Criminal Conflicts and the Killing of Law Enforcement Officers in Mexico

Marco Alcocer[*][†]

Abstract

Violence against law enforcement by criminal organizations is pervasive in Latin America yet largely unexplored. What explains why and where law enforcement is violently attacked, who is targeted, and how they are killed? This article contends that conflicts between criminal organizations incentivize warring organizations to attack law enforcement, particularly local officers, with more brazen violence. Two original datasets on killings of law enforcement in Mexico show that killings are overwhelmingly of local officers and most frequently perpetrated through coordinated attacks, not confrontations, executions, or kidnappings. Using data on cartels, I first document a strong association between criminal conflicts and the killing of law enforcement officers, and find that the association is driven by killings of state and municipal officers rather than federal officers enforcing the government crackdown. I further show that criminal conflicts increase brazen killings and killings of officers while off duty.

1 Introduction

Since 2017, Cártel Santa Rosa de Lima (CSRL) and Cártel de Jalisco Nueva Generación (CJNG) have been engaged in a bloody war over illicit markets in the state of Guanajuato, Mexico. In October of 2019 in the municipality of Cortazar, three municipal police officers working with CSRL kidnapped three state police officers and handed them over to CSRL. CSRL then published a video online showing armed men torturing two of the kidnapped state officers who claimed that their superiors worked for CJNG. One of the officers was subsequently found dead and the other two remain missing (Infobae 2019). In retaliation, just two months later, 15 members of CJNG armed with automatic rifles and grenades attacked a municipal police station in the neighboring municipality of Villagrán, a CSRL stronghold, killing three local police officers, injuring one, and kidnapping four. CJNG then published a video online showing them interrogating the four kidnapped police officers, who outlined the services they allegedly provided CSRL. The four officers were later found lifeless on the side of a main road (Crónica 2019). Alarmingly, while these examples are particularly shocking, such occurrences are far from rare. The killing of law enforcement officers[1] in Mexico by cartels—what criminal organizations (COs) in the country are colloquially called—is strikingly common: Between January 1, 2018 and December 31, 2023, at least 2,638 police officers were killed (Causa en Común 2024).

This phenomenon is unfortunately not restricted to Mexico. Violence against law enforcement is a serious issue throughout Latin America. Each year, multiple, if not dozens or hundreds, of law enforcement officers are killed by COs in Brazil, Ecuador, Colombia, Peru, El Salvador, Honduras, Guatemala, Bolivia, Paraguay, Venezuela, and Haiti. This type of violence is surprising given the common assertion that COs using violence against the state is costly and thus wide-scale confrontation should be a rarity (Gambetta 1993; Bailey and Taylor 2009; Willis 2015; Durán-Martínez 2017; Lessing 2017).

Yet, while scholars have noted the existence of violence against law enforcement as part of broader violent trends in Latin America over the past two decades (e.g., Sullivan and Elkus

2008; Reuter 2009; Bailey and Taylor 2009; Sabet 2010; Shirk and Wallman 2015; Durán-Martínez 2017), the phenomenon has unfortunately received little scholarly attention, in part due to a lack of data, despite its importance. For example, a recent review of 168 articles on violence against public figures found studies on the killing of politicians, journalists, judicial officials, activists, and social leaders, but not police or law enforcement (Blume et al. 2025). While only two studies, to my knowledge, have specifically analyzed violence against law enforcement by COs (Willis 2015; Lessing 2017), a few existing studies have made interrelated arguments about how government enforcement efforts against COs can create incentives for COs to use violence against rivals, society, and the state, including law enforcement (Ríos 2013; Magaloni et al. 2020; Barnes 2022; Durán-Martínez 2017).

These arguments, nevertheless, only appear to explain a subset of this violence in Mexico and other Latin American countries, leaving important parts of the variation unexplained. Notably, such violence often targets officers either in absence of a crackdown or against those uninvolved in enforcing crackdowns. In the Mexican case, while the government crackdown initiated in December 2006 was led by the military and at times supported by some state police agencies, most killings are of *local* law enforcement—in 2018, while state and municipal police made up 30.86% and 21.05% of all law enforcement personnel, respectively, 36.9% of killings were of state officers and 53.2% were of municipal personnel.[2] Even less understood is variation in the *form and brutality* of the violence, with some killings being far more brazen than others: some are carried out by a single assailant in limited attacks while others by groups of armed men shooting hundreds of bullets at officers in public spaces.[3]

This article seeks to contribute to the literature by providing an additional factor driving violence against law enforcement by COs. This article argues that local criminal conflicts over illicit markets create incentives for warring COs to violently confront law enforcement to both keep certain officers from imposing costs on them to the benefit of their rival and get certain officers to provide them benefits to the detriment of their rivals. The use of more brazen forms of violence by COs serves the additional functions of sending a clear

and costly signal to law enforcement personnel and intimidating them into either colluding with them or deterring others from protecting rivals. Additionally, criminal conflicts make *subnational* law enforcement more salient actors and thus prime targets for both strategic and operational reasons.

The article focuses on Mexico, which provides a puzzling case because federal law enforcement provided protection to cartels for decades (see Shirk and Wallman 2015; Lerch 2024) and the crackdown that began in December of 2006 was spearheaded by federal forces, and yet, over 90% of killed law enforcement officers in 2018 belonged to subnational agencies, particularly local level agencies that do not have investigative mandates or jurisdiction over CO-related activities and crimes.

Empirically, the article leverages two original datasets on the killing of law enforcement officers by COs in Mexico: a cross-sectional dataset covering all of Mexico in 2018, and a panel dataset covering the state of Guanajuato from 2000 to 2020. To the best of my knowledge, these are the first datasets of their kind. Descriptively, I find that most killings fall into four categories—coordinated attacks, executions, confrontations, and kidnappings— with coordinated attacks accounting for over half of all killings. Moreover, the majority of victims are municipal officers, just over 20% are high-ranking officers, and about one third are killed while off duty.

Using data on cartel presence at the municipal level in Mexico and a series of linear regression models, I find that cartel presence in a municipality is not enough to explain killings, but rather that criminal wars in municipalities drive violence against law enforcement. I further find that killings of subnational (state and municipal) law enforcement are driving the effect. Moreover, I find that criminal wars lead cartels to kill law enforcement personnel through more brazen tactics, with some evidence that this is driven by the increased targeting of off duty officers, but do not help explain the targeting of high-level law enforcement officers.

These findings have dire implications. As the embodiment of the state's coercive power, law enforcement institutions are responsible for exercising violence, establishing the rule of

law, and enforcing crime or social control. COs perpetrating violence against law enforcement has significant consequences for law enforcement officers, their families, and their agencies (Willis 2015; den Heyer 2024), which likely impact the state's capacity to enforce the rule of law. This, in turn, increases the likelihood that COs can operate and perpetrate crimes and violence against rivals, civilians, and the state with some degree of impunity.

This article makes some key contributions. First, it advances studies in political science by focusing specifically on violence against law enforcement and looking beyond crackdowns. Second, it makes a data contribution by introducing the first quantitative datasets on killed law enforcement personnel in Mexico and by COs. Third, by investigating different modes of violence, this study contributes to scholarship examining not just the use of violence by COs but also variation in how they perpetrate this violence (Cruz and Durán-Martínez 2016; Durán-Martínez 2017). Fourth, to the best of my knowledge, it provides the first quantitative analysis on the killing of law enforcement officers by COs. Substantively, this article complements and extends scholarship investigating the collusive arrangements between COs and law enforcement (Auyero and Sobering 2019; Morris 2012; Flom 2019; Lerch 2024) and violence by COs against politicians (e.g. Blume 2017; Daniele and Dipoppa 2017; Alesina et al. 2019; Trejo and Ley 2020) and other public figures (see Blume et al. 2025). More broadly, through these contributions, this article answers calls to bring greater attention to policing and law enforcement, which remains largely understudied in political science (Crabtree 2018; Flom 2018; Eck et al. 2021), particularly in the Global South (Crabtree 2018; Flom 2018) and violent contexts (Flom 2018; Eck et al. 2021). Even more, the literature has largely focused on killings by police, police-citizen interactions, and police accountability (Eck et al. 2021), while largely overlooking the use of violence against law enforcement.

