

In the Crevices of the State: Criminal Governance in Contexts of High State Presence and Low Violence

Lucía Tiscornia ^{*} Verónica Pérez Bentancur [†] Ines Fynn [‡]

Gustavo Díaz [§] ¶

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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

^{*} Assistant Professor, School of Politics and International Relations, University College Dublin, lucia.tiscornia@ucd.ie

[†] Assistant Professor, Universidad de la República, veronica.perez@cienciassociales.edu.uy

[‡] Assistant Professor, Universidad Católica del Uruguay, ines.fynn@ucu.edu.uy

[§] Postdoctoral Fellow, McMaster University, diazg2@mcmaster.ca

¶ Authors in reverse alphabetical order, equal contribution given.

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 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.

Dear reader,

Thank you very much for your interest in our our draft. This is an early iteration of this project, any and all feedback you might have will be very beneficial.

We are particularly interested in your input on our theoretical argument and mechanisms, and how we might be able to better integrate the qualitative and quantitative evidence into a cohesive piece. Conversely, if you think we should split the paper, it would be great to get your suggestions on that too.

Finally, if you have any thoughts on what other evidence might make the argument more persuasive, we would be very appreciative.

Thank you for your time and input.

Best,

Lucia, Veronica, Ines and Gustavo.

Introduction

Does high state presence alter the dynamics of criminal governance? If so, how? Many countries experience the presence of criminal organizations involved in illicit businesses for profit, such as gangs, mafias, or cartels ([Lessing, 2020](#)). Often, criminal organizations develop governance strategies—informal tools of control over different aspects of social, economic and political life ([Arias and Barnes, 2017](#); [Lessing, 2020](#))—in the territories where they operate. 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, the tools of control can be violent (such as extortion in exchange for protection), nonviolent (such as paying for electricity for local populations), or a mix ([Magaloni et al., 2020a,b](#)). It emerges as a result of relationships between the state, communities, and criminal groups ([Moncada, 2020, 2013](#); [Arias, 2017](#); [Barnes, 2017](#)). Our current understanding of the phenomenon of criminal governance in Latin America stems from 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](#)), countries with high levels of violence, powerful criminal organizations, and low levels of state presence in the territory.

In this paper we focus on understanding the manifestations of criminal governance in cases where one would not expect to find it. Focusing on the case of Montevideo, the capital city of Uruguay, we argue that state presence—manifesting through welfare policy and security policy—limits what criminal organizations can do beyond controlling drug markets at the micro-level. Combining qualitative fieldwork and a survey, our results indicate that in Uruguay criminal organizations circumscribe their actions to

illicit markets. Whereas in other contexts, criminal organizations are deeply involved in politics and societal life, this does not seem to be the case in high presence states. We also find that, similar to other cases, criminal groups develop violent and non-violent tools to control communities. Our results also suggest that nonviolent strategies are prevalent.

Even though existing theories suggest that we should not expect criminal organizations to emerge 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. Understanding such cases is highly informative. 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. We contribute to theory development by specifying the variables and mechanisms that produce the features and dynamics of criminal governance in these seemingly unexpected contexts. We contribute empirically by mapping out the myriad governance tools that criminal organizations deploy in our case, and by identifying the extent of criminal governance through the implementation of methods to study hard-to-reach populations.

1 Insights from the study of criminal governance

When criminal organizations impose formal or informal rules and regulate life in a territory with the ultimate goal of controlling illicit markets, 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. To control illicit markets, criminal groups use different tools that can be violent, such as extortion, or nonviolent, such as paying for groceries or certain public services like electricity ([Magaloni et al., 2020a,b](#); [Ley et al., 2022](#); [Olson, 1993](#); [Arjona, 2014](#); [Blattman et al., 2022b](#)). These tools can correspond to different forms of criminal governance, just because we observe one type of tool is not sufficient to assess what type of governance is being established. For instance, groups can use threats to control illicit markets only, but they may use them also to influence politics.

Existing research conceptualizes criminal governance as resulting from the relationships established between criminal groups, the state, and communities. Within this debate, scholars have not come to a consensus regarding the conditions under which violent or nonviolent tools may be more prevalent. One set of studies focuses on relationships between groups, either as competitive or noncompetitive. A dominant argument suggests that 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](#); [Moncada, 2019](#)). In turn, when contestation happens, it leads to the prevalence of violent relationships with communities ([Magaloni et al., 2020b](#); [Barnes, 2022](#); [Moncada, 2019](#)). Other scholars emphasize that because criminal organizations are not driven by political incentives in the same way as other groups (such as rebels, or terrorist organizations) the dynamics of control are 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](#)). Still others suggest 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. 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 non-violent means (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). Others posit 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 makes important contributions to explain criminal governance in contexts of high violence and relatively lower state presence. However, it did not consider the possibility of complementarity between the state and criminal organizations, nor does it explain the existence of criminal governance in contexts of higher state presence and lower violence. 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 fill because states face difficulties occupying 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. In addition, 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. We build on these findings to understand the development of criminal governance in contexts of historical low violence and high state presence. In these cases, we should not expect to find evidence of criminal governance.

Existing research in Latin America has developed explanations for the dynamics of criminal governance in cases where there is relatively low presence of the state—through social policies—and high levels of violence. What is different about high state presence and low violence that should lead us to different expectations? We develop a theory positing that in contexts of high state presence the space to develop criminal governance is more constrained than in others.

