality industry lost 70% and 50% in revenues, respectively. The Spanish schools for foreigners also were affected. Before 2008 Cuernavaca used to receive 10,000 students, while for 2010 this number decreased to 4,000 (González 2012b).

In terms of the perception of insecurity, in 2012 Morelos along with Chihuahua presented the highest percentage with 85.8% of the economic units asserting they felt insecure in their municipalities. In contrast, only 34.5% of the economic units in the state of Yucatán stated they felt insecure. After Colima, Morelos presented the second highest percentage with 63.2% of economic units stating that in 2012 organized crime related activities against the private sector increased. Even more alarming is the fact that for 2011 the total cost as a consequence of the insecurity and crimes for each economic unit in Morelos reached $12,580 USD, which represents $188,705 Mexican pesos (INEGI 2012a). Morelos was the state in which the costs from crime were the highest in the

country for the private sector (Rea 2011). In general, these numbers show that the economic activity in Morelos has been severely damaged as a consequence of the rising levels of violence.

7.5 Conclusions

Three main factors triggered the intensification of organized crime violence in Cuernavaca: first, the beheading of the Beltrán Leyva Organization in December 2009 prompted the fragmentation of the cartel into smaller organizations. Second, from 2007 to 2012, the local government of Cuernavaca weakened financially throughout the years. Third, the tremendous reach of corruption by the Beltrán Levyas within the three levels of government became exposed and destabilized previous pacts.

Before 2010, Cuernavaca could be characterized as having a monopoly market-intermediate state capacity, since BLO was the single and larger organization controlling the area. However, Cuernavaca later would exemplify the consequences of the kingpin strategy pursued by the federal government. Since the assassination of Arturo Beltrán Leyva in December 2009, all the remnants from this big and important organization have been fighting to control Acapulco and Cuernavaca. This represents the case when the illegal market becomes very unstable, due to the fragmentation of the larger cartel and the emergence of local gangs that in some cases tend to disappear. Therefore by 2011, Cuernavaca resembled an oligopoly market-intermediate state capacity, in which similar organizations in terms of sizes and capabilities fought to control the region and as a consequence the levels of violence increased.

Second, state capacity in Morelos and Cuernavaca has proven to be weak in several aspects. First, this case illustrates how high level politicians are always deeply involved in organized crime activities by favoring one group over another. Second, due to a misappropriation of funds, the municipality of Cuernavaca saw a substantial reduction in its financial autonomy, which had consequences over government resources and services. Third, as already discussed, the federal government reduced the municipal security program funds for Cuernavaca by 36.2% from 2007-2012 which weakened even more the capacity of the municipality to confront organized crime. In terms of law enforcement efficiency the municipality experienced an improvement of 23%.

Moreover, this substantial weakness was not accompanied by an improvement in the police force as in the case of Monterrey and Cuernavaca. Though the federal government implemented a joint operative in Morelos in mid-2012, the army was deployed well before in 2010. The army activities included patrolling and establishing checkpoints, but they did not take over the police tasks as in the case of Veracruz, for example. Thus, this case shows that there are variations in terms of the type of military presence that ultimately have an impact in the levels of violence. This case supports the hypotheses that the military deployment increases the levels of violence as well as the absence of a substantial improvement in local state capacity.

Chapter 8. Conclusions

The purpose of the present research is to explain why some municipalities located away from the U.S.-Mexico border have experienced an increase in organized crime-related violence. As presented in the previous chapters, the particular combination between local state capacity and the configuration of the illegal market structures yields different levels of violence and opens the path to alternative trends and future scenarios. Based on this discussion, this chapter will present three types of conclusions: empirical, theoretical and recommendations for public policy. Finally, a section on suggestions for further research will be presented.

8.1 Empirical Conclusions

Even though the homicide rate in Mexico began to decline in 2012, this pattern was not uniform at the subnational level. For instance, while Ciudad Juárez, Monterrey, and Veracruz experienced declines of 83%, 18%, and 79%, respectively, from 2011 to 2012, other cities very close to Mexico City, like Ecatepec and Cuernavaca experienced increases of 77% and 158%, respectively (Presidencia de la República 2011a; SESNSP 2015). These patterns demonstrate that violence is volatile and should be analyzed through several years in order to understand these peaks and valleys.

Second, although intentional homicides have declined since 2012, other forms of violence have started to arise. The number of kidnappings increased 32% from 2012 to 2013. The number of extortions also increased by 11% with respect to the same year. However, this tendency differs at the subnational level. For instance, in 2013, 64% of

kidnappings occurred in only six states: Estado de México, Guerrero, Michoacán, Morelos, Tamaulipas, and Veracruz (Torres 2013). Though this was not explored in this dissertation, it should be acknowledged that while some forms of violence – in this case organized crime related homicides – may decline, other types of violence intensified in the period studied, thus highlighting the necessity of analyzing shifting geographical patterns for other crimes.

How can these shifts be explained? In the period 2007 to 2012 the government implemented several programs that designed to reduce the number of homicides. The federal government carried out several joint operations throughout the country with the participation of the main security forces: army, navy, federal policy, CISEN and PGR. Though not explored in this dissertation, Ciudad Juárez is an example of how the federal government changed its strategy from one that initially emphasized militarization to combat organized crime to one that currently highlights the importance of programs on social prevention of violence. The analysis of the case studies showed that the federal and state governments through different mechanisms –i.e. reliance on the army and the navy, or the creation of a new police force like the *Fuerza Civil*–strengthened the state in some municipalities facing a rising incidence of organized crime related homicides.

The case studies demonstrated that the "war on drugs" carried out by President Felipe Calderón took different forms at the sub-national level. However, these strategies were not implemented in the same way across all states and municipalities. The three cases reveal that the presence of the military varies in terms of agency leadership in the joint operatives as well as in the relationship with the local police force. The case of Monterrey shows that the army was in charge of carrying out the joint operatives while

the navy participated in selective operations against organized crime. In addition, a vice-admiral was appointed as the Secretary of Public Security in Monterrey.

The case of Veracruz presents an even more conspicuous and permanent participation of the navy in combating organized crime and in carrying out public security tasks. *Veracruz Seguro* was the first joint operative in which the navy coordinated the operations of other agencies. The local police was completely dismantled due to pervasive infiltration by organized crime and, instead, the naval police assumed the local public security responsibilities. This coordination between the military and civil power has not been seen in other localities (not even in other municipalities in Veracruz). Thus, Veracruz underscores the relevance on how the navy presence has successfully reduced the level of violence acting in coordination with the state police. Though this initiative has brought substantial results, with the marines continuing in the port of Veracruz, the government hasn't been able to transfer command to the state police after three years. Unfortunately, this is not a long-term solution, since the naval forces cannot be used permanently to perform police tasks.

Thus, these cases show that there are different degrees and configurations in the intervention by the military. In terms of the agency in the lead, Veracruz would be at one extreme with a strong naval presence, Monterrey in an intermediate position, and Cuernavaca at the other extreme with a weak military presence. Regarding coordination with the local police, Veracruz is an example of a high level of coordination while in Monterrey and Cuernavaca this kind of management is absent. Moreover, the three cities show different degrees of militarization with former or active members of the army and navy in positions at the local security departments. This represents a subtle alternative

process of militarization. This is an example of how case studies improve the analysis by providing a better measure for certain variables.

In terms of strengthening local police agencies, the case studies reveal two different models for achieving the same goal. Monterrey pursued the professionalization of the police force through the creation of *Fuerza Civil*. In contrast, Veracruz relied on the navy. These two cases show the imperative of adopting a model in which the agencies responsible for public security are well trained and resistant to criminal infiltration. Though each case was relatively successful, the two trajectories were different, with important implications. On the one hand, the path followed by Nuevo León through the *Fuerza Civil* show the significance of activism by the business community and the inclusion of the civil society in the design of security programs. On the other hand, Veracruz followed a path that probably will be difficult if not impossible to sustain in the long-term. Though the naval police achieved significant results – from 2011 to 2012 the organized crime homicide rate dropped 78% – after three years the navy has not been able to transfer public security tasks to the local police force. This reliance on federal military units entails two dangers: first, the continuous exposure of the naval forces to organized crime, thereby risking its corruption, and second, the easy path in which the state relies on the navy rather than investing in equipping and training a proper municipal police force.

This dissertation has pointed out to the different degrees in which the militarization process has taken place throughout the country in terms of the size and length of military participation in anti-crime operations, but also the reliance on former or active-duty officers who have been appointed as chiefs of the public security forces and

departments in the 32 states and hundreds of municipalities. For instance, in 2012, 50% of the heads of the secretaries of public security had a military background (Moloeznik and Suárez de Garay 2012, 134).

Third, the cases of *Fuerza Civil* in Monterrey and *Mando Único* in Veracruz are examples of when the state police took over functions of the municipal police. These experiments are highly relevant since the administration of President Enrique Peña Nieto currently proposed to create 32 state police forces along with the abolition of the municipal police. These experiments in some states may shed light on the advantages and risks creating a single police corps in each state.

