

Pre-Analysis Plan

Investigating Criminal Governance Strategies in Uruguay

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December 12, 2023

Abstract

Increasingly, many countries experience the presence of criminal organizations with different degrees of territorial control. In some cases, these organizations develop governance strategies—de facto controls over different aspects of social, economic and political life in the territories where they operate. These groups' presence produces a wide array of coexistence problems, as well as security issues. Criminal governance studies in Latin America tend to focus on countries with high levels of violence, powerful criminal organizations, and low levels of state presence in the territory. However, evidence shows that there is criminal governance also in cases like Argentina, Chile and Uruguay, where the state is present throughout the territory, and violence levels are comparatively low. This project's main objective is to expand our knowledge about criminal governance in these settings, focusing on the case of Montevideo, Uruguay. The project employs a mixed-methods design, combining in-depth interviews with community leaders, members of NGOs, state and local authorities, and a public opinion survey containing a double list experiment and network scale-up questions. This research strategy seeks to minimize the risks involved in studying criminal organizations while obtaining as much information as possible to understand the logic of criminal governance in Montevideo.

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Introduction

Increasingly, many countries experience the presence of criminal organizations involved in illicit businesses for profit, such as gangs, mafias, or cartels ([Lessing, 2020](#)). Focusing on the city of Montevideo, the capital of Uruguay, this project seeks to expand our knowledge of the behavior of criminal organizations in cases where one would not expect to find them. Criminal governance studies tend to focus on countries with high levels of violence, powerful criminal organizations, and low levels of state presence in the territory. However, recent evidence shows that criminal organizations proliferate even in cases where state capacity is comparatively higher and violence levels are lower, such as Argentina, Chile and Uruguay. Understanding the case of Uruguay is highly informative. Given Uruguay's low levels of inequality, high state presence and territorial control, and the comparatively low levels of violence, we should not expect to find criminal organizations with the ability to implement governance schemes.

In some cases, criminal organizations develop governance strategies—de facto controls over different aspects of social, economic and political life ([Arias and Barnes, 2017](#); [Lessing, 2020](#))—in the territories where they operate. These groups' presence produces a wide array of coexistence problems, as well as security issues. One important question is if and how these groups build governance mechanisms. Research suggests that criminal governance emerges as a result of relationships between the state and criminal groups, which result in a variety of localized governance structures ([Moncada, 2020, 2013](#); [Arias, 2017](#); [Barnes, 2017](#)). When criminal organizations impose formal or informal rules to regulate life in a territory, they build governance structures. Criminal governance takes place following various schemes of control that can be political ([Trejo and Ley, 2020](#); [Ley, 2017](#)), economic ([Arias and Barnes, 2017](#); [Magaloni et al., 2020a](#)), or a combination. Meanwhile, strategies of control can be violent (such as extortion in

exchange for protection) or benevolent (such as paying for electricity for local populations), or a mix ([Magaloni et al., 2020a,b](#)).

The project seeks to systematically describe variation in criminal organizations' governance strategies across neighborhoods of Montevideo, the capital city of Uruguay. In particular, we seek to identify the prevalence of governance strategies with varying degrees of violence. This document represents the Pre-Analysis Plan of our research. In this paper we outline a theory of variation in criminal control strategies in cases of high state capacity and low violence and we specify a research design that combines qualitative fieldwork with an original survey experiment.¹

1 Relevance of Case

Recently, high levels of violence in Latin America, as well as the expansion of criminal organizations that dominate territories, have led researchers to explain the logic of violence as primarily driven by illicit markets, organizational dynamics and the relationship between criminal organizations and the state ([Yashar, 2018](#)). Existing research in Latin America focuses on cases where levels of violence are high, state presence is low, and criminal organizations are powerful, such as Mexico, Brazil or Colombia ([Arias, 2017, 2006](#); [Arias and Barnes, 2017](#); [Lessing, 2017](#); [Durán-Martínez, 2015, 2017](#); [Trejo and Ley, 2018](#)).

Because one of the main concerns is criminal organizations' ability to control populations, recent advances in research focus on understanding how criminal organizations build governance. Research suggests that states and criminal organizations establish different kinds of relationships that result in variegated local orders ([Moncada, 2013, 2020](#); [Arias and Barnes, 2017](#); [Barnes, 2017](#)). According to existing research, when criminal organizations impose formal or informal rules and regulate life in a ter-

¹We are grateful to Guillermo Martinez for superb research assistance.

ritory, they build governance. Criminal governance can take different forms: control can be political (Trejo and Ley, 2020; Ley, 2017), social (Magaloni et al., 2020a), or economic (Arias and Barnes, 2017; Magaloni et al., 2020b), or a combination. In addition, strategies to exercise control can be violent, such as extortion, or collaborative, such as paying for groceries or certain public services like electricity (Magaloni et al., 2020a,b; Ley et al., 2022).

Even though existing theories suggest that we should not expect to find criminal organizations in contexts of high state presence and low violence, evidence from cases such as Argentina (Auyero and Berti, 2013; Auyero and Sobering, 2019; Flom, 2019) and Chile (Luna, 2017) shows that criminal organizations, and criminal governance, are also present in these unexpected contexts. Yet, we know comparatively less about the dynamics of governance in these cases. For example, based on our fieldwork, control dynamics seem to result from ordinary processes and practices, rather than strategic behavior and intentionality.

Understanding these types of cases is crucial (Gerring, 2007). Given relatively high levels of equality, high state presence and low violence in comparison with other cases in Latin America, we should not expect to see the emergence of criminal organizations, or mechanisms of control (strategic or otherwise). It is possible that the conclusions derived from existing research may not travel to contexts of low violence and high state presence where we also see criminal organizations. By implication, current explanations may be biased towards high violence contexts, and are therefore incomplete. In addition to these theoretical contributions, our work has important policy implications, it can generate evidence that allows us to characterize the phenomenon of criminal governance systematically.

2 Insights from the study of criminal governance

Insights from research on violent non-state actors suggest that they develop nonviolent and violent strategies to interact with the communities where they are embedded (Olson, 1993; Arjona, 2014; Magaloni et al., 2020b; Blattman et al., 2022b). When one group controls territory and there is no competition with others, under long time horizons nonviolent strategies are more likely (Staniland, 2012; Mampilly, 2012; Arjona, 2016). In turn, when contestation happens, it leads to the prevalence of less benevolent relationships with communities (Magaloni et al., 2020b; Barnes, 2022). Research on criminal governance suggests that because criminal organizations are not driven by political incentives in the same way as other groups may be (such as rebels, or terrorist organizations) the dynamics of control may be more fragile, uncertain, and short lived (Trejo and Ley, 2020). Thus, the threat of violence is always present, affecting the types of relationships they are able to develop with communities (Barnes, 2022). Other research suggests that violent and nonviolent strategies can be equally as prevalent in contexts of competition (Ley et al., 2022).

Another set of explanations focuses on the relationship between criminal organizations and the state and its impact on violence towards communities. Increasingly, scholars have turned their attention to the use of violent and nonviolent strategies. Yet, there is no consensus regarding when we should expect to see one or the other type. Magaloni et al (2020), for example, explain that when the state and criminal organizations are in confrontation, violence towards communities will be reduced. Increased police repression might lead criminal organizations to seek community support through benevolent strategies (Magaloni et al., 2020b). Nevertheless, competition with the state also affects competition between groups because it impacts time horizons, which in turn has spillover effects towards communities (Barnes, 2022).