2 The development of criminal governance in contexts of high state presence

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 maximize profit from illicit activities. We build on existing research defining criminal governance as informal rules to control different aspects of community life (Arias and Barnes, 2017; Lessing, 2020;

[Moncada, 2019](#); [Trejo and Ley, 2020](#)). We conceptualize criminal governance as having the control of illicit markets (any point along their chain of production and distribution) as a necessary condition, without which the phenomenon of criminal governance does not exist. Additionally, criminal governance may have other manifestations. That is, in addition to controlling illicit markets, it may have other attributes that determine sub-types of criminal governance: for example, criminal governance may be the control of illicit markets plus political control; plus economic control; plus social control, and the different combinations thereof. To achieve different forms of governance, criminal organizations utilize violent and nonviolent tools (extortion, kidnappings, killings, provision of goods, jobs, among many others). Our theory, summarized in [Figure 1](#), posits that high state presence reduces the space for criminal governance to the control of illicit markets. 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 controlling illicit markets. 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, also resulting in restricted control to illicit markets.

Even though the state provides services, it does so inefficiently (it is slow and insufficient), which creates space for criminal organizations to expand governance through a number of tools. Criminal groups are able to provide some services that the state

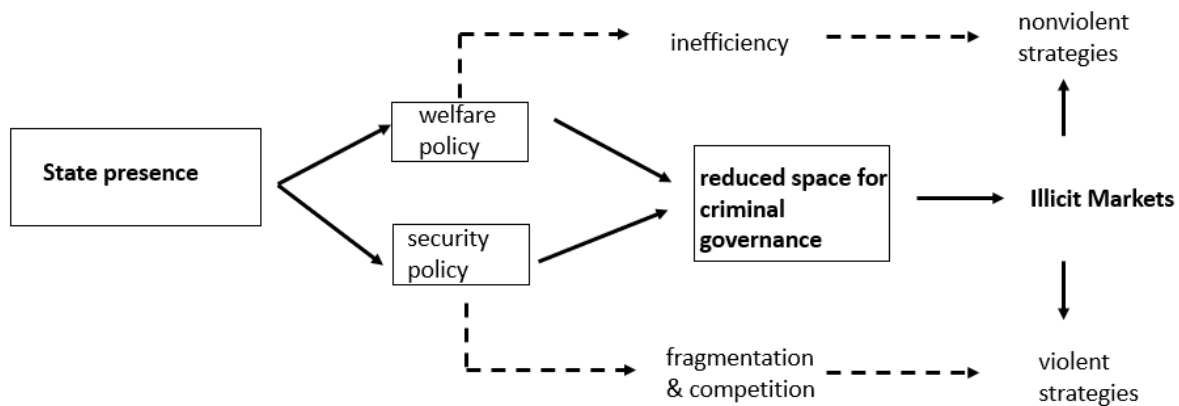


Figure 1 Theory of Diversification of Criminal Tools in Contexts of High State Presence

may take too long to provide (temporary jobs, small donations, or small investments in neighborhoods), which they use as nonviolent tools to win residents over (Blattman et al., 2022b). In addition, because security policies prevent groups from growing, they are limited by their own precariousness, and so are the nonviolent tools at their disposal.¹ Because security policies fragment groups, increased competition triggers violent tools of population control.

Paradoxically, high state presence, much like its absence, might lead to the proliferation of violent criminal tools. 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 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

¹Another limitation may come from internal group characteristics; capturing more fine grained information about groups is beyond the scope of this project.

for neighborhood residents.

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

H1: High state presence limits criminal governance to the control of illicit markets;

H2: High state presence leads to the existence of violent and nonviolent tools of criminal control;

H3: High state presence leads to a higher prevalence of violent tools vis-à-vis nonviolent ones.

3 The Case of Uruguay

In the last two decades, criminal groups involved in local drug-trafficking have begun to concentrate in urban areas with high poverty levels in Montevideo, the capital of Uruguay. While there is no evidence that criminal groups have established liberated zones, or that they dominate entire communities, their presence and behavior 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](#)).

² This phenomenon takes place simultaneously with the expansion of the welfare state as well as an expansion of security policy, making the case of Montevideo rather puzzling.

3.1 The evolution of the welfare state

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 clientelistic 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—the capital city—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 twelve-year-long military dictatorship (1973-1985) (Álvarez 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

²The World Health Organization identifies epidemic levels of homicides as those surpassing 10 per 100,000 population.

poverty line (INE, 2006). Yet, since 2005 a new period of expansion of social policies began, improving social indicators substantially.

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 (Pribble, 2013). As a result, social indicators improved. For instance, the GINI coefficient improved from 0,47 in 2002 to 0,39 in 2017 (CEPAL, 2018), and poverty levels decreased from 32,5% in 2006 to 8,8% in 2019 (Brum and De Rosa, 2020). This new period of incorporation includes not only trade unions—as in the first incorporation process—but also 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, 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 conditional cash 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 decreased from 2.4% in 2009 to 0.2% in 2017. Furthermore, the percentage of house-

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.

holds 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 improved its social indicators the most (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, albeit central to life in peripheral neighborhoods, may be insufficient for some, which creates an opportunity for criminal organizations. 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 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

⁴Interviewee 26, June 17, 2020.