The fourth empirical conclusion relates to the evolution of organized crime in Mexico. Findings from the case studies support the results from the statistical analysis chapter, in which violence increased in a particular municipality when the illegal market structure transitioned from a monopoly to an oligopoly. This phenomenon occurred when a single organization suffered an internal fragmentation – i.e., Gulf Cartel and Zetas – or when other criminal organizations moved to contest a specific *plaza*, – i.e. Sinaloa vs. Gulf in Nuevo Laredo. Though the kingpin strategy pursued by the federal government has been criticized for the unintended consequence of criminal organizations multiplying, there have been other cases in which governmental policy did not have a direct impact in the division of the cartel. The case studies analyzed also showed that criminal organizations may not disappear from the municipality. Rather, due to the presence of the army and navy, they may simply shift operations to other cities. Hence, the "cockroach effect" (Bagley 2012) does not only take place between countries, but also at the sub-

national level, in this case, between municipalities. This underscores how changes in the structure of organized crime may have an impact on the level of violence.

The fragmentation of the illegal market forces organizations to diversify their criminal activities, thus increasing not only the number of homicides but also kidnappings and extortions. Thus, by 2014 previously peaceful Cuernavaca had replaced cities like Acapulco and Ciudad Juárez as the most violent city in Mexico (SJP 2015). The three municipalities studied show a different presence of national cartels, as in the case of Monterrey and Veracruz, and more regional and local gangs in the case of Cuernavaca. Though not analyzed in this research, it is important to incorporate the impact the internal organization of the drug cartels may have on the way they exercise violence and engage in various illegal activities.

8.2 Theoretical and Analytical Implications

The quantitative analysis highlights several findings. First, the relationship between state capacity and the levels of violence follows an inverted U-shape curve. This means that municipalities with either an extremely weak state capacity or strong and consolidated state capacity may have lower levels of violence. In the first case, the absence of violence is related to the lack of attractiveness that these municipalities have for organized crime. They lack a sufficient bureaucratic structure for organized crime to take advantage of for its own purposes. At the other extreme, municipalities with strong and efficient bureaucracies and well-trained police do not appeal to criminal groups since they know it will be difficult to resort to bribes and corruption to obtain protection. Therefore, both extremes are unattractive to organized crime, which requires protection to operate

effectively. One because a well-established bureaucracy is absent, and the other because strong state capacity discourages criminal organizations from engaging in violence for fear of punishment.

This inverted-U relationship implies that the most violent scenario may be found precisely in those municipalities with an intermediate level of state capacity. They are most attractive because the bureaucratic apparatus can be used by organized crime to secure protection and cover their illicit activities, with less fear of punishment. This finding supports the argument that organized crime needs the state and does not seek to supplant it.

The second finding suggests that the relationship between organized crime and levels of violence also follows an inverted-U shape. Hence, we expect lower levels of violence in the presence of monopoly and fragmented market structures. In the first case, lower levels of violence is the consequence of a single dominant organization that controls the activities in a specific territory strong enough to deter incursion by other cartels. In a more fragmented market, with multiple organizations, lower levels of violence stem from the fact that the survival rate for criminal groups is lower when the market is saturated by numerous smaller organizations. Hence, the most violent scenario would be the intermediate situation of oligopolistic markets in which criminal organizations with roughly equal power fight among themselves for control over disputed territory.

What factors explain an increase in levels of organized crime violence? This research argues that the most violent scenario may be found in the combination of oligopoly markets joined with intermediate state capacity. Lower levels of violence are

found in a monopoly market-strong state capacity and fragmented market-strong state capacity structure. Under these configurations criminal organizations are less likely to conduct illegal activities since impunity is unlikely and as a consequence their actions are more likely to lead to punishment. This outcome finds support in the case studies analyzed. In Veracruz, the navy arrested alleged criminals that the local police (due to allegations of infiltration) was unable or unwilling to detain. The *Fuerza Civil* in Monterrey has been created as a highly professionalized police corporation with reasonable salaries and social benefits, making police officers less susceptible to corruption. Thus, as state capacity strengthens, we expect levels of violence to decline.

This project provides an analytical framework that incorporates the joint effects of state capacity and criminal markets into the analysis. The history of drug trafficking in Mexico summarized in Chapter 3 demonstrates that the relationship between these two factors has evolved over time and that the structure, form and activities of organized crime cannot be understood without consideration of the uneven development of state capacity over time. This dissertation supports the argument advanced by others that the state is a fundamental actor in shaping the form taken by organized crime in each historical period.

Other variables are also relevant in determining levels of violence. As shown in Chapter 4, politics matter. When the Mexican president and the governor of a particular state belong to the same political party, levels of violence decrease by 25%. This finding demonstrates that coordination among the different levels of government matters, but this plays out at the state and the federal level. This is expected since it is the governor (not municipal executives) who requests the federal executive to provide military support.

The results of this research do not support the literature that emphasizes the role of Mexico as a transit route to the U.S. as the main source of violence. This argument suggests that the municipalities closest to the U.S-Mexican border present higher levels of violence precisely because of their strategic location. However, the empirical analysis shows that the distance to the U.S. is not significant. This finding implies that violence in Mexico is not strongly related to its transit role, while also underscoring the reasons that other illegal activities expanded in areas far from the border. This contention finds support in recent statistics showing a sharp rise in kidnappings and extortions in the country's interior as organized crime diversifies its activities. Though, trafficking of cocaine is still very lucrative, criminal organizations have found a fertile ground in municipalities in which they can obtain rents from society and cannot be prosecuted by the local government.

Along with this phenomenon, rates of domestic drug consumption were positive and significant in one of the models, which may suggest that a domestic market in Mexico is growing; and as a consequence, struggles among fragmented criminal organizations contribute to violent confrontations and homicides. This finding supports the argument by several scholars (Williams 2010) that Mexico suffers the consequences of being a "bridge" territory. This would explain why tourist destinations like Acapulco and Cuernavaca have experienced an astonishing rise in the number of homicides, at the same time that border cities like Tijuana and Ciudad Juárez have experienced declines.

The results presented also support the arguments made by studies that emphasize the link between inequality and crime. Though not explored in depth, the relationship between inequality and organized crime-related homicides shows that an unequal society

will probably confront higher violence. The younger male population lacking opportunities in the formal economy will seek them in the illegal market by participating in criminal groups. This suggests that more attention should be paid to programs that target social inequality and aim to improve the quality of education and employment opportunities.

8.3 Public Policy Implications

This research provides important insights on how to reduce the organized crime homicide rate, not only in Mexico, but also in other violent regions in the world facing similar challenges. In particular, this research has shown the importance of carrying out a sub-national analysis since variables relevant for understanding the development of violence considerably vary within countries. In this regard, this dissertation has shown that the presence of the state is quite uneven across municipalities in Mexico. The index of state capacity employed incorporates three indicators –law enforcement efficiency, financial autonomy and infrastructure– that represent an approximation of the degree to which local governments possess the ability to provide basic public goods and establish a strong presence throughout the territory.

The quantitative and qualitative analyses provide important suggestions in terms of public policy programs. First, in order to lower the levels of violence, it is necessary to strengthen the capacity of local governments. However, this strengthening should be done in a very specific manner. Law enforcement institutions and the security agencies should be professionalized in order to demonstrate that the rule of law is effectively implemented and that there is no room for impunity. As we have seen, the intermediate

levels of state capacity actually provide incentives to organized crime groups to take advantage of public agencies to carry out their illegal activities. Nevertheless, if the state sends the message that the security agencies are immune to infiltration, criminal groups may learn that the state may no longer serve their purposes.

The case studies analysis illustrates at least two ways in which the local security agencies have been professionalized. On the one hand, the case of Monterrey has relied on the *Fuerza Civil* to clean up the notoriously corrupt police force. On the other hand, Veracruz has relied on the naval police to take charge over of public security in the municipality. These two cases represent important examples in which the professionalization of public security agency leads to reduce violence. However, we cannot ignore the performance of the *Ministerios Públicos* and the administration of the prison system. The professionalization of the police force is only a first, albeit essential step in the complex reforms needed to overhaul the judicial system in Mexico. Though it was not explored in this dissertation, it is necessary to include in the analysis the implementation of the *juicios orales* in the state courts and the impact on the organized crime homicide rate this reform may entail.

Second, the results of this dissertation highlight that the same policy implemented, –i.e., the deployment of the military–to combat organized crime has yielded varying results across the country. This shows that we cannot generalize the expected results of this policy from a few cases to the nation as a whole. Though it has been widely demonstrated that the deployment of the army or the navy has increased the levels of violence, the cases of Veracruz and Monterrey show the contrary is also possible. These two cases demonstrate that the implementation of joint operatives can

bring successful results in lowering levels of violence. Then, how can we explain this outcome?

The results of this research suggest that it makes a difference which security agency is in charge of coordinating the operations, if it is the navy, the army or the federal police. In addition, how the military power interacts with civilian power (the police) also influences the levels of violence. The case studies shed light on the possible combinations on the interaction of these agencies. Veracruz, for instance, has implemented a program, in which the navy in coordination with the state police patrols neighborhoods with high criminal incidence rates. When a citizen requires the assistance regarding public security issues, the police and the navy address the incident together.

Regarding the structure of the illegal market, we have found that, in principle, the fragmentation of drug cartels stemming from the strategy pursued by the federal government was carried out with the intention of achieving greater control over these smaller organizations. However, this strategy has had pervasive unintended consequences for the civil population since due to the lack of sufficient state capabilities, smaller organizations diversify their illegal activities by engaging in kidnappings and extortions. Moreover, this policy of militarization was not accompanied by efforts to simultaneously strengthen local state capacity. Thus, violence increased in those municipalities. This shows that not only does it make sense to strengthen the municipalities under an oligopolistic market structure, but also in municipalities with monopoly or very fragmented markets.