Other research posits that criminal organizations might coordinate with the state. As long as they keep levels of violence low, the state may choose to turn a blind eye to their activities (Denyer Willis, 2015; Lessing, 2020). In contexts of high uncertainty about state expected behavior, criminal organizations may choose to use violence towards the state and towards populations (Trejo and Ley, 2020). Another set of arguments posits that the strength of communities is relevant to understand the behavior of criminal organizations (Staniland, 2012; Berg and Carranza, 2018). When communities have tight connections, illicit actors have fewer opportunities to control them, and thus violent strategies should be less prevalent (Arias, 2017; Magaloni et al., 2020a; Arjona, 2016; Kaplan, 2017; Ley et al., 2019).

Earlier research focused on state and criminal actions did not consider the possibility of complementarity between the state and criminal organizations, nor did it help us understand why we observe the development of criminal governance in contexts where violence is low and state presence is high. More recently, other researchers have demonstrated that complementarity is not exceptional (Barnes, 2017). Lessing (2020) describes the emergence of spaces of informality that criminal organizations begin to occupy because states face difficulties controlling them, but which “state forces can enter at will” (Lessing, 2020, 4), suggesting that criminal control may be more fluid than other research has previously suggested. Blattman et al (2022b) describe dynamics of criminal governance in the case of Medellin, a city with relatively high levels of state capacity and lower violence: they argue that the state and criminal organizations simultaneously provide services in a given territory. Nevertheless, because according to the authors criminal organizations in Medellin exercise control over territory, we do not have clear expectations for the development of governance strategies in contexts where there is high state presence but where criminal organizations *compete* for control. This body of research also suggests the existence of a trade off between violent

and nonviolent strategies.

3 Argument

Why do we observe variegated control strategies by criminal groups in a context where state capacity and presence is high?

We assume that criminal organizations' primary objective is to profit from illicit markets. They will use all means at their disposal to that aim. Criminal governance, be it economic, social or political, is a byproduct of the need to profit from illicit activities. Our theory, summarized in Figure 1, posits that in cases of high state capacity, state presence reduces the space for criminal governance to the economic sphere. State presence manifests through two simultaneous paths: welfare policies (social policies), and security policies (police repression, justice system). The provision of services allows the state to maintain its legitimacy ([Blattman et al., 2022a](#)). Because there is high state presence in the territory, neighborhood residents not only utilize its multiple services (day cares, schools, clinics, among many others), they also rely on those services to help them manage everyday violence and coexistence issues. The existence of welfare policies reduces groups' ability to get involved in socio-political aspects of life in the neighborhoods where they are present, restricting them to economic governance mechanisms.

High state presence also leads to the implementation of crime control strategies, which prevent groups from forming larger, more powerful organizations with the capacity to develop more sophisticated mechanisms of control. As a result, organizations are limited to economic strategies to make profit. When there is competition among groups, and increased violence towards neighborhood residents, the state intervenes violently in an attempt to control these groups, thereby increasing fragmentation further.

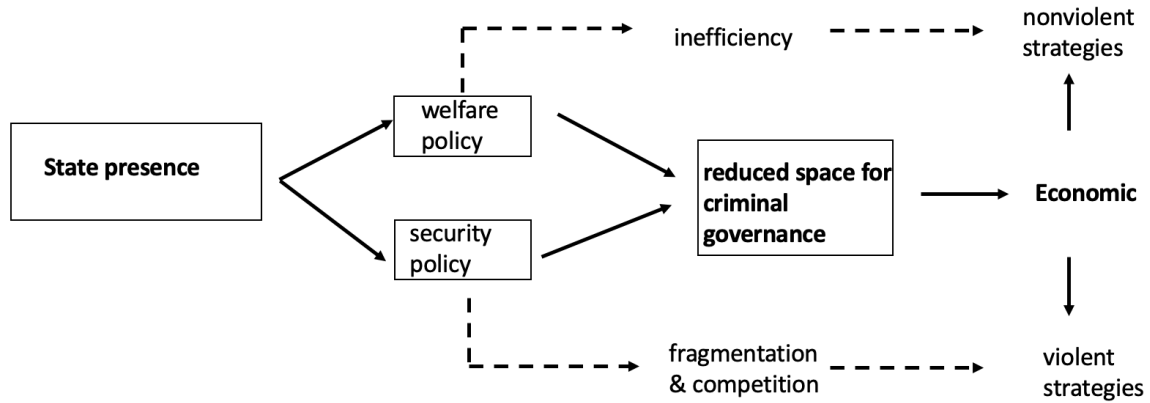


Figure 1 Theory of Diversification of Criminal Strategies in Contexts of High State Presence

Even though the state provides services, it does so inefficiently (it is slow and insufficient), which creates space for criminal organizations to build governance. Criminal groups are able to provide some services that the state may take too long to provide (temporary jobs, small donations, or small investments in neighborhoods), which they use as nonviolent strategies to win residents over (Blattman et al., 2022b). Overall, high state presence restricts the types of nonviolent strategies that groups might develop to the economic sphere. Because security policies prevent groups from growing, they are limited by their own precariousness, and so are the nonviolent strategies at their disposal.² Because security policies fragment groups, increased competition triggers violent strategies of population control.

Paradoxically, high state presence, much like its absence, might lead to the proliferation of violent criminal strategies. In contexts where the state is routinely absent, violent strategies are the only means it can use to contain criminal organizations, since it is not present in the territory in other meaningful ways. This violent response triggers the escalation of violence locally. Conversely, in contexts where the state is routinely present, even though it does not prevent the emergence of criminal groups, it

²Another limitation may come from internal group characteristics, capturing more fine grained information about groups is beyond the scope of this project.

limits their possibilities of encroachment. State presence acts as a counterweight to the development of criminal governance strategies in the long run, and their potential extension to other spheres of community life, such as political participation. Criminal groups may not control large territories, but their violent interactions generate negative externalities for neighborhood residents.

We derive three hypotheses from this argument, which we test using different methods:

- H1: High state presence limits criminal governance to economic mechanisms;
- H2: High state presence leads to the existence of violent and nonviolent strategies of economic criminal control;
- H3: High state presence leads to a higher prevalence of violent strategies of economic control vis-à-vis nonviolent ones.

3.1 The evolution of the welfare state in Uruguay

During the first half of the 20th century, based on the Import Substitution Economic Model (ISI), social spending grew significantly. Uruguay developed a welfare matrix with a corporate profile and universalist approach that reached most formal workers, mainly urban ones ([Collier and Collier, 1991](#); [Haggard and Kauffman, 2008](#); [Pribble, 2013](#)). Even though social spending in this period had a strong clientelist component, particularistic distribution was so extensive that it forged the image of a middle-class country and the notion of a “hyper-integrated” society ([Filgueira and Filgueira, 1994](#); [Rama, 1971](#)).

After 1958, a long process of stagnation ensued and social indicators (poverty, unemployment, inequality, etc.) began to worsen ([Astori, 2001](#); [Cancela and Melgar, 1985](#)). Social segregation and gentrification also worsened in Montevideo, which concentrates half of the population of the country (roughly 1.4 million people). “Poverty

belts” and “shanty towns” formed in the outskirts of Montevideo leading to the creation of precarious neighborhoods, with very limited infrastructure, such as Casavalle (originally a smaller area called “Unidad Casavalle”) and nearby areas, like Marconi. These processes of marginalization and exclusion persisted and worsened during the decade-long military dictatorship (1973-1984) ([Alvarez-Rivadulla, 2017](#)). After the democratic transition in 1985, some socioeconomic indicators improved, until 2000 where the worst economic crisis in the history of Uruguay led to a sharp escalation in poverty levels. In 2003, 30% of the population was below the poverty line ([INE, 2006](#)). Yet, since 2005 a new period of incorporation arises in Uruguay.