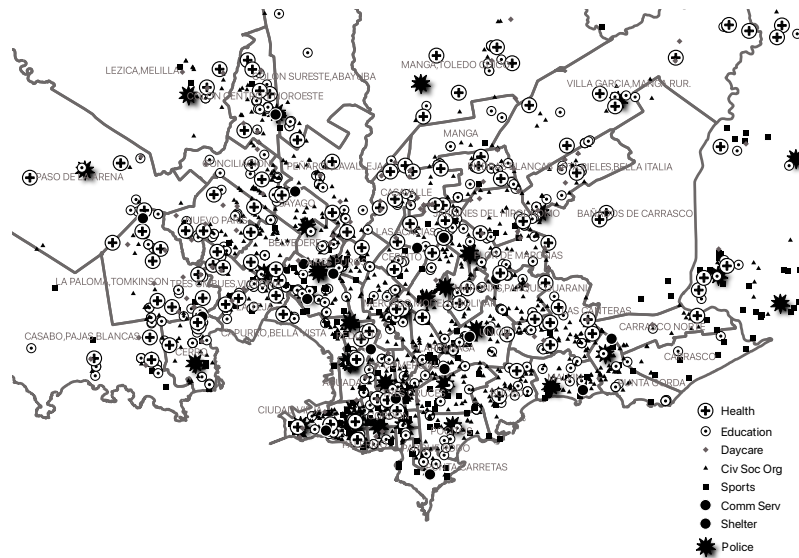
⁵Interviewee 15, March 2, 2020.

and NGOs working in the territory, but there was something that did not change: the social fracture.”⁶

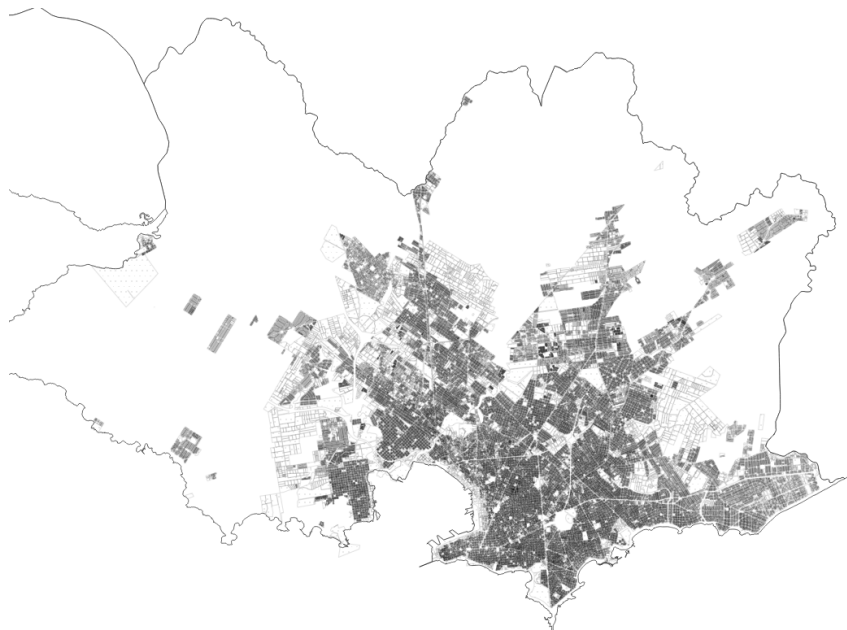
As the quotes illustrate, extended state presence still leaves spaces where needs are not fully met.

⁶Interviewee 6, June 4, 2019.

Figure 2 State Presence in Montevideo



(a) State services in Montevideo



(b) Urban areas in Montevideo

3.2 The evolution of the security policy

Policing policies in Uruguay changed only recently, in line with a regional shift towards profesionalization, but also punitiveness in Latin America (Flores-Macías and

Zarkin, 2019; Visconti, 2019; Tiscornia and Perez Bentancur, 2019). Around 2009, a sharp increase in public opinion concern with insecurity follows a precipitous decline in material concerns (such as education, the economy and unemployment) (Consultores, 2020), pushing politicians and policymakers to rethink policing strategies. 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), a hot-spot policing program designed to increase patrolling in high-crime areas.

PADO began in Montevideo in 2016 in the neighborhoods 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 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

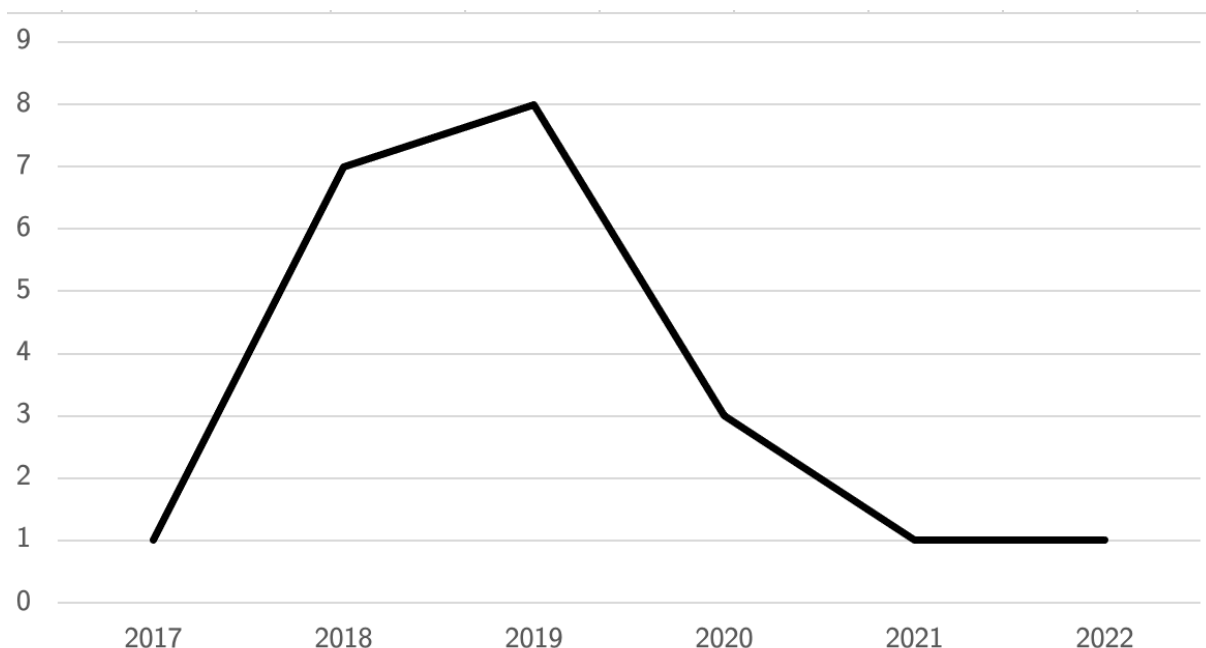


Figure 3 Number of Police Crackdowns 2017–2022

violence in some areas ([Tiscornia and Perez Bentancur, 2022](#)), 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](#)).