Promoting the creation of monopolies would be another alternative in order to lower violence. However, the risk would be in the levels of infiltration and corruption

which will inevitably lead to the establishment of a criminal state with constant human rights abuses and the permanent absence of the rule of all. The price of following this alternative would be high. To sum up, there is no perfect solution. There are potential risks in pursuing either policy: strengthening the state shows that at intermediate levels, violence increases. This may be seen as a necessary evil, since the goal is to reach higher levels of state capacity that will mitigate not only homicides, but also new forms of violence such as extortion, human trafficking and kidnapping. On the other hand, encouraging monopolies will encourage the establishment of a criminal state.

Third, programs that target corruption should be incorporated in efforts to strength local governments. As previously pointed out, it would not make a difference if a municipality invests in acquiring equipment and more power capabilities for the police force if organized crime is able to infiltrate the municipal authorities. If corruption is not seriously tackled, then any other efforts to improve public security will not yield significant results.

In terms of international cooperation, the Merida Initiative signed by the Mexican and the U.S. government to combat drug trafficking organizations has evolved over time. The initial focus was placed primarily in the improvement of military capabilities. However, the strengthening of law enforcement institutions and the judicial system, as well as supporting the creation of strong communities were later incorporated. This help has taken many forms. For example, with funds from the Merida Initiative the National Academy of Penitentiary Administration was established with the purpose of professionalizing prison guards (Herrera 2012). Through the Merida Initiative, public

security secretariats have received equipment and police corporations have received training programs

The U.S. government has realized the importance of providing assistance to the police and judicial institutions of the 32 states. In a message from Ambassador Carlos Pascual to Secretary of the State Department Hillary Clinton drew the attention to the states:

> [W]ith many of our federal programs well underway, we should broaden our focus to include work at the state level. The GOM [Government of Mexico] is wary of such a devolution of energy and resources, but there is a growing and clear understanding of the key role states play in security in Mexico, and an understanding among many officials that without good state institutions, the federal government has nowhere to land when it deploys. (Wikileaks 2009e)

Finally, this research has shown that the situation in Mexico has nothing to do with "terrorism." Acknowledging this fact is important because allegations to the contrary have had a negative impact on public policies designed to address organized crime. As shown in previous chapters, criminal organizations inevitably need the state to carry out their illegal activities. This is the reason why the intermediate levels of state capacity provide the most propitious environment for them. Therefore, the focus should be on improving law enforcement and police institutions. Higher levels of state capacity always mitigate any configuration of the illegal drug market.

8.4 Further Research

This project has confronted a number of limitations. First, the three case studies serve the purpose of illustrating the causal mechanisms but we cannot confidently generalize the patterns observed to the rest of Mexico's 2,457 municipalities. Thus, one of the next steps in future research would be to incorporate a more in-depth qualitative analysis of more

cases. Qualitative Comparative Analysis (QCA) constitutes an interesting option. QCA methodology provides the advantage to analyze different combinations of variables that yield the same result. For instance, it would be interesting to take a number of cities that experienced the same outcome (low, same or increase in the level of violence) and analyze the necessary and sufficient conditions that triggered such outcomes. As shown in a very limited manner in this dissertation, Veracruz and Monterrey were able to lower the levels of violence by professionalizing the local police force, albeit this outcome was achieved through two different policy paths.

A second limitation of this project stems from the short period of time under study. Six years represent a limited time when analyzing waves of violence and long-term tendencies. This is relevant when analyzing the evolution of the illegal drug market in a region. For example, in the case of Cuernavaca, the fragmentation of the Beltrán Leyva Organization into smaller organizations has not yet reduced levels of violence as we would expect. In this sense, further research is needed to advance our understanding of the circumstances in which fragmentation may lead to reductions in levels of violence. As pointed out by Sánchez Valdés (2014), the splinter organizations from BLO have become very violent due to the their determined efforts to defend their territories and their ability to carry out extortions and kidnappings precisely because they lack the contacts and resources previously deployed by the dominant cartel to control the drug trafficking business. Therefore, it is necessary to develop research strategies to focus on the kind of organizations that emerge following the dismantling of larger cartels. Related to this point, future research should incorporate the type of criminal organization affecting levels of violence. How the presence of a military-style criminal group such as the Zetas, or the

more transnational company style methods of the Sinaloa Cartel has on the likelihood of episodes of violence should be also analyzed.

Third, further research should focus on the interaction between the army and the police corporations. So far, studies have emphasized quantitative analysis focusing on the impact of deploying the military. However, more in-depth analysis is required to understand why sometimes the presence of the army helps in reducing the levels of violence and why in other cases it exacerbates violent conflict. This research has addressed this question but in a partial and limited manner with few case studies that have allowed the elucidation of some interesting hypotheses. More is needed.

In terms of the structure, configuration and evolution of organized crime, it would be worth exploring how the nature and type of organization impacts the levels of violence –i.e. a multinational corporation type such as the Sinaloa Cartel, a mystic/moral codes organization as the Knights Templar or an outsourcing/violent group such as the Zetas (Canales 2013). Finally, as shown by the case studies analysis, factors such as corruption and social capital need to be incorporated in future studies. As previously noted, if the governments do not tackle the problem of collusion and infiltration, efforts to equip and train the police and military agencies will probably just waste scarce resources. Additionally, social capital is an interesting factor meriting more consideration. Not only do civil society actors have the proven ability to successfully pressure the governments (as seen in the case of Nuevo León) to take effective action but it must be recognized that alternative forms of social capital and collective solidarity in affected communities may play an important role in tacitly supporting organized crime.

References

Aguayo, Sergio, Peña-González, Rodrigo and Ramírez-Pérez Jorge Ariel. 2014. *Atlas de la seguridad y violencia en Morelos*. México: Universidad Autónoma del Estado de Morelos, CASEDE.

Aguilar, Gardenia Mendoza. 2010. "Pemex, otra víctima del narco." *La Opinión*, August 3.

Aguilar, Rubén and Jorge Castañeda. 2009. *El narco: la guerra fallida*. México, D.F.: Punto de Lectura.

Aguilar-Gutiérrez, Genaro. 2010. "Capacidad tributaria y finanzas públicas metropolitanas en México." *Estudios Demográficos y Urbanos* 25 (1):103-132.

Aguirre, Jerjes and Hugo Amador Herrera. 2013. "Institutional weakness and organized crime in Mexico: the case of Michoacán." *Trends in Organized Crime* 16 (2).

Ajenjo, Manuel. 2012. "La emboscada de Tres Marías." *El Economista*, August 27.

Andreas, Peter. 2000. *Border games: policing the U.S.-Mexico divide*. Ithaca: Cornell University Press.

Animal-Político. 2011. "Operación 'Lince Norte', golpe contundente a los Zetas: SEDENA." August 4.

___. 2012a. "Cae en Veracruz presunto jefe de sicarios de los 'Mata Zetas'." April 15.

___. 2012b. "El 'Z-40' arrebata el liderazgo de los Zetas a 'El Lazca'." August 27.

Aranda, Jesús. 2012. "Marina y gobierno estatal acuerdan renovar el operativo Veracruz Seguro." *La Jornada*, September 21.

Art, Robert J. and Louise Richardson. 2007. *Democracy and counterterrorism: lessons from the past*. Washington, D.C.: United States Institute of Peace Press.

Arzt, Sigrid and Guillermo Vázquez del Mercado. 2010. "Violencia en México: realidades y perspectivas." *Istor* 42.

Astorga, Luis. 2004. "Mexico: drugs and politics." In *The political economy of the drug industry. Latin America and the international system*, edited by Menno Vellinga, 85-102. Gainesville: University Press of Florida.

___. 2005. *El siglo de las drogas. El narcotráfico, del Porfiriato al nuevo milenio*. México, D.F.: Plaza Janés.

___. 2007. *Seguridad, traficantes y militares. El poder y la sombra*. México: Tusquets.

Astorga, Luis and David A. Shirk. 2010. "Drug trafficking organizations and counter-drug strategies in the U.S.-Mexican context." In *Shared responsibility: U.S.-Mexico policy options for confronting organized crime*, edited by Eric L. Olson, David A. Shirk and Andrew Selee, 31-61. Washington, D.C.: Woodrow Wilson International Center for Scholars, Trans-Border Institute.

Bagley, Bruce. 2009. "La conexión Colombia-México-Estados Unidos." In *Atlas de la seguridad y la defensa de México 2009*, edited by Raúl Benítez Manaut, Abelardo Rodríguez Sumano and Armando Rodríguez Luna, 24-32. México, D.F.: CASEDE.

___. 2012. "Tráfico de drogas y crimen organizado en las Américas: grandes tendencias en el siglo XXI." In *Agendas comunes y diferencias en la seguridad de América del Norte*, edited by Abelardo Rodríguez-Sumano (coord), 457-480. Mexico: Centro de Estudios Superiores Navales de la Armada de México, Universidad de Guadalajara.

Bailey, John and Roy Godson. 2000. "Introduction." In *Organized crime and democratic governability: Mexico and the U.S.-Mexican borderlands*, edited by John Bailey and Roy Godson, 1-29. page numbers. Pittsburgh: University of Pittsburgh Press.

Banamex. 2014. *Indicadores regionales de actividad económica 2014*. Mexico: Banamex.