2 Violence against law enforcement and criminal organizations

In most countries, law enforcement is a dangerous occupation, with violence against officers being common (den Heyer 2023). Yet, little research has been conducted to understand violence against law enforcement outside of developed countries and perpetrated by non-state actors. In criminology, there is a longstanding literature exploring risk factors associated with violence against police (see den Heyer 2023). Within this literature, some studies have found that working in high crime areas increases the probability of an officer being assaulted (see den Heyer 2023, 2024), though COs are not included in 'high crime areas' since the studies focus on the US and Europe. Some recent studies of the US specifically investigate the targeted killing of police (e.g. Schouten and Brennan 2016; White et al. 2019), with some focusing on ambush attacks (White 2020) and others on the ideology of the assailants, particularly right-wing ideologies (Gruenewald et al. 2016; Sarteschi 2021; Norris 2024, 2025). However, the vast majority of these attacks are not planned and perpetrated strategically by organized groups but rather by single individuals who sometimes hold anti-police sentiments.

Yet, in the Global South COs pose an additional threat to law enforcement, with scholars noting violence against law enforcement as part of broader violent trends in Latin America (e.g., Sullivan and Elkus 2008; Reuter 2009; Bailey and Taylor 2009; Sabet 2010; Shirk and Wallman 2015; Durán-Martínez 2017; Flom 2022). Nevertheless, the phenomenon has unfortunately received little scholarly attention despite its importance.

Centrally, by 'law enforcement' I mean any security agency authorized to use force domestically. Standard definitions of law enforcement typically exclude the military because these are seen as forces that engage in external conflicts, hence the common use of the term *policing* in the literature when referring to domestic enforcement.[4] Yet, given the widespread use of the military for *domestic policing* in Latin America, I include the military within the scope of this article and use the term 'law enforcement' to refer to policing and military

institutions.

Recent research points to state-CO relations as central to understanding outbreaks of violence against the state by COs, including against law enforcement. COs are strategic profit-maximizing actors who do not seek to take over the state or establish a monopoly over the use of violence vis-à-vis the state, and instead often share the same spaces (Lessing 2021). Nevertheless, due to their illicit nature, COs rely on state non-enforcement or protection to survive and successfully operate in illicit markets (Arias 2017; Durán-Martínez 2017; Trejo and Ley 2020). As the arm of the state responsible for enforcing the rule of law through the legitimate use of force, law enforcement agencies impose costs on COs by targeting revenue-generating activities and the organizations themselves. For example, by interdicting drug shipments, eradicating illegal crops, seizing goods and assets, freezing bank accounts, arresting accountants, capturing or killing members, seizing safehouses, and confiscating weapons, among others. These dynamics create a constant underlying antagonism between law enforcement and COs, though their coexistence does not imply active conflict between them (Willis 2015).

Given the capacity of states to impose costs on COs (Lessing 2017), it follows that existing studies highlight government enforcement efforts as a key factor that can cause outbreaks of violence by COs against rivals, society, and the state, including against law enforcement. First, Flom (2022) argues that when political competition and political fragmentation are high, the dynamic of particularistic confrontation can emerge in which law enforcement becomes involved in systemic but uncoordinated attacks against COs, pushing COs to confront the police.

Second, Willis (2015) argues through ethnographic research in the city of São Paolo, Brazil, that the police and the monopolistic Primeiro Comando da Capital (PCC) co-regulate killings through an implicit and informal consensus that results in relative peace. However, while rare, events such as the state targeting PCC members in prison, police predating on marginalized communities that the PCC operates in, or police executing PCC members in

a manner that exceed the existing consensus lead to the PCC retaliating and killing police officers.

Third, intense enforcement efforts, often called crackdowns, can also escalate violence, with part of this violence targeting law enforcement. Through case studies of Brazil, Mexico, and Colombia, Lessing (2017) provides the underlying logic for how crackdowns, particularly unconditional crackdowns, increase anti-state violence, including against the enforcers of the crackdown to both reduce their efforts and make them more corruptible. In Mexico, Ríos (2013) further argues that crackdowns can create a self-reinforcing violent equilibrium, with part of the argument being that law enforcement casualties are driven by confrontations between COs and troops ordered to prosecute COs. Following these two arguments, various scholars find that crackdowns increase violence, including against law enforcement. Magaloni et al. (2020) link militarized crackdowns in Rio de Janeiro's favelas targeting COs with monopoly control and cooperative relations with their community to increases in homicides, killings by police, crime, and killings of enforcement officers. Alternatively, ethnographic evidence by Barnes (2022) from the Complexo de Maré favela in Rio de Janeiro indicates that militarized crackdowns increase violence—including against those implementing the crackdowns—when COs face active threats from rival COs.

Relatedly, Durán-Martínez (2017) argues that as the state security apparatus shifts from cohesive to fragmented it makes state protection of COs less predictable or enforcement less effective, increasing visible violence. Specifically, through case studies of three Latin American cities, Durán-Martínez (2017) argues that military deployments to fight COs fragment the state security apparatus, driving COs to use violence against citizens, rivals, and the state, including security personnel.

3 Criminal conflicts and violence against law enforcement

This article offers an additional factor that can create incentives for COs to violently confront law enforcement officers. The central argument is that criminal wars or criminal conflicts, understood as wars between COs over territories to control illicit markets, can create incentives that push COs and law enforcement away from otherwise relatively peaceful configurations and towards one of conflict, *ceteris paribus.* This argument builds on the claim by Lessing (2017) that a '[t]urf war among cartels can, on its own, provide incentives to attack state forces' (59), though the logic presented by the author is one of using occasional violence to reduce the cost of corrupting other officers. Here I draw on this proposition but build on it by highlighting additional logics created by criminal wars that can push COs to systematically attack law enforcement, even those not enforcing crackdowns. This not only leads to more nuanced arguments about how criminal wars can lead to higher levels of violence against law enforcement but also provides additional insights about who specifically they target and how.

The relationship between law enforcement and COs is complex and is continuously implicitly and explicitly 'negotiated' (Willis 2015; Auyero and Sobering 2019). While the literature has largely focused on the costs law enforcement can impose on COs, especially through crackdowns, law enforcement can also provide benefits even beyond protecting COs through selective non-enforcement. For example, they can serve as bodyguards for CO members, target and arrest individuals for not complying with the CO, provide information on ongoing and future investigations and operations, help collect extortion payments, escort illegal shipments to assure their delivery, re-rout patrols away from specific communities during key moments, provide COs with official uniforms and weapons, among others.

Thus, in contexts with powerful COs, law enforcement personnel can choose to actively impose costs on COs, passively tolerate COs, or even actively collude with—what is also

often called capture or corruption—and protect COs (Sabet 2010; Flom 2022). COs, on their part, also have three general strategies to deal with law enforcement: evade, capture, or confront the state (Bailey and Taylor 2009; Sabet 2010; Lessing 2017).[5] Together, the strategies each actor pursues jointly shape the relationships and interactions between COs and law enforcement.

As scholars have noted, COs should prefer to evade or collude given that actively confronting the state is costly, brings unwanted attention and scrutiny, and can result in heavy-handed retaliation by the state (Gambetta 1993; Bailey and Taylor 2009; Willis 2015; Durán-Martínez 2017; Lessing 2017). When COs face no competition from rivals, they can choose to deal with law enforcement by evading, capturing to secure non-enforcement or gain benefits, or *occasionally* targeting them to reduce enforcement or assure that officers prefer to tolerate or collude. Thus, COs with monopoly control or as dominant actors should sparingly use violence against law enforcement (Willis 2015), particularly absent an active crackdown (Lessing 2017; Magaloni et al. 2020; Barnes 2022).

Under criminal conflicts, COs now face encroachment on their illicit markets by rival groups, making state protection even more imperative, as law enforcement can provide essential protection *and* benefits during deadly wars. This not only puts law enforcement personnel that choose to enforce the law in danger, but also those that choose tolerance or collusion who were safe under no criminal competition, making collusion and evasion less feasible.

First, law enforcement personnel enforcing the law and imposing costs against a CO now impose those costs *to the benefit of* the rival CO. This intensifies the need for COs to either eliminate this threat or coerce them towards colluding with them. Even if a CO wants to rely on nonviolent collusive agreements, some officers will reject bribes and impose costs on a CO fighting a rival, pushing COs towards coercion. A public message by a CO in Acapulco, Guerrero against their rivals, the CIDA cartel, in February of 2012 illustrates this dynamic: A banner was left at a police station alongside an unused grenade that said, 'Preventive

Police, we don't want to fight you, we want you to fall in line. We are cleaning up extortions and kidnappings, but if we find out that you support CIDA, we will tear each one of you to pieces. If we want, we will come and detonate about 10 of these little grenades, so it's better that you fall in line for good, sincerely, people of Barbie and R1072' (Johnson 2025).