4 Research Design

To understand criminal governance and its manifestations, we implemented a mixed-methods strategy that combines in-depth interviews, review of documents, and press with an original survey. We use the qualitative information from the interviews and press to understand the context, how criminal groups have evolved, and the types of criminal governance that exist. Additionally, we use this information to generate relevant survey questions ([Pérez Bentancur and Tiscornia, 2022](#)).

Implementing this project presents several challenges: residents affected by the presence of criminal organizations can be considered a hard-to-reach or hidden pop-

ulation ([Salganik and Heckathorn, 2004](#)). Because of safety concerns, or connections with criminal groups, neighborhood residents may be reluctant to express their opinions or beliefs directly. Estimating the pervasiveness of criminal presence, or identifying the size of the population affected by criminal organizations and the precise governance mechanisms that criminal groups implement, is also a challenge. Also, security concerns and the illicit nature of criminal organizations pose ethical challenges in investigating these populations. Furthermore, we also face a case-specific challenge: criminal organizations in Uruguay are a relatively new phenomenon (last two decades) and the data available are scarce.

Our combined methods aid us in addressing these challenges in four ways: 1) our preliminary review of documents, in particular newspaper articles, 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 neighborhoods, as well as descriptions of mechanisms of control; 3) the online survey helps us understand variation in governance in the neighborhoods; 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 aggregated relational 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.

4.1 Qualitative fieldwork

To qualitatively assess criminal governance tools 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 68 in-depth interviews with a variety of local actors (neighborhood residents, NGO workers, teachers, local government officials).⁸ Table 2 summarizes these tools. Even though we did not explicitly look to interview members of criminal organizations, we interviewed individuals who had different levels of access to and contact with criminal organizations. We constructed our pool of interviewees based on a snowball sampling technique, taking into account how likely it might be that our interviewees would be proximate to our dependent variable of interest.

We used the qualitative information to generate a better understanding of the context where criminal groups operate in Montevideo, how they evolved over time, and some of their features. The revision of newspaper articles and interviews 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. According to the map, areas colored in red show the presence of at least one group between 2019 and 2022. Additionally, we used our fieldwork to inform the design of a survey that included direct and indirect questions about the presence of criminal groups in all of Montevideo.

4.2 Survey

Our survey consisted of a series of questions aiming at understanding whether and where criminal organizations were present, as well as respondents' relationship to the state. To that aim, we included direct and indirect questions. We directly asked partic-

⁸El País, El Observador, La Diaria, and Búsqueda.

ipants whether they believed there are criminal organizations in their neighborhoods, and whether they witnessed criminal groups in their neighborhood engage in any of the following activities:

1. Threatening neighbors
2. Evicting neighbors from their homes
3. Making donations to neighbors
4. Offer work to neighbors

With the goal of ensuring more realistic and effective measurement of outcomes, we defined this list of actions based on insights from our qualitative fieldwork. During fieldwork, and from our press review, we identified a longer list of activities that criminal groups engage in as mechanisms to control the local drug market. We chose these four to be included in our survey because they were the ones our interviewees mentioned the most, and the most recurrent in the press, as Table 2 indicates. We categorized the first two as violent actions, and the remaining two as nonviolent.

Our indirect questions, which included the same items we asked about directly, were included in a series of network scale-up questions (Laga et al., 2021). Following recent applications of this method in Political Science (Calvo and Murillo, 2013; Ventura et al., 2022), we present respondents with sixteen items. For each one, respondents are asked to indicate how many people they know in each category. Table 1 shows the list of items. For the last item in brackets, respondents were randomly presented with one of the four criminal organization strategies listed above.⁹

The purpose of including network-scale up questions is to use the baseline group to estimate the size of a respondent's personal network, which one can then use to

⁹We presented criminal governance tools at random to align with the sensitive item presented in a list experiment. The list experiment did not work as intended, so we do not report the results here. We deal with this issue elsewhere.

Table 1 Network scale-up questions

How many X do you know, who also know you, with whom you have interacted in the last year in person, by phone, or any other channel?	
People from Las Piedras	Public employees
Men between 25-29 year old	Welfare card holders
Police officers	People registered with a political party
University students	People with children attending public school
People who had a kid last year	People who did not vote in the last election
People who passed away last year	People currently in jail
People who got married last year	People recently unemployed
Women between 45-49 years old	[CRIMINAL GOVERNANCE TOOL]

estimate the size of the unobserved group of interest. Traditionally, the goal is to use known population quantities among the baseline groups to estimate the size or proportion of the unobserved group in the population of interest (Zheng et al., 2006; Laga et al., 2023). However, these estimates are only valid under the assumption that any respondent in the sample has the same baseline probability of knowing someone in the unobserved group (Laga et al., 2021). We believe this does not hold in our case, as people living in different parts of Montevideo have different propensities to crime exposure.