Between 2005 and 2020, during the so-called “left turn”, a fifteen year period of leftist governments, the successive Frente Amplio (Broad Front) governments systematically increased social expenditure. As a result, social indicators improved. For instance, the GINI coefficient went from 0,47 in 2002 to 0,39 in 2017 ([CEPAL, 2018](#)) and poverty levels went from 32,5% in 2006 to 8,8% in 2019 ([Brum and De Rosa, 2020](#)). This new period of incorporation includes not only the trade unions—as in the first incorporation process—but also the informal workers ([Silva and Rossi, 2017](#)).

In this context, many peripheral neighborhoods of Montevideo received considerable social and infrastructure investments. An example of this is the design of what was known as “Plan Cuenca Casavalle.” With the objective of improving living conditions, as well as accessibility and environmental aspects in Casavalle and nearby neighborhoods, this policy required coordination across multiple state institutions³. The plan included investment in state infrastructure in the territory, such as the construction of healthcare centers, cultural and sports centers, educational centers, new housing, squares, parks, and streets ([OPP, 2019](#)). In addition, the state extended cash

³State institutions involved in “Plan Cuenca Casavalle” were: Ministry of Social Development (MIDES), Ministry of Interior (MI), Ministry of Housing (MVOTMA), Ministry of Education and Culture (MEC), Ministry of Work and Social Security (MTSS), Ministry of Economy (MEF), National Administration of Public Education (ANEP), National Drug Council (JND), Municipality of Montevideo, and Municipality D.

transfer programs to the more vulnerable populations and expanded care centers for young children, particularly in peripheral neighborhoods (Pribble, 2013).

Increased public spending resulted in the marked improvement of several social indicators in Casavalle and nearby areas. For example, according to data from the evaluation of the Plan Cuenca Casavalle, the percentage of households below the poverty line went from 2.4% in 2009 to 0.2% in 2017. Furthermore, the percentage of households in irregular settlements decreased from 21% in 2010 (the highest point) to 14% in 2017. At the end of the left turn, Uruguay was one of the Latin American countries that had most improved its social indicators (CEPAL, 2018). As Figure 2 shows the state is extensively present throughout the urban territory of Montevideo.

The recent emergence and growth of criminal organizations is puzzling precisely because it takes place in a context of high state investment and presence, and particularly after many recent important changes in terms of social policy. Many of these changes, although central to life in peripheral neighborhoods may be insufficient for some, which creates an opportunity for criminal organizations to develop assistance strategies. State local officials and neighbors describe this phenomenon as follows:

"The timing of governments and people is different. The government says, yes we are going to do such and such... but time goes by, and we want solutions for yesterday, not for tomorrow".⁴

"When I arrived here, the ECLAC reports said that Casavalle was the neighborhood with the highest level of poverty, of exclusion, and that beyond the intervention of the State, it was impossible to reverse it. It is as if you are always in that tension that you go with a concrete proposal, and in reality, the demand is so great that you end up overwhelmed (...) and in reality, the demand is real because the people are in an informal settlement that is

⁴Interviewee 26. June 17, 2020. First wave of interviews.

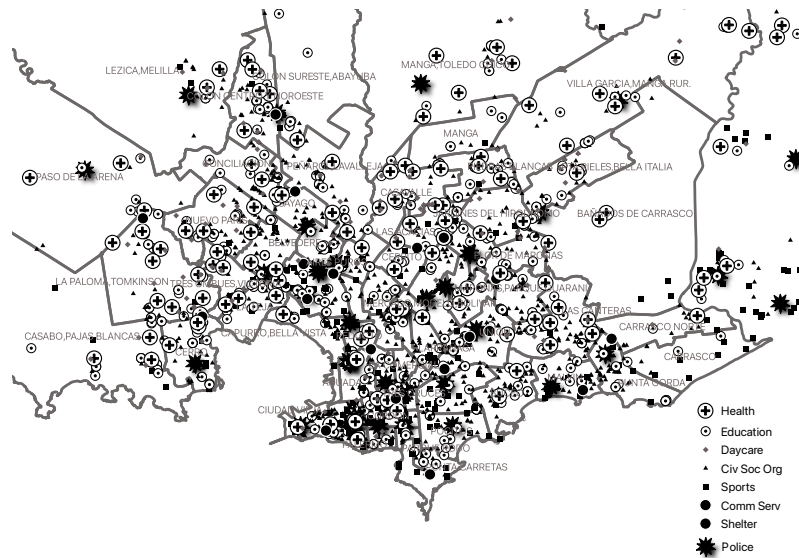
on private land and there is a need for sanitation and improvement of the streets. And you're going to tell them you're going to build a public space. So this tension is always present in all interventions."⁵

"As a city council, we have worked in the Plan Cuenca Casavalle, based on an ECLAC survey in 2004. We realized that there were state interventions and NGOs working in the territory, but there was something that did not change: the social fracture."⁶

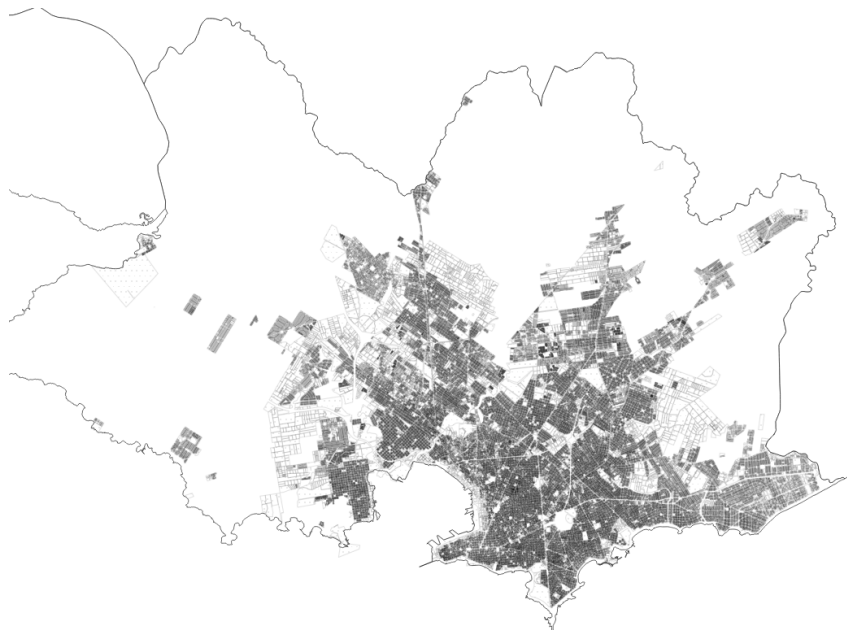
⁵Interviewee 15. March 2, 2020. First wave of interviews.

⁶Interviewee 6. June 4, 2019. First wave of interviews.