Second, while law enforcement personnel who choose to tolerate COs and their activities can be ignored by COs when they face no competition, criminal conflicts imply that these individuals are choosing to tolerate the activities of rival COs. This selective non-enforcement, which rival COs benefit from, becomes undesirable under conflict. These officers may be unwilling to actively collude but reticent about prosecuting COs, pushing warring COs towards the use of violence to get them on their side. COs therefore face incentives to confront these law enforcement personnel and nudge them towards colluding and protecting them against rival groups or towards enforcing the law *only* against rival groups. For example, in the city of Guadalajara, a CJNG stronghold, the Sinaloa Cartel left a public message in 2021 outside of a university directed at three municipal police officers. The message reads: '[Names of officers]. You owe us, thieving dogs, do not forget who is [feeding you], you agreed to give us information about the [CJNG] and you have not complied [...] you have 3 days to respond' (Reza 2021).

Likewise, when COs face no criminal competition, there exist few incentives for COs to violently confront law enforcement personnel who choose to collude with them, as they are benefiting the CO. Yet, when COs face threats from rival COs, law enforcement personnel colluding with one CO and providing them with protection or benefits become prime targets for rival COs. When rival COs are able to capture law enforcement officers, COs now face a higher threat from the state. Officers captured by rival COs not only exert the routine costs, but now they impose these costs *to the benefit of* a rival organization. Captured officers can provide the CO they collude with information on their rivals, arrest members of the rival group, plan operations against activities and members of the rival group, provide police or miliary uniforms and equipment, and even hand over members of rival groups to the

11

organization they are colluding with (Auyero and Sobering 2019). COs can attempt to pay higher bribes to win officers colluding with a rival, but this is not always feasible or possible. Thus, COs face incentives to violently confront law enforcement personnel colluding with rivals to either eliminate them, intimidate them away from protecting or providing benefits to rival COs, or lower the bribe cost for colluding with them (Lessing 2017). For example, in 2008 a war broke out between the Sinaloa Cartel and the Beltrán Leyva Organization (BLO). On May 21, 2008, two kidnapped law enforcement officers—one a high-ranking officer and the other an agent of the judicial police—were found dead with signs of torture in the trunk of a car on the outskirts of Mexico City. The two bodies were left with messages next to them: 'This is going to happen to those who [work with] El Chapo and Mayo Zambada [leaders of the Sinaloa Cartel]' (Reuters 2008).

> *Hypothesis 1*: Criminal wars over local illicit markets and turf increase violence against law enforcement by COs.

These altered dynamics not only heighten the incentives to use more violence, but to use *more brazen forms* of violence. I define 'brazen' violence against law enforcement as a distinct mode of public, premeditated, and excessive violence by COs, often characterized by the use of multiple gunmen and high-caliber weapons in attacks that result in the killing of one or more officers. Brazen violence is a specific modality used by COs to send clear messages through symbolic overkill and operational boldness, and are meant to both eliminate unwanted officers and intimidate others. The concept of brazen violence relates to but differs from that of 'visible' violence introduced by Durán-Martínez (2017)—Brazen attacks describe the method through which the violence is carried out, while visible violence describes the choice to publicly expose or claim responsibility for an attack. During criminal conflicts, brazen violence can serve additional functions beyond eliminating the targeted officer: it can serve as a credible signal to intimidate other law enforcement personnel into colluding with or tolerating them and to deter other officers from protecting rivals.

Hypothesis 2: Criminal wars over local illicit markets and turf increase the use of brazen violence against law enforcement by COs.

Additionally, I argue that criminal wars make *subnational* law enforcement agencies more salient targets, particularly local law enforcement. In the Mexican context, this is especially puzzling given that local law enforcement (preventive and transit municipal police) does not have the legal jurisdiction to investigate COs or crimes committed by COs. Even more, municipal police in Mexico are preventive police without the legal jurisdiction or organizational capacity to investigate crimes, and they are known for their poor pay, limited training, and insufficient equipment. This means they are not the enforcers of the federal crackdown and should be the easiest to capture through bribes. I argue that criminal conflicts are one factor that can help explain the targeting of subnational officers. COs amid criminal conflicts may shift to targeting more local law enforcement for both strategic and operational reasons. First, unlike drug trafficking, many prevalent illicit markets in Latin America—such as retail drug sales and extortion—target local populations and businesses. Controlling these markets requires territorial dominance at the municipal or neighborhood level. Unlike state or federal agencies that conduct patrols and may focus on countering drug trafficking, local law enforcement regularly operates within the same neighborhoods that COs seek to dominate, bringing COs into direct conflict with local enforcement officers mandated with protecting their residents and businesses. Unsurprisingly, local police often act as gatekeepers or brokers in local illicit economies making them both valuable to gain and dangerous to lose for COs (Sabet 2010; Auyero and Sobering 2019; Flom 2019). Second, while federal or military forces may be deployed for high-level operations or occasional patrols, they tend to rotate in and out of territories and lack the granular intelligence or prolonged presence that local officers hold. Thus, local law enforcement often has the greatest proximity to COs, making them the most accessible. In the context of criminal wars—when rivalries intensify, markets are contested, and control over territory is in flux—subnational law enforcement becomes both an obstacle and an opportunity, and therefore a strategic target. Their numbers and

poor pay mean COs can use captured officers as their protectors against rivals and also their enforcers against rivals.

Hypothesis 3: Criminal wars over local illicit markets and turf increase the targeting of more local law enforcement by COs.

The theory presented is developed with a focus on the Mexican case, however, violence against law enforcement by COs is prevalent across Latin America. I believe the argument generalizes to other contexts, though specific dynamics may manifest differently depending on key conditions. First, this article analyzes a country under a federally led crackdown for nearly two decades, a context that may amplify perverse incentives for COs to target subnational law enforcement. For instance, federal crackdowns may enhance the bargaining power of federal officials in collusive arrangements, raising the cost of cooperation and pushing COs to seek protection from subnational law enforcement, thereby making them more vulnerable to targeting. Second, the argument assumes sufficient coercive capacity to carry out attacks against law enforcement. In Brazil, Magaloni et al. (2020) find that COs that react the most violently towards crackdowns are those with high military capacity. Weaker or smaller COs without this capacity may be unable to systematically use violence against law enforcement even if the incentives are present. Finally, the third hypothesis assumes a structure where law enforcement agencies operate at different levels of government. The specific incentives pushing COs towards local law enforcement may manifest differently in unitary or centralized systems.

4   Context

This study looks at Mexico, a federal system composed of three levels of government (federal, state, and municipal), each having law enforcement powers per the Constitution. Crimes in Mexico are classified as either federal crimes (*fuero federal*) that fall within the jurisdiction of federal agencies (e.g., drug trafficking, illegal firearms possession, contraband, and

involvement in organized crime), or common crimes (*fuero común*) that fall within the jurisdiction of subnational agencies (e.g., homicides, property theft, fraud, sexual crimes). Law enforcement in Mexico is divided into three broad institutions: the military, public security agencies charged with enforcing the law, and the Attorney General's (AG) Office within the judiciary branch charged with investigating crimes and prosecuting criminals. Within the military there are two institutions, the army and marines. Within the AG, there is the judicial police (*policía ministerial*) that is responsible for investigating crimes on behalf of state prosecutors. Public security agencies exist at all three levels of government, though not all municipalities have them, and are charged with policing and prisons. These public security agencies include municipal preventive police, municipal transit police, state police, and federal police (transformed into the National Guard in 2019), among others.[6] These agencies are outlined in Table 1, which also denotes the agencies spearheading the government crackdown against criminal organizations that began in December of 2006.

Table 1: Main law enforcement agencies in Mexico by institution and level of government

Level of Government	Institution	Agency (main agencies in data)
Federal	Military	Army[*] Marines[*]
	Public Security	Federal Police[*] (dissolved in December 2019) National Guard[*] (created May 2019)
	Attorney General	Ministerial Police
State	Public Security	State Police Corrections
	Attorney General	Judicial Police
Municipal	Public Security	Municipal Police Transit Police

Note: [*] Denotes agencies spearheading government crackdown against criminal organizations that began in December of 2006.

Since the 1990s, Mexico's criminal underworld was dominated by a handful of powerful COs that specialized in trafficking drugs to the United States. COs in Mexico are known as cartels. The subnational democratization process Mexico underwent during this time period meant that the hegemonic PRI party could no longer provide or coordinate protection

to these cartels across the country (see Shirk and Wallman 2015). Trejo and Ley (2020) argue that this detonated a series of deadly wars between these cartels during the 1990s and early 2000s. In response to increasing violence, newly elected president Calderón declared war against drug trafficking in December of 2006 and deployed the military to the state of Michoacán, and subsequently across the country in a militarized crackdown against powerful cartels. Among other important consequences, the crackdown fragmented Mexican cartels and gave rise to dozens of new cartels, many of which went to war with the cartel they fragmented from and each other. Consequently, cartel fragmentation, which increased dramatically after 2010, resulted in an ever-increasing number of criminal wars across the country.