Instead, we follow the modeling strategy in recent political science applications and model exposure to criminal governance strategies within our sample (Calvo and Murillo, 2013; Ventura et al., 2022). We model responses to the network scale-up questions as following the distribution

$$y_{ik} \sim \text{negative-binomial}(\text{mean} = e^{\alpha_i + \beta_k}, \text{overdispersion} = \omega_k) \quad (1)$$

Where y_{ik} is the size of group k for respondent i , α_i is the (logged) expected degree for person i , and β_k is the (logged) expected degree for group k . Note that degrees denote the number of edges in a network. So α_i can be interpreted as a function of the size of respondent i 's network, but β_k cannot be interpreted in terms of size. The

parameter ω_k allows for variance in the propensity to know someone for group k (for details see [Zheng et al., 2006](#)).

We fit this model via maximum likelihood estimation twice. In the first step, we exclude the criminal governance strategy of interest to generate predictions for its size based on a respondent's baseline network. In the second step, we fit the model including the group of interest to measure its actual size for each respondent.

This allows us to express whether a respondents exposure to criminal governance strategies relative to the size of their personal network as

$$r_{ik} = \sqrt{y_{ik}} - \sqrt{e\alpha_i + \beta_k} \quad (2)$$

Where r_{ik} is the standardized residual between the actual and expected size of group k for respondent i . Individuals with high r_{ik} know disproportionately more people who have experience the criminal governance strategy of interest given the size of their personal network, whereas the reverse is true for individuals with low r_{ik} .¹⁰

Our ultimate goal is to estimate the proportion of respondents who can be considered as exposed to the criminal governance strategies of interest. That means we need to convert this continuous measure into a binary indicator. We report results using a generous and conservative conversion. The most generous approach would be to consider any value of $r_{ik} > 0$ as exposed. A more conservative approach would be to count respondents as exposed only if they have above average residuals. Since the average residual is around zero, our conservative approach counts $r_{ik} > \text{mean}(r_{ik}) + \text{SD}(r_{ik})$ as exposed. In either case, this allows us to estimate the proportion of respondents exposed to the criminal governance strategies of interest through a simple means, which implies that our estimates are directly comparable with the direct questions.

¹⁰Up to here our approach is the same as [Calvo and Murillo \(2013\)](#) and [Ventura et al. \(2022\)](#).

4.3 Sample size and Recruitment

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.¹¹ 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. For a detailed description of our recruitment through Facebook see the appendix.

We seek to minimize concerns with sensitivity 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). However, for this particular

¹¹We use Facebook exclusively as a recruitment tool, information resulting from the survey, was stored and protected by Qualtrics.

study, we prioritize the implementation of survey instruments to minimize sensitivity bias over producing a representative sample.

5 Results

We tested three hypotheses: 1) that in contexts of high state presence, criminal governance is relegated to the control of illicit markets; 2) that in contexts of high state presence, we should identify the presence of violent and nonviolent criminal actions; 3) that violent actions should be more prevalent than nonviolent ones. We used the qualitative fieldwork to test H1 and H2, the survey also provides evidence for H2 and H3. We present our results by discussing each hypothesis at a time, combining quantitative and qualitative sources of evidence.

Descriptively, our results show that criminal groups are concentrated in urban areas of Montevideo, with high poverty levels. From the analysis of press and in depth-interviews, groups vary in size and capacity for violence, and there is sometimes more than one group present in certain neighborhoods.

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 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.

Our in-depth interviews reveal that these groups originated from families who were involved in criminal activities and who expanded their illicit 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.

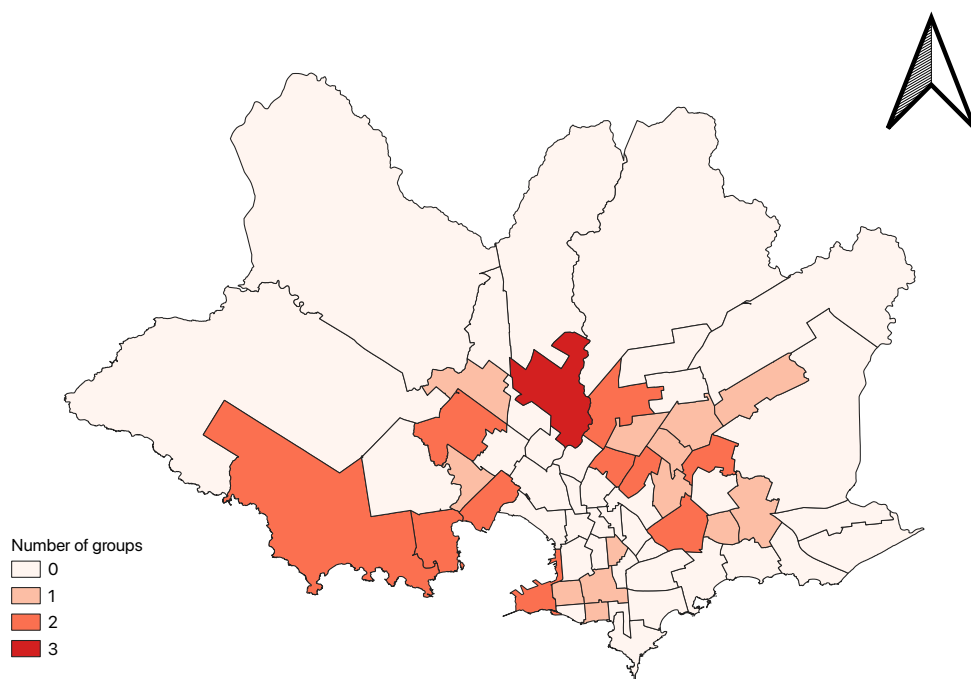


Figure 4 Criminal presence

When more than one group is present, they tend to be involved in disputes over drug sales in the area. Newspaper reports identify common confrontations between "Los Chinga" and "Los Camala" in Casavalle, and "Los Alvariza" and "Los Ricarditos" in Cerro. We discuss our hypotheses in light of our evidence next.