Figure 2 State Presence in Montevideo



(a) State services in Montevideo



(b) Urban areas in Montevideo

3.2 The evolution of the security policy

Changes in policing strategies in Uruguay are not unique, they are aligned with a regional shift towards punitiveness in Latin America (Flores-Macías and Zarkin, 2019;

[Visconti, 2019](#)). With the precipitous decline in public opinion material concerns (such as education, the economy and unemployment) around 2009, comes a sharp increase in concerns with insecurity ([Consultores, 2020](#)). In 2016, the National Police underwent an extensive reform with the objective of increasing effectiveness, amid increases in levels of crime, particularly in peripheral neighborhoods. A notable change was the implementation of the Programa de Alta Dedicación Operativa (PADO, loosely translated as Program of High Operational Dedication) in 2016, a hot-spot policing program designed to increase patrolling in high-crime areas.

PADO began in Montevideo in 2016 in the neighborhoods of Montevideo with the highest homicide levels: Casavalle, Marconi, and Cerro. Its main objective was to reduce property crime and increase efficacy in solving crimes, as well as to increase citizens' trust in police and improve the population's perception of safety and security. It aimed to prevent crime by deploying deterrent patrolling, and it has garnered high support, notably, in the neighborhoods where it is implemented ([Tiscornia and Perez Bentancur, 2019](#)).

PADO units were composed of full-time police officers who received special compensation. It also implemented 'crackdowns,' operations consisting of inundating a neighborhood with police and conducting raids, among other tactics. PADO units are generally associated with more frequent and intense displays of force than regular police ([Chainey et al., 2021](#)). Figure 3 extends data compiled by ([Bogliaccini et al., 2022](#)) using publicly available data from the Ministry of Interior. It displays information on police crackdowns in neighborhoods of Montevideo between 2017 and 2022.⁷ As the figure shows, the intensity of operations grew dramatically in 2018 and 2019 and they were concentrated in 11 of the 62 neighborhoods of Montevideo. It is unclear whether these operations have had positive impacts in long term crime reduction and coexistence issues, rather they have created a sense of quick improvement in the extent of

⁷The full table can be found in the appendix

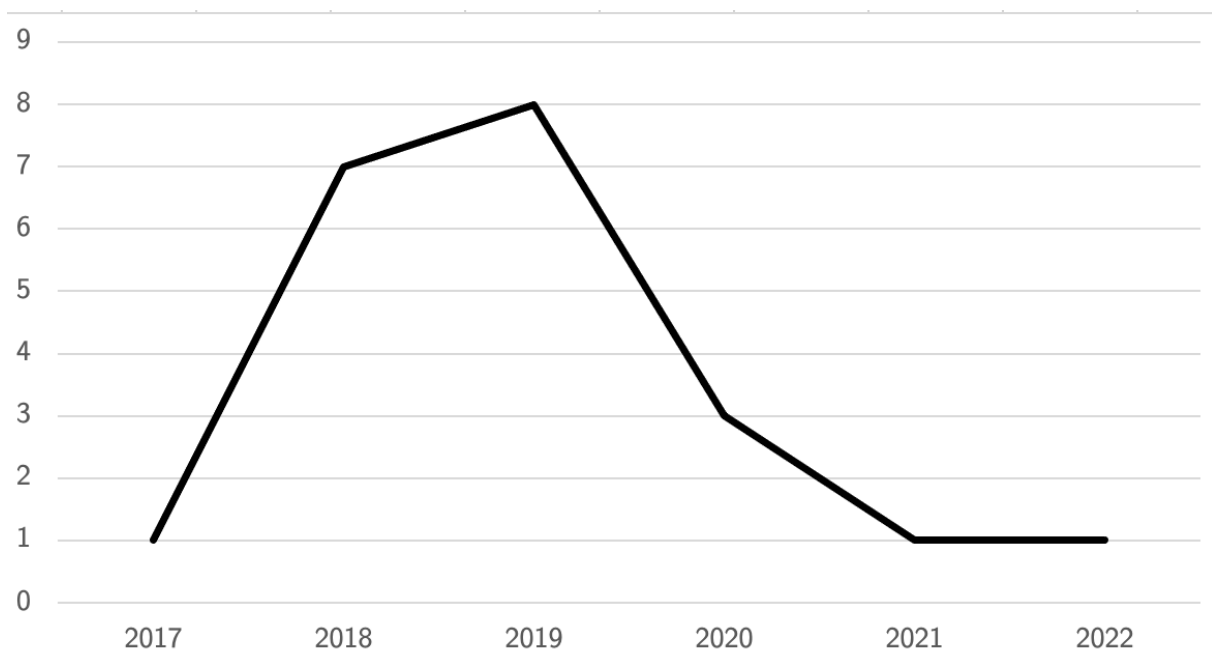


Figure 3 Number of Police Crackdowns 2017–2022

violence in some areas ([Tiscornia and Perez Bentancur, 2019](#)), but they have also contributed to destabilizing local dynamics among criminal groups. Much like in other contexts, violent state involvement to curb criminal organizations' presence, led to the proliferation of more groups ([Calderón et al., 2015](#); [Phillips, 2015](#)).

3.3 Criminal control strategies in Montevideo

In the last decade, criminal groups involved in local drug trafficking have begun to concentrate in urban areas with high poverty levels in Montevideo, the capital of Uruguay. As our press review and in-depth interviews suggest, several criminal groups of varying size and capacity for violence exist in different neighborhoods of Montevideo. Figure 4 shows a rough indicator of this phenomenon based on the systematization of press between 2012 and 2022. The areas in red represent neighborhoods where criminal groups linked to drug trafficking are present. Based on our press review, we identified 36 criminal groups that have operated in 24 of Montevideo's 62

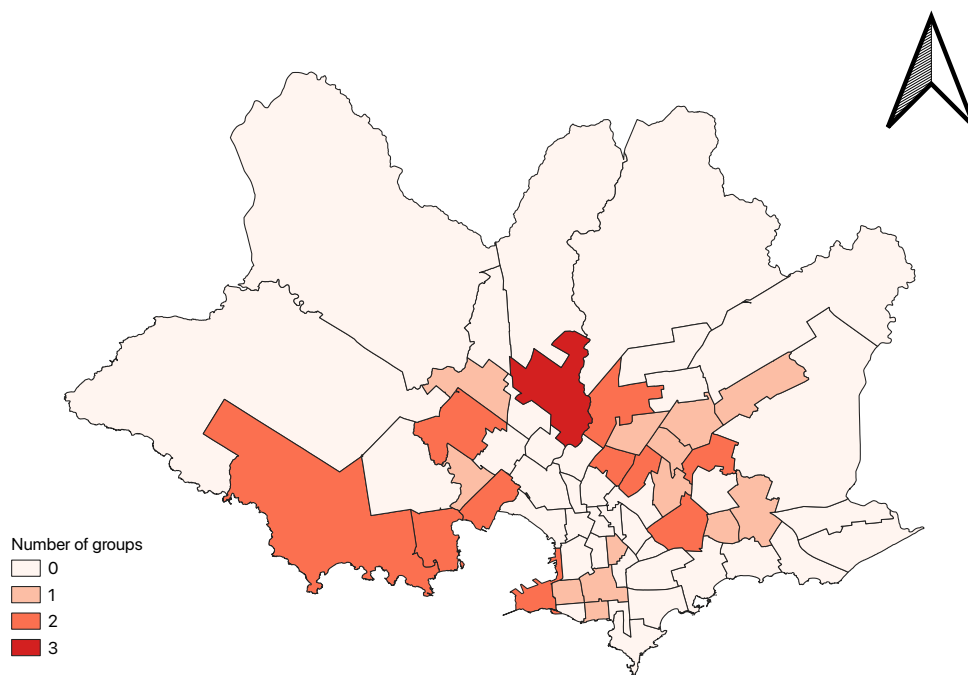


Figure 4 Criminal presence

neighborhoods over the last decade. The darker colors correspond to neighborhoods with a greater presence of criminal groups, such as Marconi–Casavalle in the center-north of Montevideo, or Cerro, Santa Catalina, and Casabó towards the south-west.