Barría, Cecilia. 2009. "Sangriento tiroteo en calles de México." *BBC Mundo*, December 5.

Bates, Robert H. 2008. "State failure." *Annual Review of Political Science* 11:1-12.

Baum, Joel A.C. 1995. "Organizational ecology." In *Handbook of Organization Studies*, edited by C. Hardy and W. R. Nord S. R. Clegg, 71-108. Thousand Oaks, CA: SAGE.

Beittel, June S. 2013. "Mexico's drug trafficking organizations: source and scope of the violence." *Congressional Research Service*. R41576. April 15.

Blancas Madrigal, Daniel. 2010. "Detienen en el DF a El Chaparrito, jefe de seguridad de El Barbas." *La Crónica*, January 8.

CADHAC. (Ciudadanos en Apoyo a los Derechos Humanos). 2014. *Disapperance of persons in Nuevo Leon. A sistematization of experiences in search of justice and truth.* Monterrey, Nuevo León.

Campbell, Howard. 2009. *Drug war zone: frontline dispatches from the streets of El Paso and Juarez*. Austin: University of Texas Press.

Canales, Rodrigo. 2013. *The deadly genius of drug cartels*: TED Talks. Accessed on December 10, 2014. https://www.ted.com/talks/rodrigo_canales_the_deadly_genius_of_drug_cartels

Cantú, Celso. 2012. "Casino Royale: complicidad e impunidad." *Contralínea*, October 11.

Carpenter, Ami C. 2010. "Beyond drug wars. Transforming factional conflict in Mexico." *Conflict Resolution Quarterly* 27 (4).

Carrizales, David. 2009. "Protesta de agentes de Nuevo León estuvo a punto de terminan en balacera con federales." *La Jornada*, June 9.

Carvajal, Ignacio. 2009. "Han muerto 36 elementos policiacos en Veracruz en 5 años." *Al calor político*, November 9.

Castillo, Eduardo. 2011. "Mexico: Veracruz city police infiltrated by Zetas gang." *The World Post*, December 22.

Castillo, Juan Camilo, Daniel Mejía and Pascual Restrepo. 2013. "Illegal drug markets and violence in Mexico: The causes beyond Calderón." The International Society for the Study of Drug Policy. Conference Paper.

Cayuela-Gally, Ricardo. 2011. "La batalla de Monterrey." *Letras Libres*. Accessed January 28, 2015.

Cázares, Martha. 2004. "Matan a 5 con mensaje al Chapo." *Reforma,* October 10.

Cepeda, César. 2012. "Despiden a director de penal de Apodaca." *Reforma*, Febrary 21.

Cepeda, César, and José García. 2012. "Compran Zetas a mandos para facilitar la masacre." *El Norte*, February 22.

Chabat, Jorge. 2010a. "El Estado y el crimen organizado transnacional." *Istor* (42).

___. 2010b. "La respuesta del gobierno de Felipe Calderón al desafío del narcotráfico: entre lo malo y lo peor." In *Seguridad Nacional y Seguridad Interior*, edited by Arturo Alvarado and Mónica Serrano, 21-39. México, D.F.: El Colegio de México.

___. 2010c. *Combatting drugs in Mexico under Calderon: the inevitable war*. Documento CIDE 205.

___. 2012. "Drug trafficking and United States-Mexico relations: causes of conflict." In *Mexico's security failure. Collapse into criminal violence*, edited by Paul Kenny and Mónica Serrano with Arturo Sotomayor, 143-160. New York: Routledge.

Christopher Paul, Colin P. Clarke and Chad C. Serena. 2014. *Mexico is not Colombia. Alternative historical analogies for responding to the challenge of violent drug-trafficking organizations*. National Security Research Division, RAND Corporation.

Chu, Vivian S. and William J. Krouse. 2009. "Gun trafficking and the Southwest border". *Congressional Research Service*. R40733. July 29.

Cleary, Matthew R. 2007. "Electoral competition, participation, and government responsiveness in Mexico." *American Journal of Political Science* 51 (2):283-299.

CNN-México. 2010. "México enviará más Fuerzas Armadas a Nuevo León y Tamaulipas." November 24.

___. 2011. "Monterrey: vinculan a 8 policías con robo de cuerpos tras balacera en bar", May 22.

Collier, David and Steven Levitsky. 1997. "Democracy with adjectives: conceptual innovation in comparative research." *World Politics* 49 (3):430-351.

Collier, Paul and Anke Hoeffler. 2004. "Greed and grievance in civil war." *Oxford Economic Papers* 56 (4).

CONEVAL, Consejo Nacional de Evaluación de la Política de Desarrollo Social. 2010. "Indicadores de cohesión social según municipio, 2010."

Conger, Lucy. 2014. "The private sector and public security: the cases of Ciudad Juárez and Monterrey." In *Building resilient communities in Mexico: civic responses to crime and violence*, edited by David A. Shirk, Duncan Wood and Eric L. Olson, 173-209. Washington, D.C.: Wodrow Wilson Center and Justice in Mexico Project.

Contreras, Camilo and Gabriela Zamora. 2013. "El espacio público en disputa: Monterrey, su pálida en incipiente sociedad civil." In *Violencia e inseguridad en los estados fronterizos del norte de México en la primera década del siglo XXI*, edited by Vicente Sánchez Munguía, 119-138. México: REDSPDS-RNIU.

Corcoran, Patrick. 2013. "Mexico's shifting criminal landscape: changes in gang operation and structure during the past century." *Trends in Organized Crime* (16): 306-328.

CPJ. (Committee to Protect Journalists). 2013. *Getting away with murder*. Committee to Protect Journalists. Accessed on March 28, 2015. https://cpj.org/reports/2013/05/impunity-index-getting-away-with-murder.php

Curzio, Leonardo. 2000. "Organized crime and political campaign finance in Mexico." In *Organized crime and democratic governability: Mexico and the U.S.-Mexican Borderlands*, edited by John Bailey and Roy Godson, 83-102. Pittsburgh: University of Pittsburgh Press.

De Mauléon, Héctor. 2010. "La ruta de sangre de Beltrán Leyva." *Nexos*, February 1.

Dell, Melissa. 2011. "Trafficking networks and the Mexican drug war." 1-40. Accessed February 18, 2015, http://scholar.harvard.edu/dell/publications/trafficking-networks-and-mexican-drug-war-0

Diario-de-Morelos. 2014. "Refunden a cabeza de vaca." September 19.

Dillon, Sam and Craig Pyes. 1997. "Drug ties taint 2 Mexican governors." *The New York Times*, February 23.

Dube, Arindrajit, Oeindrila Dube, and Omar García-Ponce. 2013. "Cross-border spillover: U.S. gun laws and violence in Mexico." *The American Political Science Review* 107 (3):397-417.

Dudley, Steven and Viridiana Ríos. 2013. "La Marca Zeta." *Nexos*, September 1.

Duncan, Gustavo. 2004. *Del campo a la ciudad en Colombia. La infiltración urbana de los señores de la guerra*. Bogotá.

___. 2007. *Narcotráfico en Colombia: economía y violencia*: Fundación Seguridad y Democracia.

___. 2014. "Drug trafficking and political power: oligopolies of coercion in Colombia and Mexico." *Latin American Perspectives* 41 (195):18-42.

Durán-Martínez, Angélica, Gayle Hazard and Viridiana Ríos. 2010. *2010 Mid-Year report on drug violence in Mexico.* San Diego: Trans-Border Institute.

Edmonds-Poli, Emily, and David A. Shirk. 2012. *Contemporary Mexican politics.* Plymouth: Rowman & Littlefield.

EFE-News. 2009. "México golpea al narcotráfico pero sigue violencia contra civiles y policías." July 29.

___. 2010a. "Cesan a más de cien policías en Monterrey por corrupción y falta de confianza." April 5.

___. 2010b. "Piratería, prostitución y robo de petróleo, negocios de los narcos mexicanos." October 19.

___. 2011a. "Capturan encargado de pagar nómna de Los Zetas en estado mexicano Nuevo León." November 10.

___. 2011b. "Detienen a líder del cártel del Pacífico Sur y mando policial aliado al grupo." May 19.

___. 2011c. "Sacerdote pide a Los Zetas detener violencia y extorsiones a migrantes." July 30.

___. 2011d. "Vida en Veracruz, trastocada por la violencia creciente del crimen organizado." September 23.

___. 2012. "Mexico refuerza despliegue anticrimen en estado de Morelos, aledaño a capital." May 9.

___. 2014. "Estado mexicano de Veracruz estrenará Fuerza Civil para fortalecer seguridad." October 21.

El-Blog-del-Narco. 2012. "Mata Zetas." Youtube video. Running time: 4:41. Accessed February 11, 2015. https://www.youtube.com/watch?v=rIqOA3Zzc_c

El-Economista. 2011. "Marchan en Cuernavaca contra la violencia." March 30.

El-Informador. 2011. "Gobierno lanza operativo "Veracruz Seguro"." October 4. Accessed February 15, 2015.

El-Norte. 2007a. "Amaga narco al gobierno." March 22.

___. 2007b. "Campea violencia en Veracruz." April 15.

___. 2012a. "Proyectos Frente a Frente: Monterrey." Jun 2.

___. 2012b. "Tiene Nuevo León nueva policía y un sistema vanguardista de procuración de justicia." October 11.

El-Sol-de-Córdoba. 2012. "Anuncia el gobernador el programa Córdoba Seguro." April 10.