H1: In contexts of high state presence, criminal governance is relegated to controlling illicit markets

As expected, and in line with H1, we find evidence that criminal groups in Montevideo are focused on controlling illicit markets, but they do not appear to be involved in other areas of social life. As one interviewee points out:

"Politics for them does not exist, they are in the business [of selling drugs]. Politics is the business of other people, they are interested in having economic means quickly, but politics is not their strong suit." ¹²

"They are not well-organized enough to be involved in other things." ¹³

These quotes represent suggestive evidence that criminal groups are not involved in politics. In our 66 interviews, we did not come across any evidence suggesting otherwise. Nevertheless, it may be possible that we did not come in contact with interviewees that would know the groups' motivations from the inside. It is possible that we lacked access to the evidence and therefore we cannot discard the alternative hypothesis that groups are involved in other spheres of social life. One possibility is to assess the probative value of the evidence we have based on how proximate the interviewees are to our outcome of interest. That is, if we can establish that our interviewees are close enough to our outcome of interest, we can reasonably argue that

¹²Interview 37, March 18, 2022. Second wave.

¹³Interview 13, June 17, 2019. First wave.

absence of evidence is, in fact, evidence of absence (Beach and Pedersen, 2019, 200). These quotes are from individuals who are politically and socially active, involved in their communities, they know the local dynamics very well.

In addition to our interview evidence, our survey asked a series of questions regarding whether neighborhood residents asked criminal groups for help in a variety of scenarios, to get a sense, observationally, about groups' ability to mediate interpersonal relations and coexistence in neighborhoods. Figure 5 summarizes the results, and suggests that the vast majority of respondents who previously stated they live in neighborhoods where criminal groups are present, do not resort to these groups to resolve coexistence issues.

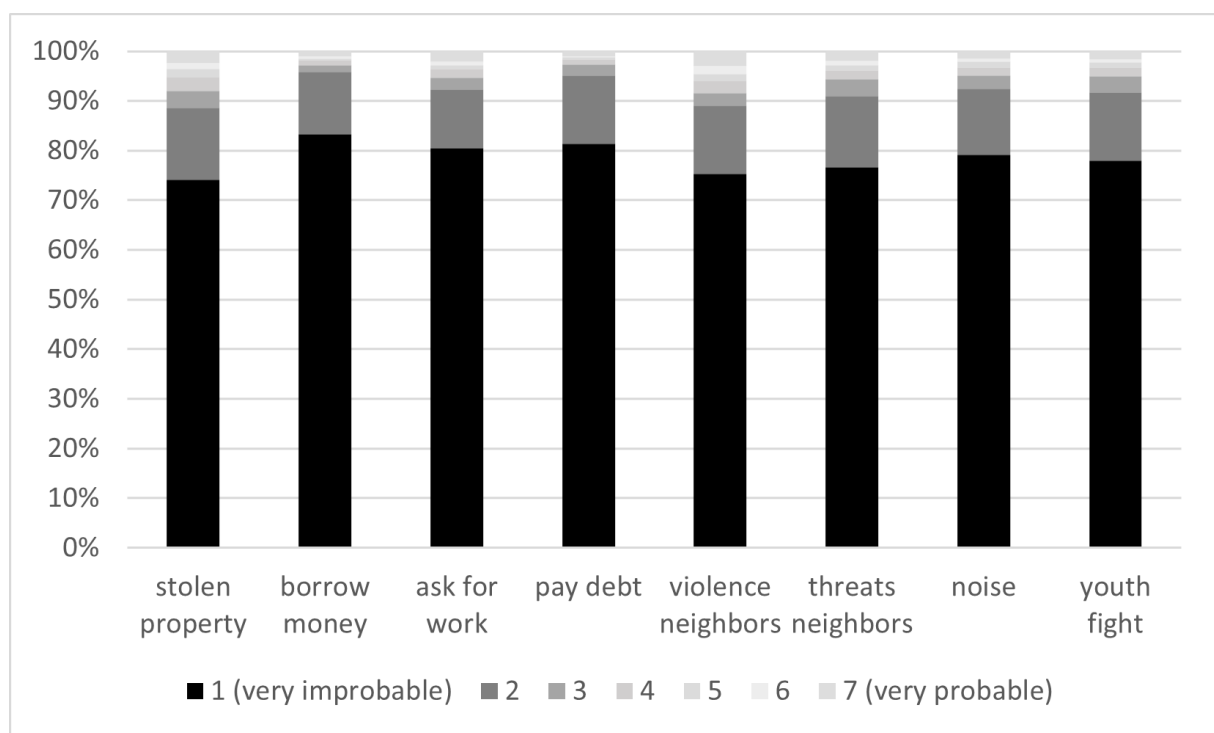


Figure 5 Social control by criminal groups

Taken together, this is necessary evidence to be reasonably confident in our assertion that criminal groups' actions are restricted to illicit drug markets, as posited by

H1, but it is not sufficient to confirm it.

H2: In contexts of high state presence, violent and nonviolent actions are observable

Regarding H2, our evidence shows that as part of the activities in the neighborhoods where they operate, criminal groups 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 2 contains a summary. Although not exhaustive, the table illustrates the variation in these actions. While mentions of violent actions are more common in the press, the interviews highlight both violent and non-violent ones.