5 Data

The literature on violence against law enforcement by COs remains limited due to the lack of data. To overcome this limitation, I create two original datasets of killed law enforcement personnel in Mexico. Both datasets include the following key information for each killing: date of killing, agency and level of government, their position, which state and municipality they worked in, which state and municipality they were killed in, whether they held a leadership position, how they were killed, whether they were killed on off duty, and whether the killing was possibly associated with organized crime. I exclude killings that are clearly not related to organized crime from the analysis, for example, those due to intrafamilial violence or being killed during routine interactions, by another officer during a disagreement, due to friendly fire, or in an accident during or outside of work. This exclusion criteria deviates to some degree from some literature on killings of politicians that relies on inclusion criteria (see Trejo and Ley 2020; Alcocer and Erickson 2024) because information on killings of law enforcement officers is much more scarce and limited.

The first dataset covers all killings of law enforcement officers in 2018 across the entire

country. I select 2018 because it marks a critical inflection point in Mexico's organized crime landscape: it was the most violent year on record at the time, coinciding with significant criminal fragmentation and the transition between federal administrations. Moreover, it is the first year for which data on killings of police is publicly available.

The second dataset identifies all killed law enforcement personnel in the state of Guanajuato between 2000 and 2020. Guanajuato is a particularly important and interesting case. On the one hand, Guanajuato has relatively strong state capacity and is a PAN party stronghold, meaning the state has experienced both partisan alignment and conflict with PAN, PRI, and Morena presidents between 2000 and 2020. Thus, Trejo and Ley (2020) use Guanajuato as an example of a state that can protect its politicians from attacks by COs. Nevertheless, it is the state with the most police killings between 2018 and 2021. This reflects changing criminal dynamics in the state: Guanajuato experienced the entry of powerful COs starting in the mid-2000s, including the Zetas (and a subsequent fragment, Cartel Santa Rosa de Lima), La Familia Michoacana, and Cartel Jalisco Nueva Generacion (Alcocer 2024b), and its main illicit markets are oil theft and drug dealing rather than drug trafficking, with cartels intensely fight over these. Finally, Guanajuato is the only state for which high-quality, hand-coded panel data on COs exists.

Together, these two datasets enable complementary empirical leverage: the national dataset provides a broad cross-sectional view of law enforcement violence across varying criminal and institutional contexts but is limited in its temporal coverage, while the Guanajuato dataset allows for a fine-grained, longitudinal analysis of one of the most violent and illustrative cases. This dual approach enhances the paper's generalizability and strengthens the robustness of the findings through triangulation. The following subsections present these two datasets in more detail. Figure 1 shows the number of killings in both samples by level of government, and Online Appendix Figure A2 shows their geographic distribution.
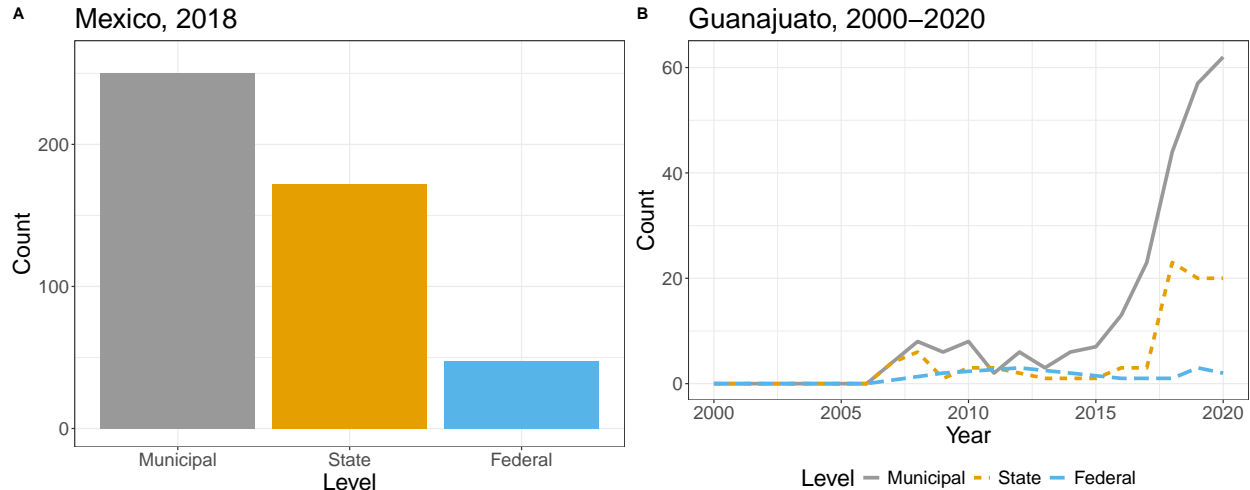
Figure 1: Number of killings of law enforcement officers by level of government in Mexico during 2018 and Guanajuato from 2000-2020. Original data collected by author.

5.1   Mexico, 2018

The first dataset covers all killings of law enforcement officers in Mexico in 2018. The dataset includes 493 individual killings, of which 469 are analyzed here due to their possible link to organized crime. To create the data, I first draw on and merge publicly available datasets on killings of police from Causa en Común (2024) and Mexico's statistical agency (INEGI), and on killed soldiers from the army (SEDENA) and marines (SEMAR). These sources provide lists of killings and the municipality in which they occurred. I first validate each dataset by independently verifying each observation. Since Causa en Común only includes police and INEGI does not cover all municipalities, I conduct additional qualitative research to cover any possible gaps. First, I searched for articles stating the total number of police officers killed per state in 2018, and second, I conducted online searches with three-month windows per state looking for additional killings. I add any new killing to the dataset. For each killing, I collect key information through extensive qualitative research.

5.2 Guanajuato, 2000 - 2020

The second dataset covers the killing of law enforcement personnel in the state of Guanajuato between 2000 and 2020. The dataset includes 351 individual killings, of which 345 are analyzed due to their possible links with organized crime. To create this dataset, I rely on extensive qualitative research and systematic online searches.[7] To validate a subset of the observations, I use data on killed *police* officers in Guanajuato from POPLAB (2024) and Causa en Común. I only use these for validation since they only cover 2018-2020 and only include public security officers and not military or judicial police.

An additional strength of the Guanajuato data is that it includes not only law enforcement *officers*, but also killings of administrative staff and other employees of these agencies. I consider these relevant as part of the phenomenon. To illustrate why, I provide this example: On March 13, 2018, eight armed men in two vehicles stopped in front of a State Attorney General's Office in Irapuato, Guanajuato. Three of them, armed with AR-15 automatic assault rifles, entered the building and opened fire, shooting 80 bullets in 25 seconds. The attack killed a secretary working at the office (AM 2018). I include the killing of this secretary as part of the phenomenon of COs targeting law enforcement institutions and *personnel* even though the secretary was not, strictly speaking, a law enforcement *officer*.

6 Understanding the killing of law enforcement

Given the novelty of the topic and that this is the first data of its kind, this section presents descriptive findings, including the types of killings and who cartels target by level of government, agency, leadership positions, and whether the officers were on or off duty.