As it is the case in several other countries, these groups originated from families who were involved in criminal activities and who expanded their illegal business to incorporate local drug dealing and set up operations in the neighborhoods where they live. Because of their historical ties, these families are well known to neighborhood residents. Furthermore, when more than one group is present, they tend to be involved in disputes over drug sales in the territory. Newspaper reports identify common confrontations between "Los Chinga" and "Los Camala" in Casavalle, and "Los Alvariza" and "Los Ricarditos" in Cerro. The emergence and expansion of groups linked to drug

dealing and trafficking in Montevideo is rather puzzling. It takes place in one of the strongest and highly consolidated welfare schemes in Latin America.

While there is no evidence that these groups have established liberated zones or that they dominate entire communities, their presence and territorial strategies are many times violent, which creates a wide range of coexistence problems of different magnitude for local populations. The presence of these groups correlates with increased levels of insecurity. Conflicts between them often result in shootouts and the escalation of homicides and revenge killings. Official data does not systematically disaggregate the proportion of homicides resulting from conflicts between criminal gangs. However, according to the Interior Ministry's Bi-Annual (2018-2019) Homicide Report ([Ministerio del Interior, 2019](#)), in 2018 50% of homicides were classified as resulting from conflicts between criminal gangs. That year Montevideo reached an all-time high homicide rate of 16.9 homicides per 100,000 inhabitants ([Ministerio del Interior, 2019](#)).⁸

As part of their activities in the neighborhoods where they operate, criminal gangs carry out violent and nonviolent actions that impact residents. From our 66 interviews, we extracted 76 references to criminal organizations' actions. Similarly, from 169 press articles, we obtained 50 references to criminal organizations' actions. Table 1 contains a summary. Although not exhaustive, the table illustrates the variation in these strategies. While mentions of violent strategies are more common in the press, the interviews highlight both violent and non-violent actions.

⁸The World Health Organization identifies epidemic levels of homicides as those surpassing 10 per 100,000 population.

Table 1 Variation in strategies by source

		Source	
		Interviews	Press
Strategy	Violent	Evictions	33% (N=25)
		Threats	54% (N=27)
		Control of movement	12% (N=9)
		Abduction	34% (N=17)
		Subtotal	8% (N=6)
	Non-violent	Help to the neighborhood	6% (N=3)
		Private donations	54% (N=41)
		Job offers	94% (N=47)
		Subtotal	31% (N=24)
		Total	8% (N=6)

Among the violent strategies, our interview data suggests that evictions are the most frequently employed actions, together with threats and the control of movement within the neighborhood. For example some interviewees illustrate these events as follows:

“They have areas in the neighborhood, they occupy houses, they take people out of their homes, and they take over those places.”⁹

“Gangs occupied houses, violently removing people who were not related to them, they were marking their territory.”¹⁰

“They threatened a neighbor because they thought he had reported them to the police.”¹¹

“They intimidate or do not allow certain people to pass or walk in their neighborhood.”¹²

As for nonviolent strategies, our interviewees mention actions geared towards aiding neighbors or the neighborhood, such as buying gifts for kids soccer clubs, or do-

⁹Interviewee 14. November 23, 2021. Second wave of interviews.

¹⁰Interviewee 8. November 18, 2021. Second wave of interviews.

¹¹Interviewee 37. March 18, 2022. Second wave of interviews.

¹²Interviewee 22. May 6, 2020. First wave of interviews.

nating food for soup kitchens, or paying neighbors' electricity bill. Interviewees also point out that gang members offer jobs to young people.

"They give money to the neighbors, when they have to go to the doctor they give them money for the cab."¹³

"Gang members offered help in an activity for children in the neighborhood."¹⁴

"They made a huge meal in the soup kitchen, they fed about 300 people during the pandemic."¹⁵

"They help the neighbors. For example, they are the first to contribute when someone's house catches fire."¹⁶

"They sent us a carafe as a gift to cook for the children in the neighborhood."¹⁷

"They have a business as a front, and they hire teenagers for that business. But if they don't continue studying, they don't get to keep the job."¹⁸

"They give jobs to the women of the neighborhood as drug dealers."¹⁹

4 Research Design

Our research design is based on a mixed-methods strategy that combines in-depth interviews, review of documents, and press with an original survey containing list experiments. We use the information from the interviews and press to understand

¹³Interviewee 16. November 23, 2021. Second wave of interviews.

¹⁴Interviewee 29. December 7, 2021. Second wave of interviews.

¹⁵Interviewee 26. June 17, 2020. First wave of interviews.

¹⁶Interviewee 17. November 23, 2021. Second wave of interviews.

¹⁷Interviewee 29. December 7, 2021. Second wave of interviews.

¹⁸Interviewee 10. June 23, 2019. First wave of interviews.

¹⁹Interviewee 31. December 9, 2021. Second wave of interviews.

how the welfare and security policy have evolved over time, as well as the types of criminal governance strategies that exist. Additionally, we use this information as the basis to generate realistic treatments for our experimental design ([Pérez Bentancur and Tiscornia, 2022](#)).

Implementing this project presents several challenges: residents affected by the presence of criminal organizations are typically not visible, they rarely mobilize to seek more security. In addition, because of safety concerns, or connections with criminal groups, neighborhood residents may be reluctant to express their opinions or beliefs directly. Also, security concerns and the illicit nature of criminal organizations pose ethical challenges in investigating these populations. In our case, one added challenge relates to estimating the pervasiveness of criminal presence, that is, identifying the size of the population affected by criminal organizations and the precise governance mechanisms that criminal groups implement.

Our combined methods aid us in addressing these challenges in four ways: 1) our preliminary review of documents, in particular newspaper articles, and police reports, allows us to identify areas of operations, as well as some descriptive features of groups; 2) in-depth interviews with a range of actors (community leaders, members of NGOs, and state and local authorities), are a means to get first-hand accounts of experiences of (in)security in local neighborhoods, as well as descriptions of mechanisms of control; 3) an online survey containing a list experiment helps us understand variation in strategies in the territory; 4) including indirect questions in the survey that leverage recent developments in network models allows us to estimate the size of hard-to-reach populations. These models rely on questions of the type “how many X do you know?” as a tool to approximate the size of the population affected by criminal presence using information from respondents’ friendship networks. Following [Ventura et al. \(2022\)](#) and [Calvo and Murillo \(2013\)](#) we include eighteen indirect items to estimate the size

and structure of respondents' networks. This set of questions allows us to ask about respondents' exposure to criminal organizations by asking about people they know who have been exposed to them. We will use Facebook Ads to deploy our survey, with the goal of reaching areas where polling agencies do not send canvassers.

4.1 Outcome to be measured and strategy: qualitative fieldwork to build experimental treatments

Our outcome of interest is criminal governance strategies, which manifest in concrete activities that impact neighborhood residents. Control over individuals and territories is a byproduct of the need to capture profit. To achieve this goal, criminal groups may avail themselves of violent or nonviolent actions. To identify prevalent activities in Montevideo, we combined two sources: the systematic review of 169 press articles between 2012 and 2022, obtained from the four newspapers with highest national circulation, and 66 in-depth interviews with a variety of local actors (neighborhood residents, NGO workers, teachers, local government officials).²⁰ Table 1 in Section 4 illustrates these strategies.