Table 2 Variation in strategies by source

		Source		
		Interviews	Press	
Strategy	Violent	Evictions	33% (N=25)	54% (N=27)
		Threats	12% (N=9)	34% (N=17)
		Control of movement	8% (N=6)	6% (N=3)
		Abduction	1% (N=1)	
		Subtotal	54% (N= 41)	94% (N=47)
	Non-violent	Help to the neighborhood	31% (N=24)	2% (N=1)
		Private donations	8% (N=6)	4% (N=2)
		Job offers	7% (N=5)	
		Subtotal	46% (N= 35)	6% (N=3)
	Total		100% (N=76)	100% (N=50)

Among the violent actions, our interview data suggests that evictions are the most frequently employed ones, 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.” ¹⁴

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

“Gangs occupied houses, violently removing people who were not related to them, they were marking their territory.”¹⁵

“They threatened a neighbor because they thought he had reported them to the police.”¹⁶

“They intimidate or do not allow certain people to pass or walk in their neighborhood.”¹⁷

As for nonviolent actions, our interviewees mention that some seek to aid neighbors or the neighborhood, such as buying gifts for kids’ soccer clubs, donating food for soup kitchens, or paying neighbors’ electricity bill. Interviewees also point out that group 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.”¹⁸

“Gang members offered help in an activity for children in the neighborhood.”¹⁹

“They made a huge meal in the soup kitchen, they fed about 300 people during the pandemic.”²⁰

“They help the neighbors. For example, they are the first to contribute when someone’s house catches fire.”²¹

“They sent us a carafe as a gift to cook for the children in the neighborhood.”²²

¹⁵Interviewee 8. November 18, 2021. Second wave of interviews.

¹⁶Interviewee 37. March 18, 2022. Second wave of interviews.

¹⁷Interviewee 22. May 6, 2020. First wave of interviews.

¹⁸Interviewee 16. November 23, 2021. Second wave of interviews.

¹⁹Interviewee 29. December 7, 2021. Second wave of interviews.

²⁰Interviewee 26. June 17, 2020. First wave of interviews.

²¹Interviewee 17. November 23, 2021. Second wave of interviews.

²²Interviewee 29. December 7, 2021. Second wave of interviews.

“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.”²³

“They give jobs to the women of the neighborhood as drug dealers.”²⁴

The interview evidence is in line with H2, we find that groups systematically carry out violent and nonviolent actions. However, because we only conducted in-depth interviews in specific neighborhoods and not across Montevideo, it may be that we only observe this mix of activities in those neighborhoods and not beyond. Regardless, the neighborhoods where we conducted interviews include most of the areas where criminal groups are present and active. We used the survey to garner a better understanding of how widespread these actions are across all neighborhoods of Montevideo, as well as systematic evidence of their relative prevalence. We present those results next, and we also discuss evidence regarding H3.

H3: Violent actions should be more prevalent than nonviolent ones

Our interviews suggest that asking about the prevalence of criminal governance strategies in a survey directly would lead to misreporting, which may complicate making statements about the prevalence of violent and non-violent actions. Therefore, we also rely on the results of the network scale-up questions described in the previous section.

Figure 6 presents these results. Each point estimate indicates the proportion of respondents who have seen criminal groups engaging in the corresponding type of action under different approaches to direct and indirect questioning. The vertical lines denote 95% confidence intervals, whereas the horizontal ticks indicate 84% confidence intervals that are more appropriate to evaluate the hypothesis of any two means being

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

²⁴Interviewee 31. December 9, 2021. Second wave of interviews.