6.1 Types of killings

An important finding is that there is substantial variation in *how* law enforcement personnel is killed. To better understand this variation, I develop a typology of killing modalities—

that is, the observable ways in which officers were killed. The typology was constructed inductively through manual content analysis of qualitative descriptions of each killing. This process yielded four primary modes of violence: (1) Coordinated attacks, (2) executions, (3) confrontations, and (4) kidnappings.[8] Table 2 defines each category and provides illustrative examples. The categories are not mutually exclusive, and there is some conceptual and empirical fuzziness. Nevertheless, consistent patterns emerge across hundreds of cases, allowing for meaningful classification. Then, for each killing in the datasets, I read the description of the event and assign it to one of the categories based on the most salient features. In cases with overlap, I do the following: coordinated attacks where officers are able to fight back are categorized as confrontations, executions where officers are able to fight back are counted as confrontations, and events where an officer disappears and is found dead in another location is counted as a kidnapping even if the killing potentially took place before the body was moved. This classification undercounts coordinated attacks and overcounts confrontations, biasing against brazen violence and in favor of confrontations. Figure 2 shows the distribution of killings by type of attack.
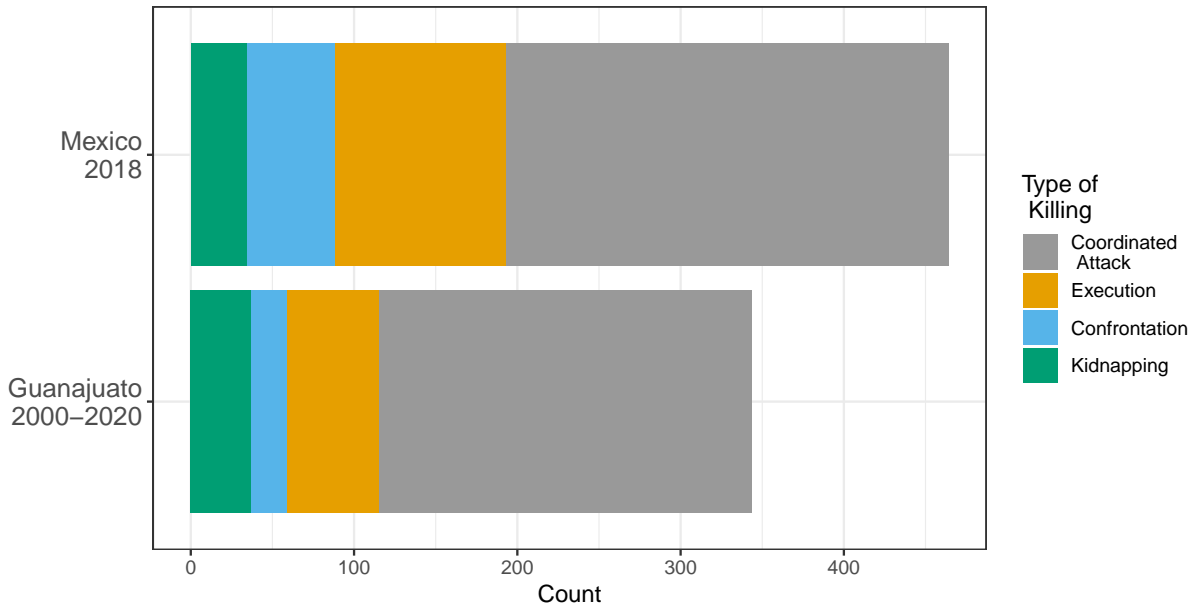

Figure 2: Killings of law enforcement officers by type of attack in Mexico during 2018 and Guanajuato from 2000-2020. Original data collected by author.

Table 2: Types of killings and examples of each category

Types	General definition	Typical examples
Coordinated attack	Attack against law enforcement personnel, generally in public spaces. Tends to be perpetrated by multiple armed individuals and typically involve multiple gunshots. These crimes appear to be premeditated most of the time. Targets one or multiple officers.	(1) Armed individuals in multiple vehicles stopped police officers while they were patrolling and shot them with automatic rifles. (2) Police officers were met with gunshots when attending a call. The officers were killed before they could react. (3) An officer was shot twenty times by multiple armed men when leaving their home.
Execution	Directed attack in public or private spaces. Tends to target only one officer and be perpetrated by one or two assailants and entail one or two gunshots or stabbings. Seems premeditated sometimes but also occurs spontaneously. Less scandalous and more targeted than a coordinated attack.	(1) Officer was eating lunch when an assailant walked up to the officer and shot them twice in the head. (2) An officer responded to a reported robbery and was shot in the head by the alleged criminal. (3) Armed individuals entered the officer's home in the middle of the night and killed the officer.
Confrontation	Violent altercation with armed individuals. Can be result of law enforcement operation against suspected criminals, but often results from an attack against law enforcement officer(s) who returns fire.	(1) Police officers were pursuing a vehicle when they were met with gunshots. The officers fired back, but one officer died in the exchange. (2) A group of armed individuals ambushed a group of officers, who subsequently fired back. Two officers died in the firefight.
Kidnapping	Law enforcement personnel are kidnapped or taken alive and killed or disappeared in a different location.	(1) The officer was reported missing by their family. Their dismembered body was found a week later. (2) A group of armed individuals entered the officer's home and took the officer with them. The officer was found dead two days later by the side of a road with signs of torture.

First, and perhaps surprisingly, despite a slight undercount, coordinated attacks—the most brazen forms of attacks—are the most common form of killing, making up 58.5% of killings in Mexico in 2018 and 66.8% in Guanajuato between 2000 and 2020. The frequency of these brazen attacks goes against common assertions that COs should not use this type of violence because it brings unwanted government attention. This may speak to the coercive capacity of COs and high levels of impunity in Mexico.

Second, and also surprisingly given a slight overcount, only 11.6% of killings in Mexico in 2018 and 6.4% in Guanajuato between 2000 and 2020 occurred during confrontations. This is puzzling given Mexico's ongoing war against COs, the deployment federal forces throughout the country to confront cartels, and existing explanations centering on cartels and the state confronting each other. This suggests that the proportion of killings directly related to crackdown operations is relatively small.

Third, executions are the second most common type of killing and make up 22.6% of killings in Mexico in 2018 and 16.2% in Guanajuato between 2000-2020. Finally, kidnappings make up 7.3% of killings in Mexico in 2018 and 10.7% in Guanajuato between 2000 and 2020.

6.2   Level of government and agency

Given that Mexico is federal system with enforcement agencies *across* and *within* levels of government, an important question is *which* agencies cartels are targeting. Figure 1 shows the number of killings in both samples by level of government. Across samples, I find that the majority of killings are of personnel in municipal agencies, followed by state agencies and then federal agencies. Specifically, in the national sample, 10% of killings were of federal personnel, 36.9% of state personnel, and 53.2% of municipal personnel. In Guanajuato, 3.8% of killings were of federal personnel, 25.4% of state personnel, and 70.1% of municipal personnel.

I also disaggregate killings by agency (following Table 1) in Figure 3. In the national sample, the main targets are municipal police (52.3%), state police (22.3%), and judicial
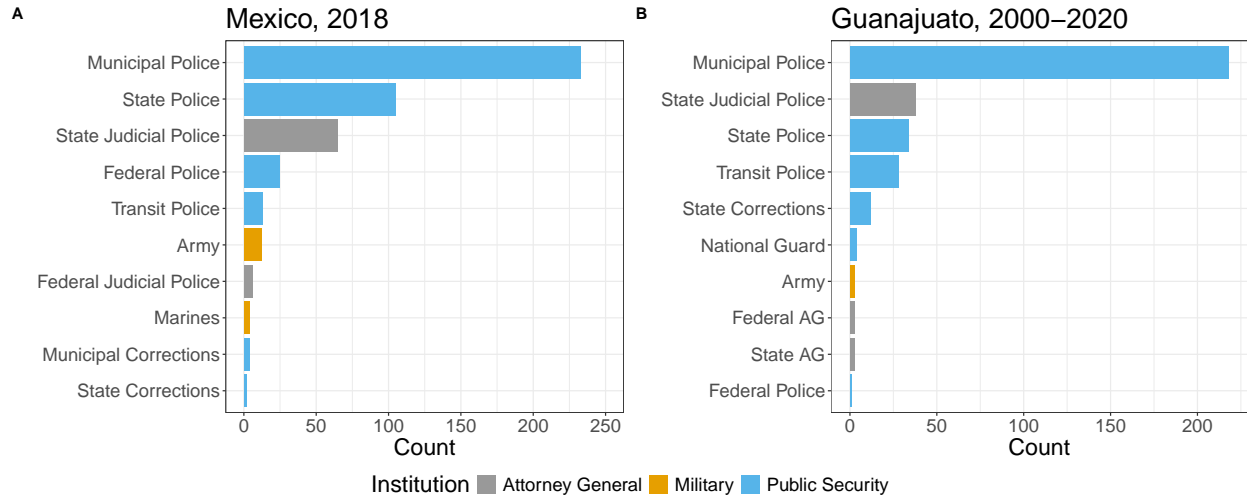
Figure 3: Killings of law enforcement officers by level of government and institution in Mexico during 2018 and Guanajuato from 2000-2020. Original data collected by author.

police (14%). These three agencies make up 88.7% of victims. In Guanajuato, these agencies are also the main targets, with municipal police (71.1%), judicial police (11.8%), and state police (9.8%) totaling 92.8% of all killings. These findings clearly show that cartels are principally targeting local police, who, in Mexico, cannot preemptively investigate crimes (by law and in practice), meaning that most victims are not those implementing militarized crackdowns.