As mentioned above, whereas the press emphasizes mostly violent strategies, the interviews suggest the existence of a wider array of alternatives. In line with other research (Davenport and Ball, 2002), the Table 1 highlights the potential risks of only resorting to one source and the advantages of triangulation: had we only used newspapers, we would have missed part of the variation in our dependent variable, since they mostly report violent strategies. Even though our interviews are not free from bias, they allowed us to complement the information we had previously gathered.²¹

This analysis is relevant to our experimental design as well. Had we only based our

²⁰El País, El Observador, La Diaria, and Búsqueda.

²¹In a separate paper we discuss how variation in our interviewees' proximity to our outcome of interest may also affect the evidence we are able to gather. Interviews with informants who have more direct contact with criminal organizations depict wider variation. In all other cases, violent strategies are far more common.

treatment selection on newspaper data, we would have concluded that violent strategies are the only relevant ones. Based on the prevalence of strategies in Table 1, we selected four experimental treatments: the use of threats, evictions, and providing different forms of assistance in the neighborhood. The qualitative information allows us to build realistic treatments for our experimental design (Seawright, 2021; Pérez Bentancur and Tiscornia, 2022). Following Magaloni et al. (2020b) and Ley et al. (2022), to gather individual evidence, we conducted an online survey containing an experiment.

4.2 Experimental design

Our experimental design consists of a double list experiment with two baseline lists and four sensitive items. We ask participants how many, but not which ones, of the following activities they have experienced in the last six months. We also consider a placebo item with expected zero prevalence to avoid artificial response inflation due to list length Riambau and Ostwald (2021). Table 2 summarizes our design.

Table 2 Experimental Design

	Baseline List 1	Baseline List 2	Sensitive Items	Placebo
2	I saw people doing sports in my neighborhood	I saw people paying soccer on weekends	I saw gang members threaten neighbors	I did not drink mate
	I visited friends on weekends	I frequently chatted with my friends	I saw gang members evict neighbors from their homes	
	I participated in activities organized by feminist groups	I participated in activities organized by LGBTQ groups	I saw gang members offer jobs to people from the neighborhood	
	I went to the religious ceremonies of the church in my neighborhood	I participated in charitable activities organized by the church in my neighborhood	I saw gang members make donations in the neighborhood	

4.3 Randomization

We implemented a double list experiment, with four treatments (two violent and two non-violent actions) randomly assigned to one of two lists ([Diaz, 2022](#); [Glynn, 2013](#)). We randomized the order of items in the lists to prevent ordering effects. We also included a placebo item in one of the control groups.

For the distribution of the survey, divided the 62 neighborhoods in Montevideo in two blocks, based on police precincts. We created these two blocks based on the levels of violence, where block A is less violent than block B. [Figure 5](#) shows the two blocks. We randomized participants into one of the two blocks based on their answer to the question "in which of the neighborhoods of Montevideo do you live?".

4.4 Target population

A preliminary revision of newspaper articles and documents reveals that different criminal organizations are present in about a third of the neighborhoods of Montevideo, and they deploy various strategies. Criminal presence is represented graphically in [Figure 4](#) in Section 4. According to the map, areas colored in red show the presence of at least one group between 2019 and 2022. Our target population is individuals living in neighborhoods where criminal organizations deployed these strategies.

4.5 Sample size and Recruitment

We used `DeclareDesign` ([Blair et al., 2019](#)) to estimate the sample size for our experiment. Using [Magaloni et al. \(2020b\)](#) and [Ley et al. \(2022\)](#) as a benchmark for the size of our treatment effects, we assume a prevalence rate of 15%. In the most conservative scenario, this effect exists in only one of the blocks and it is zero in the other. In this setting, a sample of 1,000 respondents per sensitive item achieves power over 80%, which means we need a total of 4,000 respondents.

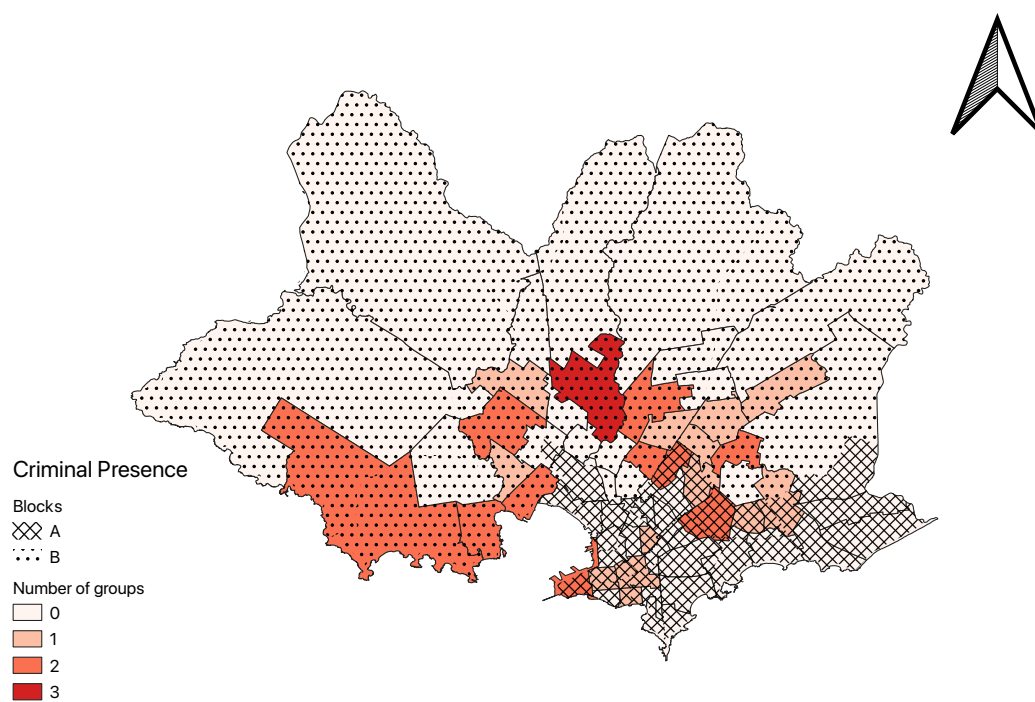


Figure 5 Criminal presence and blocks

We recruited survey participants through an advertisement on Facebook containing the following message: "Take this short survey and participate in a raffle for a smartphone." The advertisement contained a link that redirected the respondent to the survey questionnaire in Qualtrics. We use Facebook exclusively as a recruitment tool, information resulting from the survey, was stored and protected by Qualtrics. To target the Facebook ads we specified characteristics based on the information present in individuals' public profiles: residents of Montevideo who are 18 years of age or older.

The choice to use Facebook for recruitment as opposed to conducting the survey through a polling agency responds to two criteria: cost and access. The cost of fielding a survey of this size in Uruguay is high. In addition, we seek to get respondents from neighborhoods that are difficult to access given current security issues, polling agencies are reticent to send canvassers to those areas. The use of Facebook Ads provides a tool to access these respondents. A possible concern might be variability in the use of devices like computers and smartphones, internet access and social network use. According to a recent survey conducted by the national statistics institute (INE), 7 out of 10 urban households with individuals older than 14 years of age have at least a desktop computer, a laptop and/or a tablet. Furthermore, in 2016 64% of households in the lowest income quintile had access to a computer (81% for the highest quintile). In urban Montevideo (which is almost the totality of the department) 73.3% of households had access to a computer, and 82.8% had internet access. Moreover, in urban Montevideo, 77% of households in the lowest income quintile had internet access (INE-AGESIC 2016).