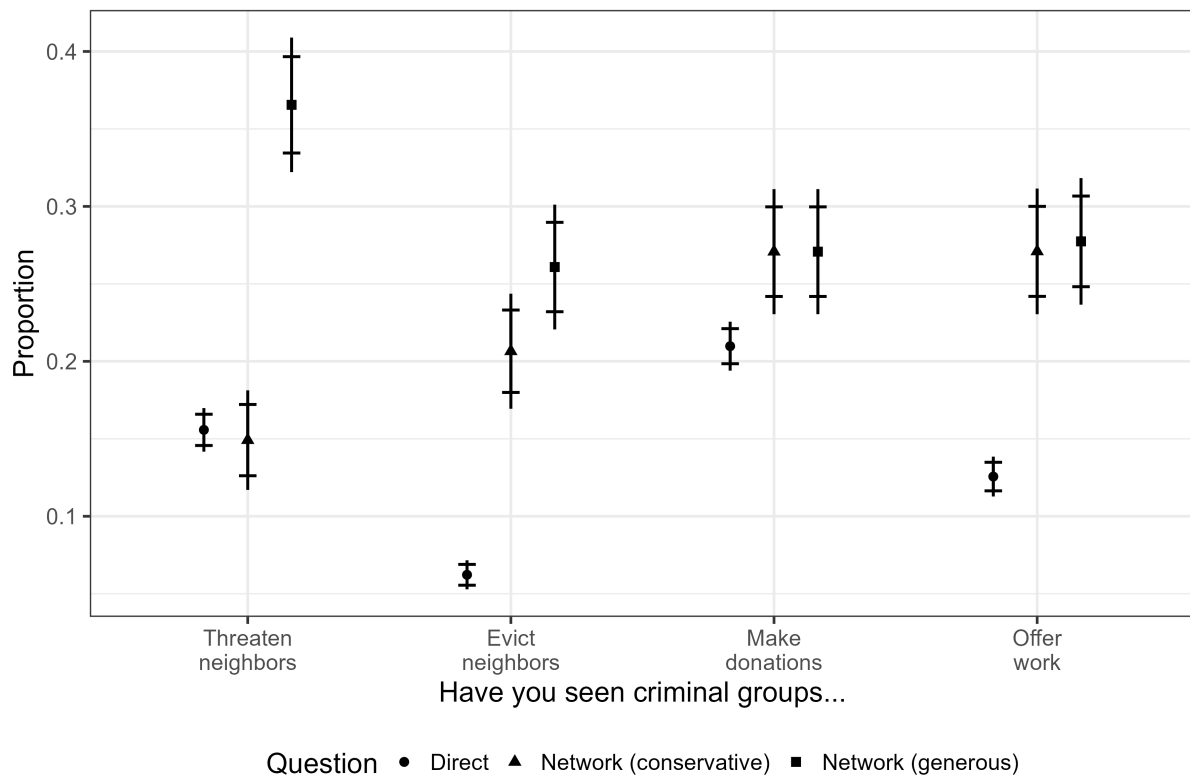


Figure 6 Relative prevalence of criminal governance tools

different (Goldstein and Healy, 1995). Even when taking a conservative approach to estimate the size of the network (residuals one standard deviation above the mean), the results are quite striking. The proportion of neighborhood residents in our sample who have been exposed to criminal organizations ranges between 15 and 25 percent. Except for threats, all other estimates are higher than reported through the direct question. Notably, the prevalence of non-violent strategies seems to be higher. To summarize, our survey results provide support for H2, but they are opposite to the expectation in H3. Findings from extant research suggest that we should expect the prevalence of violent strategies when criminal organizations are in competition for turf, this does not appear to be the case in our sample.

These results differ from our initial hypothesis, however they do not undermine our argument. High state presence confines the implementation of control strategies to the

illicit drug market, but it does not correspond with a higher prevalence of violent activities as compared to non-violent ones. High state presence in terms of security policy implies that the state responds to crime reporting. Previous research underscores significant legitimacy and trust in the police among the Uruguayan population (Tiscornia and Perez Bentancur, 2017). As a result, criminal groups are likely to refrain from engaging in actions that would make them more visible, increasing the likelihood of reporting (Durán-Martínez, 2017). Thus, because the state is present and responsive, it is reasonable to observe criminal groups pursuing loyalty through non-violent activities. This does not preclude the possibility of violence, but it implies a more selective use, as high state presence compels groups to exercise restraint in their use of violence.

A persistent question is whether the prevalence of these strategies varies by neighborhood type. Extant research emphasizing state presence would suggest that we should expect higher prevalence of violent tools in peripheral areas. Figure 7 contains the proportion of direct responses by strategy and by zone. As the figure suggests, even though there is a higher overall prevalence of tools in peripheral neighborhoods (Zone B), these tools are also present in nonperipheral ones (Zone A), which suggests that criminal organizations are present in affluent and nonaffluent areas alike. As we show in the discussion of the case, population affluence and state presence are not synonymous. Our findings suggest that state presence seems to be a less relevant factor to understand criminal presence, but it is central to understand what these organizations do.

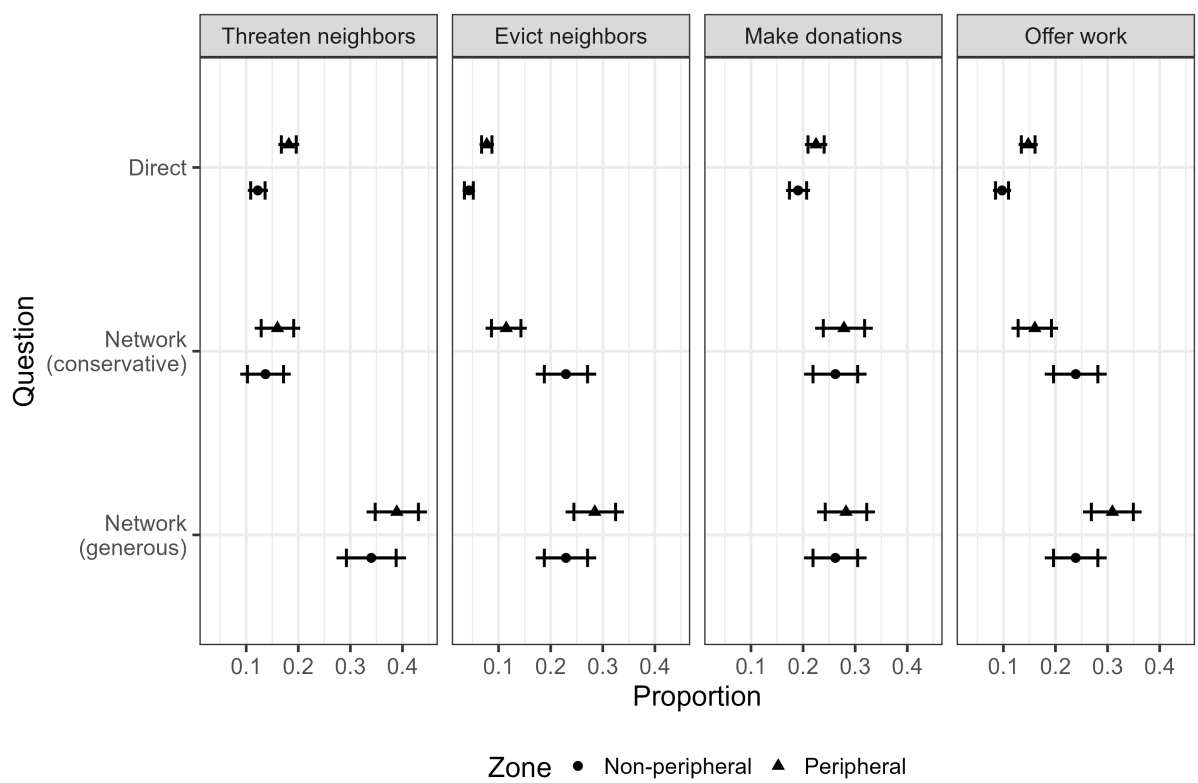


Figure 7 Relative prevalence of criminal governance tools by zone

6 Conclusion

Coming soon!

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A Appendix 1: Facebook Use in Uruguay

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.