El-Universal. 2008. "Preocupa a Estados Unidos el ataque a su Consulado en Monterrey." October 13.

Emmott, Robin. 2011. "If Monterrey falls, Mexico falls." *Reuters*, June 1.

Enamorado, Ted, Luis-Felipe López-Calva, Carlos Rodríguez-Castelar and Hernán Winkler. 2014. "Income inequality and violent crime. Evidence from Mexico's drug war." *Policy Research Working Paper 6935, World Bank*.

Enciso, Froylán. 2010. "Los fracasados del chantaje. Régimen de prohibición de drogas y narcotráfico." In *Seguridad Nacional y Seguridad Interior*, edited by Arturo Alvarado and Mónica Serrano, 61-104. México, D.F.: El Colegio de México.

Escalante, Fernando. 2011. "Homicidios 2008-2009 La muerte tiene permiso." *Nexos*.

Espinosa, Valeria and Donald B. Rubin. 2015. "Did the military interventions in the Mexican drug war increase violence?" *The American Statistician* 69 (1):17-27.

Estrada, Javier. 2011. "El exalcalde de Monterrey, Adalberto Madero y un historial de escándalos." *CNN México*, October 10.

Eubank, William and Leonard Weinberg. 2001. "Terrorism and democracy: perpetrators and victims." *Terrorism and Political Violence* 13 (1).

Fajnzylber, Pablo, Daniel Lederman and Norman Loayza. 2002. "Inequality and violent crime." *Journal of Law and Economic* 45 (1):1-40.

Fausset, Richard. 2013. "Mexico under siege; city's pall of crime lifting; Monterrey has made strides, but the battle is not yet won." *Los Angeles Times*, Octobr 23.

Fearon, James. 2006. "Ethnic mobilization and ethnic violence." In *The Oxford Handbook of Political Economy*, edited by Barry R. Weingast and Donald A. Wittman, 852-868. Oxford; New York: Oxford University Press.

Fearon, James D. and David D. Latin. 2003. "Ethnicity, insurgency, and civil war." *American Political Science Review* 97 (1):75-90.

Fernández Menéndez, Jorge. 2012. *La batalla por México. De Enrique Camarena al Chapo Guzmán*. México: Taurus.

Fierro, Raquel. 2005. "Niega Morelos que haya alza del narcotrafico." *Palabra*, July 13, 9.

Fiorentini, Gianluca and Sam Peltzman. 1995. "Introduction." In *The economics of organized crime*, edited by Gianluca and Sam Peltzman Fiorentini, 1-26. Cambridge: Cambridge University Press.

Flores Pérez, Carlos Antonio. 2009. *El Estado en crisis: crimen organizado y política. Desafíos para la consolidación democrática*. México, D.F.: CIESAS.

Forbes. 2013. "Los 10 mexicanos más corruptos de 2013." December 22.

Galarza, Rocío. 2009. "Encabeza Jáuregui Consejo de Seguridad." *El Norte*, January 14.

Galeotti, Mark. 2005. *Global crime today: the changing face of organised crime*. London: Routledge.

García, José. 2007. "Renuncia en NL Rogelio Cerda." *El Norte*, July 5.

___. 2010. "Asesora Tello Peón a Gobierno." *El Norte*, October 9, 2.

___. 2011. "Esperan reducir con Fuerza Civil presencia militar." *El Norte*, May 27.

García, José, Ángel Charles and Ma. Dolores Ortega. 2009. "Exige IP acciones en seguridad y depuración de corporaciones." *El Norte*, June 10.

García, Lev, and Benito Jiménez. 2011. "Desaparece Duarte policía en Veracruz." *Reforma*, December 12, 9.

Gardenia Mendoza, Aguilar. 2012. "Crimen no da tregua a periodistas en Veracruz." *La Opinión*, May 23.

Garduño Rivera, Rafael, José Eduardo Ibarra-Olivo and Rafael Dávila-Bugarín. 2013. "La medición de la competitividad en México: ventajas y desventajas de los indicadores." *Realidad, Datos y Espacio. Revista Internacional de Estadística y Geografía* 4 (3):28-53.

Garza, Luciano Campos. 2012. "La Marina toma Monterrey." *Proceso*, November 15.

George, Alexander L. and Andrew Bennet. 2005. *Case studies and theory development in the social sciences*. Cambridge: MIT Press.

Gerring, John. 2007. "The case study: what it is and what it does?" In *The Oxford Handbook of Comparative Politics*, edited by Carles Boix and Susan Stokes, 90-122. Oxford: Oxford University Press.

Giraudy, Agustina. 2012. "Conceptualizing state strenght: moving beyond strong and weak states." *Revista de Ciencia Política* 32 (3):599-611.

Goertz, Gary and James Mahoney. 2012. *A tale of two cultures. Qualitative and quantitative research in the social sciences*. Princeton: Princeton University Press.

González, Héctor Raúl. 2010. "Escalan ataques en Cuernavaca." *El Norte*, March 23, 12.

___. 2012a. "Embargan cuentas a Cuernavaca." *Reforma*, August 22.

___. 2012b. "Hallan en Cuernavaca a otra mujer asesinada." *Reforma*, August 21.

___. 2013. "Quiere Cuernavaca otro crédito financiero." *Reforma*, May 2.

Gootenberg, Paul. 2008. *Andean cocaine: the making of a global drug*. Chapel Hill: University of North Carolina Press.

Granados Chapa, Miguel Ángel. 2011. "Plaza Pública/Acabar la violencia en Morelos." *Reforma*, April 3.

Grayson, George W. 2010. *Mexico: narco-violence and a failed state?* New Brunswick: Transaction Publishers.

Grillo, Ioan. 2011. *El narco: inside Mexico's criminal insurgency*. New York: Bloomsbury Press.

Guadarrama, Óscar. 2011. "El gobernador de Morelos cesa al secretario de seguridad pública." *México CNN*, April 10.

Guerrero, Eduardo. 2010. "Cómo reducir la violencia en México." *Nexos*.

___. 2011a. "La raíz de la violencia." *Nexos*.

___. 2011b. "Security, drugs and violence in Mexico: a survey." *7th North American Forum, Washington D.C.*

___. 2012a. "An assessment of illegal protection markets in Mexico." In *Rethinking the "war on drugs" through the US-Mexico prism*, edited by Ernesto Zedillo and Haynie Wheeler, 33-46. New Haven: Yale Center for the Study of Globalization.

___. 2012b. "La estrategia fallida." *Nexos*.

___. 2015. "¿Bajó la violencia?" *Nexos*.

Gurr, Ted Robert. 1970. *Why men rebel*. Princeton: Princeton University Press.

Hanson, Jonathan K. and Rachel Sigman 2013. "Leviathan's latent dimensions: measuring state capacity for comparative political research." *APSA 2011 Annual Meeting Paper*.

Hegre, Håvard. 2014. "Democracy and armed conflict." *Journal of Peace Research* 51 (2).

Hegre, Håvard, Tanja Ellingsen, Scott Gates and Nils Petter Gleditsch. 2001. "Toward a democratic civil peace? Democracy, political change, and civil war, 1816–1992." *American Political Science Review* 95 (1).

Hendrix, Cullen S. 2010. "Measuring state capacity: theoretical and empirical implications for the study of civil conflict." *Journal of Peace Research* 47 (3): 273-285.

Hendrix, Cullen S and Joseph K. Young. 2012. "Weapon of the weak? assessing the effects of state capacity on terrorism." *Working Paper,* presented at the 2012 Midwest Political Science Association Annual Meeting.

Hernández, Érika, and Claudia Guerrero. 2010. "Piden Alcaldes frenar plan de Mando Único." *El Norte*, Oct 21.

Herrera, Rolando. 2010. "Revela 'El Charro' división de cártel." *Reforma*, November 26, 9.

___. 2012. "Preparan vigilancia en penales." *Reforma*, January 1.

___. 2013. "Fallan consignaciones de Marina en Veracruz." *Mural*, March 27.

Herrera-Lasso, Luis. 2012. "Factores que propician la violencia y la inseguridad: apuntes para una estrategia integral de seguridad pública en México." Grupo Coppan S.C. Manuscript. Accessed April 14, 2015. http://cei.colmex.mx/EstudiosViolenciaMexico2.html

Hevia de la Jara, Felipe and Alberto J. Olvera Rivera. 2013. "Capital social en el estado de Veracruz." In *Violencia, Inseguridad y Justicia en Veracruz*, edited by Alberto J. Olvera Rivera, Alfredo Zavaleta Betancourt and Víctor Manuel Andrade Guevara, 165-216. Xalapa, Veracruz: Universidad Veracruzana.

Hibbs, Douglas A. 1973. *Mass political violence: a cross-national causal analysis*. New York: Wiley and Sons.

Hill, Andrew and Jennifer Gelman. 2007. *Data analysis using regression and multilevel/hierarchical models*. New York: Cambridge University Press.

Hope, Alejandro. 2012. "De muertos y números." *Animal Político*, August 18.

___. 2013. "Violencia 2007-2011. La tormenta perfecta." *Nexos*, November 1.

Huber, Chuck. 2013. "Multilevel linear models in Stata, part 1: components of variance." Accessed September 27, 2013. http://blog.stata.com/2013/02/04/multilevel-linear-models-in-stata-part-1-components-of-variance/

Human-Rights-Watch. 2011. *México: Ausencia de justicia por asesinatos y desapariciones en Monterrey.*

Huntington, Samuel. 1996. "Democracy for the long haul." *Journal of Democracy* 7 (2).