Internet access could be a concern. Nevertheless, according to the same INE survey, in 2016 3 out of 4 people in Uruguay had a smartphone, 74% of urban population. In the lowest quintile, 76.2% of individuals used a smartphone, and of those 82% used internet one or more times daily ([INE-AGESIC, 2016](#)). Finally, Facebook has extensive

coverage in Uruguay, in particular in Montevideo. According to a recent study ([Consultores, 2018](#)), 68% of the population of Uruguay use Facebook. Furthermore, 77% of individuals between 18 and 34 years of age who use social media, use Facebook, 72% of those between 35 and 59, and 46% of those who are 60 and older. Of those users with little education 56% use Facebook, and 75% of those users with some education use Facebook. The population of Uruguay is roughly 3.5 million, with about 1.4 million living in Montevideo, thus, the likelihood that there are users in the neighborhoods with exposure to criminal groups is high. Other mechanisms such as Amazon's Mechanical Turk are not available.

We seek to minimize concerns with social desirability bias as well as protect participants as much as possible. The use of online tools for recruitment provides respondents with another layer of anonymity (as opposed to face to face responses). Facebook has increasingly become a popular tool to recruit survey participants. As a result, we know that the samples obtained from these studies are biased towards younger, more educated individuals ([Jäger, 2017](#)). Nevertheless, Facebook also allows access to populations that are hard to reach in face-to-face surveys. Even though this is in tension with emphasis on producing samples that are representative of a population, studies that used Facebook to recruit survey participants also demonstrate that it is possible to achieve some level of representativeness with this type of recruitment ([Samuels and Zucco, 2013](#); [Broockman and Green, 2014](#); [Jäger, 2017](#)).

For this particular study, we are less concerned about achieving a representative sample of the population of Montevideo. Our concern is achieving internal validity. Therefore, we focused on achieving balance across different socio-economic strata, specifically the urban poor and not poor. Within those groups, we aimed at achieving balance in other relevant features, such as sex and age to the extent possible. We will also post-stratify the sample using relevant criteria such as sex and age, based on

information from the National Household Survey.

4.6 Estimation Strategy

To test our hypotheses we also rely on a mixed-methods strategy. We test H1 qualitatively, whereas H2 and H3 can be tested through the experimental design. In our models, we will rely on the results from the list experiments. Our primary models will use the estimation strategy developed by [Miller \(1984\)](#). To diagnose for potential violations in the list experiment identification assumptions, we will use the techniques outlined by [Aronow et al. \(2015\)](#), [Blair and Imai \(2012\)](#), and [Diaz \(2022\)](#). As a robustness check we will replicate the models using direct questions about citizens' interactions with criminal groups.

We also included a battery of indirect questions (of the form "how many X's do you know?"). These questions allow us to estimate overdispersion of criminal groups in the network. We will use these estimates to compute an individual level estimate of exposure, since we will know the proportion of people in the network who are exposed to criminal organizations.

These indirect questions also provide auxiliary information to improve our list experiment estimates ([Aronow et al., 2015](#); [Chou et al., 2017](#)). For the respondents identified as exposed to a specific criminal strategy under indirect questioning, we do not need a list experiment. Therefore, we can replace their answer to the list with a "1" and add them to the overall responses among those we do not know. Since we can assume that people who know more people exposed to X are embedded in X, we can use it as auxiliary information. Direct questions can also be used in this way to enhance the precision of list experiment prevalence estimates.

References

- Alvarez-Rivadulla, M. J. (2017). *Squatters and the Politics of Marginality in Uruguay*. Palgrave Macmillan Cham.
- Arias, E. D. (2006). The dynamics of criminal governance: networks and social order in rio de janeiro. *Journal of Latin American Studies*, 38(2):293–325.
- Arias, E. D. (2017). *Criminal enterprises and governance in Latin America and the Caribbean*. Cambridge University Press.
- Arias, E. D. and Barnes, N. (2017). Crime and plural orders in rio de janeiro, brazil. *Current Sociology*, 65(3):448–465.
- Arjona, A. (2014). Wartime institutions: a research agenda. *Journal of Conflict Resolution*, 58(8):1360–1389.
- Arjona, A. (2016). *Rebelocracy*. Cambridge University Press.
- Aronow, P. M., Coppock, A., Crawford, F. W., and Green, D. P. (2015). Combining list experiment and direct question estimates of sensitive behavior prevalence. *Journal of Survey Statistics and Methodology*, 3(1):43–66.
- Astori, D. (2001). El Uruguay del siglo XX: La economía, editado por Benjamín Nahum. In Nahum, B., editor, *El Uruguay del siglo XX: La economía*. Ediciones de la Banda Oriental, Montevideo, Uruguay.
- Auyero, J. and Berti, M. F. (2013). *La violencia en los márgenes: una maestra y un sociólogo en el conurbano bonaerense*, volume 2040. Katz Editores.
- Auyero, J. and Sobering, K. (2019). *The ambivalent state: Police-criminal collusion at the urban margins*. Oxford University Press.

- Barnes, N. (2017). Criminal politics: An integrated approach to the study of organized crime, politics, and violence. *Perspectives on Politics*, 15(4):967–987.
- Barnes, N. (2022). The logic of criminal territorial control: Military intervention in rio de janeiro. *Comparative Political Studies*, 55(5):789–831.
- Berg, L.-A. and Carranza, M. (2018). Organized criminal violence and territorial control: Evidence from northern honduras. *Journal of Peace Research*, 55(5):566–581.
- Blair, G., Cooper, J., Coppock, A., and Humphreys, M. (2019). Declaring and diagnosing research designs. *American Political Science Review*, 113(3):838–859.
- Blair, G. and Imai, K. (2012). Statistical analysis of list experiments. *Political Analysis*, 20(1):47–77.
- Blattman, C., Duncan, G., Lessing, B., and Tobon, S. (2022a). State-building on the margin: An urban experiment in medellín. Technical report, National Bureau of Economic Research.
- Blattman, C., Duncan, G., Lessing, B., and Tobón, S. (June 2022b). Gang rule: understanding and countering criminal governance. *NBER working paper 28458*.
- Bogliaccini, J. A., Pereira, D., Pereira, J. I., Giambruno, C., and Borba, I. (2022). Tackling drug-lords in a nascent market: Raids and drug crime in uruguay. *Criminal Justice Policy Review*, 33(4):351–372.
- Broockman, D. E. and Green, D. P. (2014). Do online advertisements increase political candidates’ name recognition or favorability? evidence from randomized field experiments. *Political Behavior*, 36(2):263–289.
- Brum, M. and De Rosa, M. (2020). Estimación del efecto de corto plazo de la covid-19 en

la pobreza en uruguay. Technical report, Instituto de Economía (IECON). Facultad de Ciencias Económicas y Administración. Universidad de la República.

Calderón, G., Robles, G., Díaz-Cayeros, A., and Magaloni, B. (2015). The Beheading of Criminal Organizations and the Dynamics of Violence in Mexico. *Journal of Conflict Resolution*, 59(8):1455–1485.

Calvo, E. and Murillo, M. V. (2013). When parties meet voters: Assessing political linkages through partisan networks and distributive expectations in argentina and chile. *Comparative Political Studies*, 46(7):851–882.

Cancela, W. and Melgar, A. (1985). *El desarrollo frustrado. 30 años de economía uruguaya 1955-1985*. Serie Argumentos. CLAEH-Ediciones de la Banda Oriental, Montevideo, Uruguay.