6.3 High-ranking officers

Are cartels targeting low-level officers who conduct everyday operations or the leaders making high-level decisions about policies and operations? I find that 21.1% and 22.3% of victims in the national and Guanajuato samples, respectively, held leadership roles, for example, as police chiefs, commanders, subdirectors, coordinators, or supervisors. Online Appendix Figure A3 shows that, apart from seven killings across both datasets, all personnel killed with leadership positions worked in state and municipal agencies. The killing of enforcement leaders is remarkably common but largely unrecognized and unexplored. While no data exists on the proportion of high-ranking personnel in Mexican law enforcement agencies, these findings suggest that individuals in leadership positions are killed at higher proportions

than low-level officers.

6.4   In the line of duty and off duty

Much of the existing research assumes that officer killings occur exclusively while on duty or analyzes only those incidents. Yet, many officers are killed while off duty—a phenomenon highlighted by Willis (2015) in São Paolo, Brazil. I find that 31.1% of victims in the national sample and 40.2% in the Guanajuato sample were killed while off duty (see Online Appendix Figure A4). These killings could be initially discarded as random killings or killings unrelated to their job, but descriptions of the killings suggest that most are due to their duties as officers. For example, a significant number occur when an officer is on their way to work or just leaving their shift. Even in other cases, descriptions of the attacks strongly suggest that the officers were directly targeted.

While off duty killings represent a minority of cases, they are nonetheless striking given that off-duty periods are typically considered lower-risk. This pattern suggests that officers may face heightened vulnerability when off duty, possibly because they are unarmed, unprotected, or targeted in more premeditated ways. Willis (2015) argues that killing officers while off duty serves the strategic function of putting coercible police back in line without triggering demands for a crackdown since they can target officers in marginalized communities to prevent backlash from wealthy residents and make it easier for the political elite to sell them as deaths of dirty cops.

7   Criminal conflicts and law enforcement killings

This section uses the original data on killings with data on local presence of cartels in Mexico to analyze how criminal conflicts impact these killing. The analysis offers an initial assessment and is not meant to be causal. Yet, by uncovering correlations while controlling for key covariates and triangulating results from different datasets, the article seeks to advance

the argument and inspire future research.

7.1 Empirical strategy

I triangulate evidence from two datasets. First, I use the cross-sectional data on killings covering all of Mexico in 2018, along with data on criminal presence at the local level from Sobrino (2023). Second, I use the panel dataset on killings in the state of Guanajuato along with a detailed, hand-coded dataset on cartel dynamics from Alcocer (2024b). I conduct both analyses for robustness since each sample has its strengths and limitations. The national dataset has the strength of covering all of Mexico's municipalities, assuring generalizability across different regions. However, it only covers one year, and the cartel data is based on scraped media reports that measure geographic presence with dummy variables and does not include information on criminal wars. The second dataset includes 21 years, allowing the inclusion of unit and time fixed effects. Moreover, the cartel data is hand-coded and includes details the national data does not, such as which municipalities were being actively fought over across time. Yet, this dataset only covers one state. Summary statistics for both samples are provided in the Online Appendix.

The main dependent variable in all models is the number of law enforcement officers killed per municipality per year. The main models use data on where the law enforcement personnel worked, in the Online Appendix I include results using information on where they were killed. To test which level of government is being targeted, I use the number of officers killed by level of government and the percent of each relative to all killings.[9] To then test how cartel wars influence *who* is targeted and *when*, I use both the number of high-level and off duty law enforcement officers killed and the percent of these killings relative to all killings. To investigate *how* they are killed, I focus on the most brazen types of killings and use the number of police killed by coordinated attacks and the percent relative to all killings. Measuring coordinated attacks as brazen follows existing research noting that 'ambush killings represent the most severe, traumatic form of violence against police' (White

2020, 466).[10]

The main explanatory variable is criminal wars. For the national dataset, I create a dummy variable, $Competition_i$, measuring whether two or more cartels were present in a given municipality in 2017, and another dummy variable, $Monopoly_i$, which takes a value of one if a municipality only has one cartel present in 2017. Since the data is created using web scraping, I use cartel presence data from 2017 to avoid endogeneity concerns, principally that COs killing law enforcement personnel impacts criminal wars. In the Online Appendix, I also include results using cartel data from 2018 for robustness. For the Guanajuato dataset, I combine the data on geographic presence and dyad data on rivalries and alliances to identify which municipalities are actively contested each year. Using this data, I create a dummy variable, War_{it}, that takes a value of 1 when two or more cartels are actively contesting a municipality and 0 otherwise. I also create a dummy variable, $Peace_{it}$, that takes a value of 1 when one or more cartels are present in a municipality but not at war and 0 otherwise. Given the detailed qualitative data collection methodology used to create this data, I do not lag this variable in the main models but do include lagged models in the Online Appendix for robustness. Unfortunately, there is no measure of alliances/rivalries for the national cartel data to better measure local conflicts and have the same measure as the Guanajuato data, but this biases the national results against criminal conflicts because the $Competition_i$ measure includes some municipalities that are not being fought over.

For the national model, I control for the following key covariates. First, I control for the total number of law enforcement personnel at different levels of government by using the log number of personnel in municipal public security agencies at the end of 2017 plus one and, separately, for the log number of operational personnel in state public security agencies at the end of 2017. Unfortunately, there is no data on the number of federal police or military personnel per state or municipality. Second, I control for state capacity using two variables from 2017 for each state: the log of fiscal revenue in the form of total income from taxes and the log number of AG agents and prosecutors. Third, intergovernmental

coordination can shield the state from COs, leaving local governments without higher-level protection vulnerable to attacks (Durán-Martínez 2017; Trejo and Ley 2020). To account for this, I use election data from Magar (2018) to create three dummies indicating whether the mayor shares party affiliation with only the governor, only the president, or both. I also include dummy variables for the party of each mayor. Fourth, to control for incentives created by crackdowns to attack the state, I use data from the federal police on the number of operations taken per state and amounts of drugs seized per municipality by SEDENA in 2017. Finally, I include state fixed effects that control for state-specific covariates and allow me to compare municipalities within the same state.

For the Guanajuato models, the panel data structure provides additional empirical leverage. I can keep state-specific factors constant, including state security policies, state government capacity, and the governor's political party, among others. Additionally, time and municipality fixed effects control for municipality-specific time invariant factors, such as geographic and institutional features, lucrative markets like oil ducts, and temporal common shocks, such as election years, changes in presidential administrations, and common economic shocks or policy reforms. This means testing how the existence of criminal conflicts *within* municipalities impact violence against law enforcement. I further control for key covariates. First, I control for the log number of municipal public security personnel. Since data are only available every two years starting in 2010, I impute values for missing years by taking the average of the preceding and following years. For years prior to 2010, I use the 2010 value. Second, starting in 2010, some municipalities in Guanajuato implemented a police reform known as Unique State Command (*Mando Unico Estatal*) where they dissolved the local police, while others a reform called Unique Police Command (*Mando Unico Policial*) aimed at improving coordination between state and municipal police departments. I use data from Alcocer (2024a) to create two dummy variables that take a value of 1 for municipality-years where the respective reform was in place. Third, to account for the national crackdown declared in December of 2006, I include a dummy variable that takes a value of 1 starting

in 2007. Finally, I also control for political vulnerability across time for each municipality using the same three dummy variables introduced in the previous paragraph, each mayor's party through party dummies, and municipal party alternation by creating a dummy taking on the value of 1 for municipality-years that experience alternation and 0 otherwise.[11]

With the national data I estimate both ordinary least squares (OLS) and negative binomial models with robust standard errors. For the Guanajuato panel dataset, I estimate two-way fixed-effect models with municipality clustered standard errors.

7.2 Results

Table 3 shows the main results using both datasets and various model specifications. First, a consistent result is that none of the coefficients for cartel monopoly or peace are statistically significant. Thus, cartel presence at the local level, in the absence of criminal conflicts, is insufficient to explain violence against law enforcement, even in a context with an active government crackdown.

The main finding is that criminal conflicts at the local level are strongly associated with the killing of law enforcement. All models across samples show statistically significant results. The coefficients are also substantively large and nearly identical in relative size across both samples: the coefficients of Models (3) and (6) suggest that criminal conflicts are associated with an increase of just over a 100% in the number of killings relative to the mean of the dependent variable in each respective sample. Models using different measures of cartel conflicts in the Online Appendix are not only consistent with the main results, but the point estimates are slightly larger, suggesting that the coefficients in Table 3 may be conservative estimates.