ICESI. 2005a. "La inseguridad urbana en México: Análisis comparativo de las áreas metropolitanas de 13 ciudades." *Tercera Encuesta Nacional sobre Inseguridad. ENSI-3*. November 2005

___. 2005b. *Tercera Encuesta Nacional sobre Inseguridad*. *ENSI-3*. Análisis de Resultados. September 2005

___. 2008. *Quinta Encuesta Nacional sobre Inseguridad*. Resultados.

IEP (Institute for Economics and Peace). 2015. "Mexico peace index." Accessed April 9. http://www.visionofhumanity.org/#/page/indexes/mexico-peace-index

IMCO (Instituto Mexicano para la Competitividad, A. C.). 2008. *Índice de competitividad estatal 2008. Aspiraciones y realidad: las agendas del futuro*. México: Instituto Mexicano para la Competitividad.

___. 2014. *Índice de competitividad urbana 2014. ¿Quién manda aquí? La gobernanza de las ciudades y el territorio de México.* México: Instituto Mexicano para la Competitividad.

IMCO-EGAP. 2006. *Índice de competitividad estatal 2006. Preparando a las entidades federativas para la competitividad: 10 mejores prácticas*.

INEGI (Instituto Nacional de Estadística y Geografía). 2010. *Encuesta Nacional sobre Inseguridad (ENSI)*. Accessed on February 10, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/especiales/ensi/ensi2010/default.aspx

___. 2011a. *Censo nacional de gobiernos municipales y delegacionales.* Accessed on January 21, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/censosgobierno/cng2011gmd/default.aspx

___. 2011b. *Encuesta nacional de victimización y percepción sobre seguridad pública (ENVIPE).* Accessed on January 19, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/regulares/envipe/envipe2011/default.aspx

___. 2012a. *Encuesta nacional de victimización de empresas (ENVE).* Accessed on January 21, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/establecimientos/otras/enve/enve2012/default.aspx

___. 2012b. *Encuesta nacional de victimización y percepción sobre seguridad pública (ENVIPE).* Accessed on January 19, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/regulares/envipe/envipe2012/default.aspx

___. 2013a. *Censo nacional de gobiernos municipales y delegacionales.* Accessed on February 10, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/censosgobierno/cngmd2013/default.aspx

___. 2013b. *Encuesta nacional de calidad e impacto gubernamental (ENCIG).* Accessed on February 10, 2015. http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/especiales/encig/2013/default.aspx

___. 2015. "Banco de información. Consulta integral por categorías." Accessed on April 20, 2015. http://www3.inegi.org.mx/sistemas/biinegi/

INFOMEX (Sistema INFOMEX Gobierno Federal). 2010. "Solicitud de transparencia 2210300006510." Accessed on March 16, 2015. https://www.infomex.org.mx/gobiernofederal/home.action

___. 2011. "Solicitudes de transparencia: 2210300003711, 2210300008311" Accessed on March 16, 2015. https://www.infomex.org.mx/gobiernofederal/home.action

___. 2012. "Solicitud de transparencia: 0001300021212" Accessed on April 20, 2015. https://www.infomex.org.mx/gobiernofederal/home.action

Ingram, Matthew. 2014. "Community resilience to violence: local schools, regional economies, and homicide in Mexico's municipalities." In *Building resilient communities in Mexico: civic responses to crime and violence*, edited by David A. Shirk, Duncan Wood and Eric L. Olson. Wilson Center, 25-62. Washington, D.C.: Wodrow Wilson Center and Justice in Mexico Project.

Inkster, Nigel and Virginia Commolli. 2012. *Drugs, insecurity and failed states: the problems of prohibition*. London: The International Institute for Strategic Studies.

InSight-Crime. 2014a. "Zetas profile." *InSight Crime.* Accessed September 21, 2014.

___. 2014b. "Organización Beltrán Leyva profile." *InSight Crime.* Accessed October 3, 2014.

Trans-Border Institute. 2010. *Drug violence in Mexico. Data and analysis from 2001-2009*. San Diego: University of San Diego.

Jiménez, Benito. 2010. "Refuerza Ejército labor en Morelos." *El Norte*, April 30.

___. 2011. "Amplían Zetas control de plazas." *El Norte*, February 27.

Jiménez, Benito, Silvia Garduño, and Luis Brito. 2010. "Exhibe ataque poder de Zetas." *El Norte*, August 26.

Johnson, Brian. 2010. "Multilevel analysis in the study of crime and justice." In *Handbook of Quantitative Criminology*, edited by Alex R. Priquero and David Weisburd, 615-648. New York Springer.

Kalyvas, Stathis N. 2006. *The logic of violence in civil war*. Cambridge: Cambridge University Press.

___. 2007. "Civil wars." In *The Oxford Handbook of Comparative Politics*, edited by Carles Boix and Susan C. Stokes, 416-434. New York: Oxford University Press.

Kelly, Morgan. 2000. "Inequality and crime." *Review of Economics and Statistics* 82 (4).

Kenny, Paul and Mónica Serrano. 2012a. "The Mexican state and organized crime. An unending story." In *Mexico's security failure. Collapse into criminal violence*, edited by Paul Kenny and Mónica Serrano with Arturo Sotomayor, 29-53. New York: Routledge.

___. 2012b. "Transition to dystopia: 1994-2008." In *Mexico's security failure. Collapse into criminal violence*, edited by Paul Kenny and Mónica Serrano with Arturo Sotomayor, 54-86. New York: Routledge.

Kurtz, Marcus J. and Andrew Schrank. 2012. "Capturing state strength: experimental and econometric approaches." *Revista de Ciencia Política* 32 (3):613-621.

La-Crónica. 2009. "Se extienden protestas contra Ejército a tres estados." February 17.

___. 2010. "Ejecutan a 2 en Cuernavaca; los cuelgan de puente." April 9.

La-Razón. 2011. "Desaparecen cuatro marinos en Veracruz." August 15.

Laitin, David D. 2002. "Comparative politics: the state of the subdiscipline." In *Political science: the state of the discipline*, edited by Ira Katznelson and Helen V. Milner, 630-659. Washington, D.C.: American Political Science Association.

Gobierno del Estado de Nuevo León. 2011. *Tercer informe de gobierno Nuevo León*.

Lev, García. 2008a. "Alerta en Veracruz aumento de delitos." *Reforma*, May 5.

___. 2008b. "Rescata comando a Zetas... ¡de penal!" *Mural*, May 17.

Loret de Mola, Carlos. 2014. "Sinaloa frankenstein becomes Mexico's most powerful cartel." Accessed September 23.

Luna, Juan Pablo and Sergio Toro Maureira. 2014. "State capacity and democratic governance in Latin America: a survey data-based approach to measurement and assessment." *AmericasBarometer Insights* (102):1-7.

Lupsha, Peter A. 1995. "Transnational narco-corruption and narco investment: a focus on Mexico." *Transnational Organized Crime* 1 (1):84-101.

Magaloni, Ana Laura. 2012. "Arbitrariness and inefficiency in the Mexican criminal justice system." In *Mexico's security failure. Collapse into criminal violence*, edited by Paul Kenny and Mónica Serrano with Arturo Sotomayor, 89-106. New York: Routledge.

Malkin, Elisabeth. 2012. "Business answer to violence." *International Herald Tribune*, January 12.

Martínez, Óscar. 2014. "Los coyotes domados." *El faro*, March 24.

Martínez, Regina. 2009. "El Pacto que apaciguó el Estado." In *El México Narco*, edited by Rafael Rodríguez-Castañeda, 176-183. México: Planeta.

Masse, Fátima. 2014. "¿Cuáles fueron las entidades más competitivas en 2012?" *Animal Político*, November 26.

Medellín Mendoza, Laura Nelly and Jorge Enrique Murillo Martínez. 2010. "Un retrato de las elecciones en el año 2009 y la espiral de violencia en Nuevo León." In *Elecciones en tiempos de guerra. Baja California, Chihuahua, Durango, Nuevo León, Sinaloa, Tamaulipas, Veracruz*, edited by Ernesto Hernández Norzagaray (coord), 131-155. Sinaloa: Universidad Autónoma de Sinaloa.

Mendonza-Luna, Daniela. 2014. "Cambios marcan sexenio." *Milenio*, October 15.

Meré, Dayna, and Mónica Ramírez. 2010. "Pierden hoteleros $13 mil millones." *Reforma*, March 10.

Merino, José. 2011. "Mayor presencia de la autoridad no implica más ejecuciones." *Animal Político*.

Meyer, Maureen. 2010. "Obama y la Iniciativa Mérida: ¿El inicio de un cambio o continuidad de la fallida guerra contra las drogas?" In *Crimen organizado e Iniciativa Mérida en las relaciones México-Estados Unidos*, edited by Raúl Benítez Manaut, 69-75. México, D.F.: CASEDE.

Michel, Víctor Hugo and David Vicenteño. 2007. "Mandan más tropas a NL y Tamaulipas." *El Norte*, February 19.

Moloeznik, Marcos Pablo and María Eugenia Suárez de Garay. 2012. "El proceso de militarización de la seguridad pública en México (2006-2010)." *Frontera Norte* 24 (48):121-144.