CEPAL (2018). Panorama social de américa latina.

Chainey, S. P., Serrano-Berthet, R., and Veneri, F. (2021). The impact of a hot spot policing program in montevideo, uruguay: An evaluation using a quasi-experimental difference-in-difference negative binomial approach. *Police Practice and Research*, 22(5):1541–1556.

Chou, W., Imai, K., and Rosenfeld, B. (2017). Sensitive survey questions with auxiliary information. *Sociological Methods & Research*, 49(2):418–454.

Collier, R. and Collier, D. (1991). *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America*. University of Notre Dame Press.

Consultores, E. (2020). Citizen security index.

Consultores, O. (2018). Uso de redes sociales.

- Davenport, C. and Ball, P. (2002). Views to a kill: Exploring the implications of source selection in the case of guatemalan state terror, 1977-1995. *Journal of conflict resolution*, 46(3):427–450.
- Denyer Willis, G. (2015). *The killing consensus : police, organized crime, and the regulation of life and death in urban Brazil*. University of California Press, Oakland, California.
- Diaz, G. (2022). Assessing the validity of prevalence estimates in double list experiments.
- Durán-Martínez, A. (2015). To kill and tell? state power, criminal competition, and drug violence. *Journal of Conflict Resolution*, 59(8):1377–1402.
- Durán-Martínez, A. (2017). *The politics of drug violence: Criminals, cops and politicians in Colombia and Mexico*. Oxford University Press.
- Filgueira, C. and Filgueira, F. (1994). *El largo adiós al país modelo: políticas sociales y pobreza en el Uruguay*. Arca, Montevideo, Uruguay.
- Flom, H. (2019). State regulation of organized crime: Politicians, police, and drug trafficking in argentina. *Latin American Politics and Society*, 61(3):104–128.
- Flores-Macías, G. A. and Zarkin, J. (2019). The militarization of law enforcement: Evidence from latin america. *Perspectives on Politics*, pages 1–20.
- Gerring, J. (2007). *Case Study Research: Principles and Practices*. Cambridge University Press, Cambridge, New York.
- Glynn, A. N. (2013). What can we learn with statistical truth serum? design and analysis of the list experiment. *Public Opinion Quarterly*, 77(S1):159–172.
- Haggard, S. and Kauffman, R. (2008). *Development, Democracy, and Welfare States: Latin America, East Asia, and Eastern Europe*. Princeton University Press.

- INE (2006). Pobreza y desigualdad en uruguay 2006.
- INE-AGESIC (2016). Principales resultados encuesta usos de las tecnologías de la información y la comunicación.
- Jäger, K. (2017). The potential of online sampling for studying political activists around the world and across time. *Political Analysis*, 25(3):329–343.
- Kaplan, O. (2017). *Resisting war: How communities protect themselves*. Cambridge University Press.
- Lessing, B. (2017). *Making Peace in Drug Wars: Crackdowns and Cartels in Latin America*. Cambridge University Press.
- Lessing, B. (2020). Conceptualizing criminal governance. *Perspectives on Politics*, pages 1–20.
- Ley, S. (2017). Electoral Accountability in the Midst of Criminal Violence: Evidence from Mexico. *Latin American Politics and Society*, 59(1):3–27.
- Ley, S., Mattiace, S., and Trejo, G. (2019). Indigenous resistance to criminal governance: why regional ethnic autonomy institutions protect communities from narco rule in mexico. *Latin American Research Review*, 54(1):181–200.
- Ley, S., Tiscornia, L., and Ventura, T. (2022). Criminal governance amid the COVI19 pandemic: Evidence from Mexico. *Unpublished manuscript*.
- Luna, J. P. (2017). *En vez del optimismo: crisis de representación política en el chile actual*. Editorial Catalonia.
- Magaloni, B., Franco-Vivando, E., and Melo, V. (2020a). Killing in the slums: Social order, criminal governance, and police violence in rio de janeiro. *American Political Science Review*, 114(2):552–572.

- Magaloni, B., Robles, G., Matanock, A. M., Diaz-Cayeros, A., and Romero, V. (2020b). Living in fear: the dynamics of extortion in Mexico's drug war. *Comparative Political Studies*, 53(7):1124–1174.
- Mampilly, Z. C. (2012). *Rebel rulers: Insurgent governance and civilian life during war*. Cornell University Press.
- Miller, J. D. (1984). *A New Survey Technique for Studying Deviant Behavior*. PhD thesis, George Washington University.
- Ministerio del Interior (2019). Observatorio nacional sobre violencia y criminalidad. homicidios 1 enero al 31 de diciembre (2018-2019).
- Moncada, E. (2013). The politics of urban violence: Challenges for development in the global south. *Studies in Comparative International Development*, 48(3):217–239.
- Moncada, E. (2020). The politics of criminal victimization: Pursuing and resisting power. *Perspectives on Politics*, 18(3):706–721.
- Olson, M. (1993). Dictatorship, Democracy, and Development. *The American Political Science Review*, 87(3):567–576.
- OPP (2019). Evaluación: Plan integral cuenca casavalle 2018. una herramienta para la mejora continua de los servicios públicos.
- Pérez Bentancur, V. and Tiscornia, L. (2022). Iteration in mixed-methods research designs combining experiments and fieldwork. *Sociological Methods & Research*, page 00491241221082595.
- Phillips, B. J. (2015). How does leadership decapitation affect violence? the case of drug trafficking organizations in Mexico. *The Journal of Politics*, 77(2):324–336.

- Pribble, J. (2013). *Welfare and Party Politics in Latin America*. Cambridge University Press.
- Rama, G. (1971). *El club político*. Arca.
- Riambau, G. and Ostwald, K. (2021). Placebo statements in list experiments: Evidence from a face-to-face survey in singapore. *Political Science Research and Methods*, 9(1):172–179.
- Samuels, D. J. and Zucco, C. (2013). Using facebook as a subject recruitment tool for survey-experimental research. *Available at SSRN 2101458*.
- Seawright, J. (2021). What can multi-method research add to experiments? In Druckman, J. and Green, D., editors, *Advances in Experimental Political Science*, pages 369–384. Cambridge University Press.
- Silva, E. and Rossi, F. (2017). *Reshaping the Political Arena in Latin America: From Resisting Neoliberalism to the Second Incorporation*. Palgrave Macmillan Cham.
- Staniland, P. (2012). States, insurgents, and wartime political orders. *Perspectives on politics*, 10(2):243–264.
- Tiscornia, L. and Perez Bentancur, V. (forthcoming). Policing the Urban Poor: Support for Punitiveness and Police Violence in a Latin American City. *Journal of Urban Affairs*.
- Trejo, G. and Ley, S. (2018). Why did drug cartels go to war in mexico? subnational party alternation, the breakdown of criminal protection, and the onset of large-scale violence. *Comparative Political Studies*, 51(7):900–937.
- Trejo, G. and Ley, S. (2020). *Votes, Drugs, and Violence: The Political Logic of Criminal Wars in Mexico*. Cambridge University Press.

- Ventura, T., Ley, S., and Cantu, F. (2022). Voting for Law and Order: Evidence from a Survey Experiment in Mexico.
- Visconti, G. (2019). Policy preferences after crime victimization: panel and survey evidence from Latin America. *British Journal of Political Science*, pages 1–15.
- Yashar, D. J. (2018). *Homicidal ecologies: illicit economies and complicit states in Latin America*. Cambridge University Press.