Turning to which agencies are targeted, Table 4 shows the results using both the total number and percent of overall killings of officers corresponding to each level of government. Centrally, I find that criminal conflicts are associated with the killing of *subnational* law enforcement officers, both in total number and in percent to all killings, with the largest

28

Table 3: Criminal wars and killings of law enforcement officials

	Mexico 2018				Guanajuato 2000-2020	
	OLS			*NB*	*TWFE*	
	(1)	(2)	(3)	(4)	(5)	(6)
Cartel monopoly	−0.015	−0.038	−0.024	0.571		
	(0.048)	(0.045)	(0.044)	(0.322)		
Cartel competition	0.346***	0.272***	0.202***	1.170***		
	(0.052)	(0.049)	(0.049)	(0.239)		
Cartel peace					0.423	0.420
					(0.518)	(0.504)
Cartel war					0.449**	0.361*
					(0.160)	(0.141)
Controls		✓	✓	✓		✓
State FE			✓	✓		
Municipality FE					✓	✓
Year FE					✓	✓
Num.Obs.	2456	2408	2408	2408	966	966
R2 Adj.	0.122	0.141	0.180		0.281	0.299
AIC				1653		

* p < 0.05, ** p < 0.01, *** p < 0.001

Mexico models: Robust standard errors. Guanajuato models: Clustered standard errors.

coefficients being that of municipal law enforcement but the relative increase being quite similar to state officers. For the national data, criminal conflicts are associated with an increase of 0.18 standard deviations (SDs) in killings of municipal officers and 0.186 SDs of state officers. For the Guanajuato data, criminal wars are associated with an increase of 0.205 SDs in killings of municipal officers and 0.318 SDs of state officers. Criminal wars are thus creating strong incentives to attack subnational officers.

Table 5 shows who is targeted and how using both the total number and percent of overall killings. Centrally, I find that criminal conflicts are strongly associated with the killing of law enforcement in more brazen manners. Specifically, criminal conflicts are associated with an increase of 0.227 SDs in killings by coordinated attacks nationally and 0.247 SDs in Guanajuato. The results also show that criminal conflicts are associated with a 4.913 percentage

Table 4: Criminal wars and killings of law enforcement officials by level of government

	Mexico, 2018					
	Municipal (1)	State (2)	Federal (3)	Municipal (%) (4)	State (%) (5)	Federal (%) (6)
Cartel monopoly	0.006	−0.013	−0.018*	1.070	0.247	−0.785*
	(0.032)	(0.027)	(0.007)	(1.543)	(1.184)	(0.344)
Cartel competition	0.097**	0.080**	0.025*	4.281**	4.120***	1.004
	(0.031)	(0.029)	(0.012)	(1.305)	(1.180)	(0.632)
Controls	✓	✓	✓	✓	✓	✓
State FE	✓	✓	✓	✓	✓	✓
Num.Obs.	2408	2408	2408	2408	2408	2408
R2 Adj.	0.124	0.089	0.087	0.112	0.075	0.086
	Guanajuato, 2000-2020					
	Municipal (1)	State (2)	Federal (3)	Municipal (%) (4)	State (%) (5)	Federal (%) (6)
Cartel peace	0.220	0.119	0.082	15.779	0.678	2.684
	(0.373)	(0.188)	(0.071)	(9.197)	(5.172)	(3.102)
Cartel war	0.226*	0.131*	0.004	10.982**	6.624**	0.532
	(0.110)	(0.062)	(0.012)	(3.776)	(2.118)	(0.659)
Controls	✓	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Num.Obs.	966	966	966	966	966	966
R2 Adj.	0.269	0.193	0.073	0.277	0.102	0.055

* p < 0.05, ** p < 0.01, *** p < 0.001
Mexico models: Robust standard errors. Guanajuato models: Clustered standard errors.

point increase in the percent of killings that are perpetrated through coordinated attacks in the national sample and 9.976 percentage points in Guanajuato. I further find that part of this increase is due to the killing of law enforcement while off duty, with criminal conflicts increasing killings of off duty personnel by 0.123 SDs nationally and 0.199 in Guanajuato, though the latter is not statistically significant at the $p < 0.05$ level ($p = 0.092$) using total numbers, but is using percent of killings. Finally, I find no evidence that criminal conflicts help explain the killing of law enforcement personnel with leadership positions.

Taken together, the results from both samples show clear and robust patterns: criminal

Table 5: Criminal wars and killings of law enforcement officials by mode of violence, rank, and duty status

	Mexico, 2018					
	Coordinated attack (1)	High-ranking (2)	Off duty (3)	Coordinated attack (%) (4)	High-ranking (%) (5)	Off duty (%) (6)
Cartel monopoly	−0.023	0.013	−0.008	−0.694	1.337	0.428
	(0.033)	(0.017)	(0.017)	(1.312)	(1.082)	(1.168)
Cartel competition	0.136***	0.024	0.043*	4.913***	1.283	2.520*
	(0.037)	(0.015)	(0.020)	(1.241)	(0.762)	(1.090)
Controls	✓	✓	✓	✓	✓	✓
State FE	✓	✓	✓	✓	✓	✓
Num.Obs.	2408	2408	2408	2408	2408	2408
R2 Adj.	0.104	0.095	0.184	0.094	0.062	0.117
	Guanajuato, 2000-2020					
	Coordinated attack (1)	High-ranking (2)	Off duty (3)	Coordinated attack (%) (4)	High-ranking (%) (5)	Off duty (%) (6)
Cartel peace	0.267	0.269	0.615*	6.548	12.479	23.187**
	(0.297)	(0.146)	(0.274)	(9.170)	(8.147)	(7.685)
Cartel war	0.225*	0.065	0.130	9.737**	3.445	8.131*
	(0.088)	(0.042)	(0.076)	(3.338)	(2.857)	(3.054)
Controls	✓	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Num.Obs.	966	966	966	966	966	966
R2 Adj.	0.252	0.139	0.307	0.243	0.081	0.252

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Mexico models: Robust standard errors. Guanajuato models: Clustered standard errors.

conflicts over municipalities increase the frequency of lethal attacks against law enforcement personnel, push cartels to target subnational law enforcement, and drive cartels to use more brazen forms of violence against law enforcement, with part of the increase being against off duty officers.

8 Conclusion

This article provides the first quantitative analysis of violence against law enforcement by COs. It argues that local criminal conflicts create incentives for COs to violently confront

law enforcement, particularly subnational agencies, and in more brazen manners. It then leverages two original datasets on the killing of law enforcement personnel in Mexico to provide evidence supporting the argument.

This article highlights an understudied but critical phenomenon with potentially dire consequences. Violence against law enforcement, particularly by COs, is a major challenge facing Latin American countries. COs being able to routinely perpetrate violence against law enforcement likely means they can erode the state's coercive capacity and thus operate with more impunity, worsening state capacity, citizen security, the rule of law, and public safety. By providing the first examination of the topic, this article hopefully opens the door to future research. Identifying additional drivers of this violence is imperative to design policies to protect law enforcement. Moreover, future research should evaluate the effects of this violence, for example, on law enforcement institutions and officers, public safety, criminal governance, and citizen perceptions of the state. Finally, this article hopes to answer the call to broaden the scope of political science research on security issues to policing and law enforcement in violent contexts, especially in the Global South, where the challenges are most acute.

Notes

[1]Throughout the text, I use the term 'killing of law enforcement officers' to refer to all violent deaths, whether the result of targeted attacks (i.e., assassinations) or confrontations and incidental encounters. Where possible, I distinguish between these types in the analysis.

[2]See Data section for details.

[3]A notable exception is Durán-Martínez (2017), who examines the related concept of 'visible' violence—defined as publicly exposed violence or claimed attacks.

[4]For example, Eck et al. (2021) and the 2018 Comparative Politics Newsletter on policing, *Symposium: The Comparative Politics of Policing.*

[5]Barnes (2022) provides an alternative set of actions: fight, hide, or flee. This article considers hiding and fleeing as components of evading. Blume (2022) uses the terms collude, co-opt, and evade, where co-optation includes violent strategies to infiltrate politics.

[6]Some states and municipalities have other police agencies, though these only exist in some places and vary in type. For example, auxiliary police agencies, financial and bank police agencies, and rural police, among others.

[7]See Online Appendix for details.

[8]See Online Appendix for further details. Trejo and Ley (2020) classify high-profile violence into three categories: kidnapping, public death threats, assassination attempts and murders. I break down 'murders' into three more detailed categories: coordinated attacks, executions, and confrontations. I do not include public death threats since the data is on killings. I only include kidnappings for which the victim's lifeless body was found as of mid-2024.