Molzahn, Cory, Octavio Rodríguez, and David A. Shirk. 2013. *Drug violence in Mexico. data and analysis through 2012.* San Diego: Trans-Border Institute, University of San Diego.

Molzahn, Cory, Viridiana Ríos and David A. Shirk. 2012. *Drug violence in Mexico. Data and analysis through 2011*. San Diego: Trans-Border Institute, University of San Diego.

Morales, Alberto. 2011. "Capturan a 'El Pica', operador de 'La Barbie'." *El Universal*, Abril 29.

Morris, Stephen D. 2013. "Drug trafficking, corruption, and violence in Mexico: mapping the linkages." *Trends in Organized Crime* 16 (2).

Moynihan, Daniel P. 1993. *Pandaemonium: ethnicity in international politics*. New York: Oxford University Press.

Mueller, Edward and Weede, Erick. 1990. "Cross-national variation in political violence a rational action approach." *The Journal of Conflict Resolution* 34 (4):624.

Mural. 2011. "Caen en Cuernavaca capo... y jefe policiaco." May 20.

___. 2012. "Desplaza en Nuevo León la Fuerza Civil al Ejército." September 16.

NAR (National Association of Realtors). 2014. *Profile of international home buying activity*.

Noroeste. 2006. "Asesinan a director de investigación en NL." September 7.

Notimex. 2008a. "Destinarán 42 mdp para equipos de seguridad en puerto de Veracruz." August 30.

___. 2008b. "Implementan campaña de canje de armas en el municipio de Veracruz." May 15.

O'Neil, Shannon. 2009. "The real war in Mexico. How democracy can defeat drug cartels." *Foreign Affairs* 88 (4).

Olvera, Alberto. 2011. "Poderes fácticos y democracia en México : sindicatos, caciques, monopolios y delincuencia organizada en un país en transición." In *Ciudadanía y legitimidad democrática en América Latina*, edited by Isidoro Cheresky, 311-337. Buenos Aires: Prometeo.

Osorio, Javier. 2013. "Hobbes on drugs. Understanding drug violence in Mexico." PhD Diss., University of Notre Dame. Accessed January 22, 2015. http://media.wix.com/ugd/76b255_675f00d2a50ceebfd89750ae3b6969ae.pdf

Osorno, Diego. 2013. *La guerra de los Zetas. Viaje por la frontera de la necropolítica*. México: Vintage Español.

Pachico, Elyssa. 2013. "De cómo la lucha entre los Beltrán Leyva y el Cartel de Sinaloa desangró a México." *InSight Crime*, Abril 18.

Padgett, Tim. 2011. "Why I Protest: Javier Sicilia of Mexico." *Time*, December 14.

Phillips, Brian J. 2015. "How does leadership decapitation affect violence? The case of drug trafficking organizations in Mexico." *The Journal of Politics* 77 (2).

Pimentel, Stanley A. 2000. "The nexus of organized crime and politics in Mexico." In *Organized crime and democratic governability: Mexico and the U.S.-Mexican borderlands*, edited by John Bailey and Roy Godson, 33-57. Pittsburgh: University of Pittsburgh Press.

PNUD, Programa de las Naciones Unidas para el Desarrollo. 2010. *Índice de desarrollo humano 2010.*

Polanska, Malgorzata and Armando Rodríguez Luna. 2012. "Anexo estadístico." In *Atlas de la Seguridad y la Defensa de México 2012*, edited by Sergio Aguayo Quezada and Raúl Benítez Manaut, 135-215. México: CASEDE.

Presidencia de la República. 2011a. *Base de fallecimientos por presunta rivalidad delincuencial.*

___. 2011b. *Quinto informe de gobierno*. Estados Unidos Mexicanos.

Proceso. 2009. "La anunciada muerte de 'El Negro' Saldaña." November 2.

Ramírez, Erick. 2013a. "La producción de petróleo, en suelo de siete entidades." *El Economista*, March 17.

Ramírez, Moisés. 2013b. "Sale Marina; entra crimen." *El Norte*, October 20.

Rea, Daniela. 2011. "La primavera del miedo." *Reforma*, April 10.

Reforma. 2009a. "Combate Marina ¡en tierra firme! ." December 15.

___. 2009b. "Exige narco retirar a militares de NL ", February 13.

___. 2009c. "Rastrean a 'Osiris' las fuerzas federales." July 3, 15.

___. 2010a. "Atacan cuartel en Cuernavaca." April 8, 6.

___. 2010b. "Pide IP a Calderón más Ejército en NL; exigen en desplegado el envío de 3 batallones del Ejército, y uno más, de la Marina." August 18.

___. 2011. "Migra la violencia a Veracruz y Guerrero." *Reforma*, September 28.

___. 2012. "Enfocan combate en Mano con Ojos." January 9, 54.

___. 2013. "Dice narco financiar a Herrera." *Reforma*, April 19.

Reporte-Índigo. 2012. "Un marino entre soldados." October 30.

Reuter, Peter. 1983. *Disorganized crime: the economics of the visible hand*. Cambridge: MIT Press.

___. 2009. "Systemic violence in drug markets." *Crime, Law and Social Change* 52:275-284.

Reveles, José. 2012. *El Cártel incómodo. El fin de los Beltrán Leyva y la hegemonía del Chapo Guzmán*. México, D.F.: Grijalbo.

Reyes, Alfonso. 2010. "Plan Mexico? Towards an integrated approach in the war on drugs." *Small Wars Journal*. September 15.

Ribando Seelke, Clare and Kristin Finklea. 2014. "U.S.-Mexican security cooperation: the Mérida Initiative and beyond." *Congressional Research Service*. R41349. April 8.

Ríos, Viridiana. 2012a. "Why did Mexico become so violent? A self-reinforcing violent equilibrium caused by competition and enforcement." *Trends in Organized Crime*:1-16.

___. 2012b. "How government structure encourages criminal violence: the causes of Mexico's drug war." PhD Diss., Harvard University. Accessed June 10, 2013. http://www.gov.harvard.edu/files/Rios_PhDDissertation.pdf

___. 2013. "¿Quién mata a los periodistas?" *Nexos*, August 1.

Ríos, Viridiana and David A. Shirk. 2011. *Drug violence in Mexico. Data and analysis through 2010. Special report*. San Diego: Trans-Border Institute, University of San Diego.

Robles, Francisco. 1998. "Piden la renuncia del gobernador del estado de Morelos: 98 mil personas rechazan la gestion de Carrillo Olea en simbolico plebiscito." *La Opinión*, March 12.

Rodríguez-Luna, Armando. 2010. "La Iniciativa Mérida y la guerra contra las drogas. Pasado y presente." In *Crimen organizado e Iniciativa Mérida en las relaciones México-Estados Unidos*, edited by Raúl Benítez Manaut, 31-68. México, D.F.: CASEDE.

___. 2014. "Violencia y crimen organizado en Morelos. La influencia del cartel de los Beltrán Leyva." In *Atlas de la seguridad y violencia en Morelos*, edited by Sergio Aguayo, Rodrigo Peña González and Jorge Ariel Ramírez Pérez, 231-250. México: Universidad Autónoma del Estado de Morelos and CASEDE.

Roldán, Nayeli. 2014. "Veracruz, el estado con el mayor número de policías reprobados en controles de confianza." *Animal Político*, November 14.

Ross, Michael L. 2004. "What do we know about natural resources and civil war?" *Journal of Peace Research* 41 (3).

Sabet, Daniel. 2010. "Police reform in Mexico: advances and persistent obstacles." *Working Paper Series on U.S.-Mexico Security Collaboration*: 247-269.

Sambanis, Nicholas. 2001. "Do ethnic and nonethnic civil wars have the same causes? A theoretical and empirical inquiry (Part 1)." *Journal of Conflict Resolution* 45 (3).

Sánchez Valdés, Víctor Manuel. 2014. "¿Organizaciones criminales más pequeñas = a menos violencia?" *Animal Político*, October 28.

Santos, Yaiza. 2014. "La metástasis del crimen organizado en México." *ABC*, October 24.

Schelling, Thomas C. 1967. "Economics and criminal enterprise." *The Public Interest* 61-78.

SEDENA (Secretaría de la Defensa Nacional). 2009. *Tercer informe de labores*. Accessed on January 22, 2015. http://www.sedena.gob.mx/pdf/informes/tercer_informe_labores.pdf

SEMAR (Secretaría de Marina). 2011. "La Armada de México asegura personal y desmantela red de comunicaciones de "los Zetas" en el estado de Veracruz." September 8. Comunicado. 279/11. Accessed on January 20, 2015. http://calderon.presidencia.gob.mx/2011/09/la-armada-de-mexico-asegura-personal-y-desmantela-red-de-comunicaciones-de-%E2%80%9Clos-zetas%E2%80%9D-en-el-estado-de-veracruz/

___. 2012. *Sexto informe de labores*. Accessed February 21, 2015. http://www.semar.gob.mx/transparencia/informes_labores/6_inf_labores.pdf

SESNSP (Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública). 2015. *Base de datos de incidencia delictiva.* Accessed January 15, 2015. http://secretariadoejecutivo.gob.mx/incidencia-delictiva/incidencia-delictiva-fuero-comun.php

SINAIS (Sistema Nacional de Información en Salud). Consulta. Secretaría de Salud. http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_egresoshosp.html

SJP (Consejo Ciudadano para la Seguridad Pública y Justicia Penal A.C). 2012. *San Pedro Sula (Honduras) la ciudad más violenta del mundo; Juárez, la segunda*.