[9]I do not use fraction of killings by number of officers because there is no information on the number of state and federal officers operating in each municipality.

[10]While not all coordinated attacks are ambush attacks in my data, most are.

[11]There was no party alternation at the state level during the time of analysis.

References

Alcocer, Marco (2024a). Increasing intergovernmental coordination to fight crime: evidence from mexico. *Political Science Research and Methods*, 1–10.

Alcocer, Marco (2024b). Mapping Criminal Organizations in Guanajuato. Harvard Dataverse, V1.

Alcocer, Marco and Megan Erickson (2024). Criminal dynamics and violence against state officials in mexico. Working paper.

Alesina, Alberto, Salvatore Piccolo, and Paolo Pinotti (2019). Organized crime, violence, and politics. *The Review of Economic Studies 86*(2), 457–499.

AM (2018). Atacan a gobierno. https://www.pressreader.com/mexico/periodico-am-leon/20180314/281526521577746.

Arias, Enrique Desmond (2017). *Criminal enterprises and governance in Latin America and the Caribbean*. Cambridge University Press.

Auyero, Javier and Katherine Sobering (2019). *The Ambivalent State: Police-Criminal Collusion at the Urban Margins*. Oxford University Press.

Bailey, John and Matthew M. Taylor (2009). Evade, corrupt, or confront? organized crime and the state in brazil and mexico. *Journal of Politics in Latin America 1*(2), 3–29.

Barnes, Nicholas (2022). The logic of criminal territorial control: Military intervention in rio de janeiro. *Comparative Political Studies 55*(5), 789–831.

Blume, Laura, Amanda Vaskov, Lauren Harvey, Piper Heath, and Diana Meza (2025). A holistic approach to scholarship on violence against public figures. Working paper.

Blume, Laura Ross (2017). The old rules no longer apply: Explaining narco-assassinations of mexican politicians. *Journal of Politics in Latin America 9*(1), 59–90.

Blume, Laura R (2022). Collusion, co-optation, or evasion: The politics of drug trafficking violence in central america. *Comparative political studies 55*(8), 1366–1402.

Causa en Común (2024). Registro de policías asesinados. https://causaencomun.org.mx/beta/registro-de-policias-asesinados/.

Crabtree, Charles (2018). Introduction: The comparative politics of policing. *Comparative Politics Newsletter 28*(1), 3–11.

Cruz, José Miguel and Angélica Durán-Martínez (2016). Hiding violence to deal with the state: Criminal pacts in el salvador and medellin. *Journal of Peace Research 53*(2), 197–210.

Crónica (2019). Cartel jalisco sube video de una tortura a cuatro policías. https://elpais.bo/seguridad/20191216_cartel-jalisco-sube-video-de-una-tortura-a-cuatro-policias.html.

Daniele, Gianmarco and Gemma Dipoppa (2017). Mafia, elections and violence against politicians. *Journal of Public Economics 154*, 10–33.

den Heyer, Garth (2023). Assaults on police officers: a review of the predictors. *Police Use of Force: Global Perspectives and Policy Implications*, 233–264.

den Heyer, Garth (2024). Examining assaults on police officers: An international review of the factors that influence the occurrence of these attacks. In James F. Albrecht and Garth den Heyer (Eds.), *Special Topics in Policing: Critical Issues and Global Perspectives, Volume 1*, pp. 17–39. Springer.

Durán-Martínez, Angélica (2017). *The politics of drug violence : criminals, cops and politicians in Colombia and Mexico.* New York, NY, United States of America: Oxford University Press.

Eck, Kristine, Courtenay R. Conrad, and Charles Crabtree (2021). Policing and political violence. *Journal of Conflict Resolution 65*(10), 1641–1656.

Flom, Hernán (2018). Police, politics, and political science. *Comparative Politics Newsletter 28*(1), 34–38.

Flom, Hernán (2019). State regulation of organized crime: Politicians, police, and drug trafficking in argentina. *Latin American Politics and Society 61*(3), 104–128.

Flom, Hernán (2022). *The informal regulation of criminal markets in Latin America*. Cambridge University Press.

Gambetta, Diego (1993). *The Sicilian Mafia: The Business of Private Protection*. Harvard University Press.

Gruenewald, Jeff, Kiefer Michael G Dooley, Michael J Suttmoeller, Steven M Chermak, and Joshua D Freilich (2016). A mixed-method analysis of fatal attacks on police by far-right extremists. *Police Quarterly 19*(2), 216–245.

Infobae (2019). Así se vinculó al cártel santa rosa de lima y a la policía con un nuevo caso de secuestro y tortura. https://www.infobae.com/america/mexico/2019/10/08/asi-se-vinculo-al-cartel-santa-rosa-de-lima-y-a-la-policia-con-un-nuevo-caso-de-secuestro-y-tortura/.

Johnson, Philip Luke (2025). Criminal communication: Public representations, repertoires, and regimes of criminal governance. *Perspectives on Politics*, 1–17.

Lerch, Alejandro (2024). Police protection rackets and political modernity in mexico. *Politics & Society 52*(1), 3–35.

Lessing, Benjamin (2017). *Making Peace in Drug Wars: Crackdowns and Cartels in Latin America*. Cambridge University Press.

Lessing, Benjamin (2021). Conceptualizing criminal governance. *Perspectives on politics 19*(3), 854–873.

Magaloni, Beatriz, Edgar Franco-Vivanco, and Vanessa Melo (2020). Killing in the slums: Social order, criminal governance, and police violence in rio de janeiro. *American Political Science Review 114*(2), 552–572.

Magar, Eric (2018). Recent mexican election vote returns repository. https://github.com/emagar/elecReturns.

Morris, Stephen D (2012). Corruption, drug trafficking, and violence in mexico. *The Brown Journal of World Affairs 18*(2), 29–43.

Norris, Jesse J (2024). A closer look at the alleged "war on cops": Post-ferguson trends in ideologically-motivated homicides of police officers, 2008–2021. *Police Quarterly 27*(2), 242–267.

Norris, Jesse J (2025). The prevalence of terrorist motives among civilians who kill police officers: A mixed-method analysis. *Terrorism and Political Violence*, 1–24.

POPLAB (2024). Oficial caído. https://poplab.mx/dataCenter/oficial.

Reuter, Peter (2009). Systemic violence in drug markets. *Crime, law and social change 52*, 275–284.

Reuters (2008). Hallan policías asesinados cerca de capital mexicana. https://www.reuters.com/article/idUSN21425797/.

Reza, Gloria M. (2021). Policías de guadalajara son amenazados mediante una lona, señalan nexos con el cártel de sinaloa. https://www.proceso.com.mx/nacional/estados/2021/11/8/policias-de-guadalajara-son-amenazados-mediante-una-lona-senalan-nexos-con-el-cartel-de-sinaloa-275424.html.

Ríos, Viridiana (2013). Why did mexico become so violent? a self-reinforcing violent equilibrium caused by competition and enforcement. *Trends in organized crime 16*, 138–155.

Sabet, Daniel (2010). Confrontation, collusion and tolerance: the relationship between law enforcement and organized crime in tijuana. *Mexican Law Review 2*(2), 3–29.

Sarteschi, Christine M (2021). Sovereign citizens: A narrative review with implications of violence towards law enforcement. *Aggression and violent behavior 60*, 101509.

Schouten, Ronald and Douglas V Brennan (2016). Targeted violence against law enforcement officers. *Behavioral sciences & the law 34*(5), 608–621.

Shirk, David and Joel Wallman (2015). Understanding mexico's drug violence. *Journal of Conflict Resolution 59*(8), 1348–1376.

Sobrino, Fernanda (2023). Mexican Cartel Wars: Fighting for the U.S Opioid Market. Unpublished manuscript.

Sullivan, John P and Adam Elkus (2008). State of siege: Mexico's criminal insurgency. *Small Wars Journal 12*(4), 1–12.

Trejo, Guillermo and Sandra Ley (2020). *Votes, drugs, and violence: The political logic of criminal wars in Mexico.* Cambridge University Press.

White, Michael D (2020). Ambush killings of the police, 1970–2018: A longitudinal examination of the "war on cops" debate. *Police Quarterly 23*(4), 451–471.

White, Michael D, Lisa M Dario, and John A Shjarback (2019). Assessing dangerousness in policing: An analysis of officer deaths in the united states, 1970–2016. *Criminology & Public Policy 18*(1), 11–35.

Willis, Graham Denyer (2015). *The killing consensus: Police, organized crime, and the regulation of life and death in urban Brazil.* University of California Press.