___. 2013. *San Pedro Sula otra vez primer lugar mundial; Acapulco, el segundo*.

___. 2014. *La violencia en los municipios y las entidades federativas de México* (2013).

___. 2015. *La violencia en los municipios y en las entidades federativas de México* (2014).

Shelley, Louise. 2001. "Corruption and organized crime in Mexico in the post-PRI transition." *Journal of Contemporary Criminal Justice* 17 (3).

Silva Forne, Carlos; Catalina Pérez Correa and Rodrigo Gutiérrez. 2011. *Uso y abuso de la fuerza letal por parte de las fuerzas federales en enfrentamientos con presuntos miembros de la delincuencia organizada*. México, D.F.: UNAM.

SIMBAD. 2015. Sistema Estatal y Municipal de Base de Datos. Consulta. INEGI. http://sc.inegi.org.mx/cobdem/

Skaperdas, Stergios. 2001. "The political economy of organized crime: providing protection when the state does not." *Economics of Governance* 2 (3):173-202.

Skrede Gleditsch, Kristian and Andrea Ruggeri. 2010. "Political opportunity structures, democracy, and civil war." *Journal of Peace Research* 47 (3):299-310.

Snijders, Tom and Roel J. Bosker. 2012. *Multilevel analysis: an introduction to basic and advanced multilevel modeling*. London: Sage.

Snyder, Richard and Angélica Durán-Martínez. 2009. "Does illegality bread violence? Drug trafficking and state-sponsored protection rackets." *Crime, Law and Social Change* 52:253-273.

Sobek, David. 2010. "Master of their domains: the role of state capacity in civil wars: Introduction." *Journal of Peace Research* 47 (3):267-271.

Soifer, Hillel David. 2012. "Measuring state capacity in contemporary Latin America." *Revista de Ciencia Política* 32 (3):585-598.

Sousa Oliva, José Daniel and Jesús A. López-González. 2010. "Elecciones locales en Veracruz 2004-2010: Competitividad acotada y pragmatismo partidario." In *elecciones en tiempos de Guerra. Baja California, Chihuahua, Durango, Nuevo León, Sinaloa, Tamaulipas and Veracruz.*, edited by Ernesto Herández-Norzagaray, 233-261. Sinaloa: Universidad Autónoma de Sinaloa.

Tapia, Jonathan. 2008a. "Señalan IP a alcalde como más corrupto en la historia de Monterrey." *El Universal*, September 10.

___. 2008b. "Ven 'cacería' kaibil en homicidio de militares." *El Universal*, October 22.

The-Economist. 2013. "The new face of Mexican policing." July 15.

Toro, María Celia. 1995. *Mexico's "war" on drugs. Causes and consequences*. Boulder: Lynne Rienner.

Torres, Mauricio. 2013. "El secuestro y extorsión superan al plan de seguridad del gobierno." *CNN México*, December 30.

Torres, Rubén. 2007. "Veracruz, base operativa de los Cuerpos Especiales." *El Economista*, May 14.

Torres, Rubén. 2011. "Sacan jugo a la bolsa del gasto para el Mando Único Policial." *Economista*, May 16.

Trejo, Guillermo and Sandra Ley. 2013. "Votes, drugs, and violence. Subnational democratization and the onset of inter-cartel wars in Mexico 1995-2006." Working Paper, University of Notre Dame and Duke University (1-38).

UNODC (United Nations Office on Drugs and Crime). 2014. *Global study on homicide 2013. Trends, contexts, data*. Vienna: United Nations.

Valdés Castellanos, Guillermo. 2013. *Historia del narcotráfico en México*. México: Santillana.

Villagran, Lauren. 2014. "The victims' movement in Mexico." In *Building resilent communities in Mexico: civic responses to crime and violence*, edited by David A. Shirk, Duncan Wood and Eric L. Olson, 121-141. Washington D.C.: Woodrow Wilson Center and Justice in Mexico Project.

Villegas, Rodrigo. 2014. "La falla de Morelos." *Reporte Índigo*, May 12.

Weber, Max. (1919/1958). "Politics as a vocation." In *From Max Weber: Essays in Sociology*, edited by H.H. Gerth and C. Wright Mills (eds and trans.), 77-128. London: Oxford University Press.

Whitworth, Adam. 2012. "Inequality and crime across England: a multilevel modelling approach." *Social Policy and Society* 11 (1):27-40.

Wikileaks. 2007a. *Two month truce has drastically reduced northern border drug violence, but new killings endanger the truce*. August 23: 07MONTERREY800_a.

___. 2007b. *Unprescedented escalation of narco-violence in Monterrey*. March 23: 07MONTERREY334_a.

___. 2009a. *Casino ties to PAN candidates*. July 2: 09MONTERREY259_a.

___. 2009b. *Mexican navy operation nets drug kingpin Arturo Beltran Leyva*. December 17: 09MEXICO3573_a.

___. 2009c. *Monterrey shootouts leave 17 dead, expose shortcomings in state's crime fighting apparatus*. December 14: 09MONTERREY453_a.

___. 2009d. *Veracruz: all eyes on 2010 election*. November 9: 09MEXICO3173_a.

___. 2009e. *Your meeting with FM Espinosa at UNGA*. September 23: 09MEXICO2766_a.

Williams, Phil. 2009. "Illicit markets, weak states and violence: Iraq and Mexico." *Crime, Law and Social Change* 52 (323-336).

___. 2010. "El crimen organizado y la violencia en México: una perspectiva comparativa." *Istor* 42.

___. 2012. "The terrorism debate over Mexican drug trafficking violence." *Terrorism and Political Violence* 24:259-278.

Williams, Phil and Roy Godson. 2002. "Anticipating organized and transnational crime." *Crime, Law and Social Change* 37 (4):311-355.

World-Maritime-News. 2014. "Veracruz port expansion kicks off." December 14.

Zavaleta Betancourt, José Alfredo. 2012. "La seguridad pública en Veracruz, 2004-2009." In *El prisma de las seguridades en América Latina. Escenarios regionales y locales*, edited by Alejo Vargas, 51-80. Argentina: CLACSO.

___. 2013. "La inseguridad y la seguridad de los veracruzanos." In *Violencia, Inseguridad y Justicia en Veracruz*, edited by Alberto J Olvera Rivera, Alfredo Zavaleta Betancourt and Vícto Manuel Andrade Guevara, 291-315. Xalapa, Veracruz: Universidad Veracruzana.

Appendix I.1 Institutional Review Board Approval

- Submission #: 20140189 Issue Date: 5/5/2014

UNIVERSITY
OF MIAMI

University of Miami
Human Subjects Research Office (M8089)
P.O. Box 016960, Miami, Florida 33101
1500 NW 12 Avenue, Suite 1002, Miami, Florida

Ph.: 305-243-3195
Fax: 305-243-3328
www.hsro.miami.edu

APPROVAL

May 5, 2014

Bruce Bagley
305-284-6867
bbagley@miami.edu

Dear Dr. Bruce Bagley:

On 5/5/2014, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Drug Trafficking and Violence in Mexico. A Political Economy Approach at the Subnational Level
Investigator:	Bruce Bagley
IRB ID:	20140189
Funding:	Name: International Studies, Department of
Documents Reviewed:	• Spanish Verbal Consent .pdf, Category: Consent Form; • ENG_Verbal_Consent.pdf, Category: Consent Form; • English Questionnaire.docx, Category: Questionnaire/Survey; • English Email Invite.pdf, Category: Recruitment Materials; • Spanish Questionnaire.docx, Category: Questionnaire/Survey; • Spanish Email Invite .pdf, Category: Recruitment Materials;

The IRB approved the study from 4/3/2014 to 4/2/2015 inclusive with a waiver of documentation of consent. Before 4/2/2015 or within 45 days of the approval end date, whichever is earlier, you are to submit a completed Continuing Review to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 4/2/2015 approval of this study expires on that date.

To document consent, use the consent documents that were approved and stamped by the IRB. Go to the Documents tab to download them.

NOTE: Translations of IRB approved study documents, including informed consent documents, into languages other than English must be submitted to HSRO for approval prior to use.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system

Should you have any questions, please contact: Vivienne Carrasco, Sr. IRB Regulatory Analyst, (phone: 305-243-6713; email: vcarrasco@med.miami.edu)

Sincerely,

[This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature]

Amanda Coltes-Rojas, MPH, CIP
Director
Regulatory Affairs & Educational Initiatives

Appendix I.2 List of Interviews

Anonymous Interview, Bank Clerk A, Monterrey, June 2014.

Anonymous Interview, Bank Clerk B, Monterrey, June 2014.

Anonymous Interview, Journalist A, Veracruz, June 2014.

Anonymous Interview, Lawyer A, Monterrey, June 2014.

Anonymous Interview, Naval Officer, Veracruz, June 2014.

Anonymous Interview, Professor A, Monterrey, June 2014.

Anonymous Interview, Professor B, Monterrey, June 2014.

Anonymous Interview, Professor C, Monterrey, June 2014.

Anonymous Interview, Professor D, Veracruz, June 2014.

Anonymous Interview, Professor E, Mexico City, July 2014.

Anonymous Interview, Public Security Officer, Veracruz, June 2014.

Anonymous Interview, Social Activist A, Mexico City, May 2014.

Anonymous Interview, Social Activist B, Monterrey, June 2014.