Criminal governance in times of crisis: Evidence from the COVID-19 outbreak in Rio de Janeiro*

Benjamin Lessing Joana Monteiro Santiago Tobon†

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Abstract

In urban peripheries worldwide, and especially in Latin America, criminal groups use coercive power to impose rules on and provide order to civilians. The reasons why gangs govern in particular ways, or at all, are poorly understood. Many charge taxes in exchange for governance provision—suggesting they act as stationary bandits—but some do not. Many control retail drug markets, but some also earn rents from licit goods and services like cooking gas and internet. During the COVID-19 crisis, anecdotes of gangs enforcing lockdowns and providing health-related public goods suggested they seized opportunities to consolidate their authority and perceived legitimacy. We present novel, systematic data on criminal governance practices in Rio de Janeiro, whose gangs are notoriously militarized, persistent, and—usefully, from our perspective—diverse. While many belong to prison-based drug syndicates, others are police-linked groups known as *milícias*. We surveyed residents from almost 200 *favelas* about local gangs' type, economic and governance activities, taxation, and pandemic response. Contrary to expectations, we find that drug gangs and milícias alike earn rents from a range of licit products and services, enjoy similarly high levels of perceived legitimacy, and largely avoided involvement in pandemic response. Yet milicias are far more likely to tax, and seldom sell drugs. Our findings suggest that gangs' core motives are economic rather than political, that they strategically distinguish between direct taxation and extracting monopoly rents from control over utilities.

Keywords: crime, organized crime, criminal governance, COVID-19, Brazil

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†Lessing: University of Chicago, Political Science, blessing@uchicago.edu; Monteiro: Fundação Getulio Vargas, EBAPE - Public Administration, joana.monteiro@fgv.br; Tobon: Universidad EAFIT, Economics, stobonz@eafit.edu.co.

1 Introduction

In this report, we examine how widespread was gang involvement at the outset of the pandemic. We asked residents from 191 favelas about the group controlling their community, the provision of governance services by criminal organizations, the collection of extortion and protection fees, and the degree of involvement of criminal groups in different markets such as illicit drugs or cooking gas. Residents self selected to provide information by calling the anonymous tip line Disque Denúncia. The sample of favelas from which we obtained information is relatively similar to the universe of favelas in terms of population and access to services such as electricity and garbage collection. They are, however, more vulnerable, with lower income levels and fewer services such as public lightning or infrastructure. Hence our results should be taken with caution as we cannot claim they are representative.

We document the following findings, covering both broad criminal governance issues and COVID-related criminal governance:

- As we expected, territorial control by criminal organizations is widespread. Residents did not report control in only 6% of the favelas. Milítias and CV are the most powerful groups, controlling more than one-third each. TCP and ADA follow with 15% and 4%, respectively. About 4% of the favelas have a joint control by milítias and TCP.

- These groups differ in how they engage with residents. Respondents from milítia-controlled communities reported that in most cases, businesses and residents pay extortion and protection fees. On the contrary, trafficking-financed groups such as CV, TCP and ADA engage less in charging protection fees.

- Criminal organizations provide governance services. Survey respondents report that criminal groups intervene in domestic violence, resolving neighborhood fights and preventing robberies in most of the favelas where they are present. The police rarely intervenes in these situations. In the eyes of favela residents, the services these groups provide are poor.

- As expected, trafficking-financed groups such as CV, TCP and ADA control the illicit drug market. Milítias rarely engage in illicit drug sales. All groups participate in the markets for cooking gas, electricity, internet and cable TV, though we observe variation across groups and markets.

- Contrary to anecdotal evidence and journalistic reports, gang involvement in COVID-related governance activities seems exceptional and perhaps idiosyncratic. In only a

few favelas, residents reported that criminal groups handed out food boxes, distributed hand sanitizers and face masks, or imposed curfews. In some cases, criminal groups—mainly milítias and TCP—forced businesses to stay open, most likely to cocntinue charging security fees.

2 Context and background

With its iconic hillside favelas dominated by powerful prison-based drug gangs, Rio de Janeiro has long been a critical case for the study of criminal governance (Arias 2006; Magaloni, Franco-Vivanco and Melo 2020; Dowdney 2003; Misse 1997; Zaluar 1985). The first of these so-called "criminal factions" (*facções criminosas*), the Comando Vermelho (CV), was born in the dungeon's of Brazil's military dictatorship in the 1970s, and expanded out to take over some 75 percent of the city's 829 favelas in the mid-1980s (Amorim 1993). The CV and its schism-born rivals—the Terceiro Comando (TCP) and Amigos dos Amigos (ADA)—established a business model based on militarized territorial control over and governance of individual favela communities, guaranteeing a local monopoly on retail drug sales. Broadly speaking, factions provide local governance over the civilian population of "their" communities; this includes, for instance, basic public order, banning property crime and dispute resolution. The conventional wisdom is that factions do not tax residents or local businesses for governance services. Rather, they finance governance services out of their drug profits, as part of a strategy to minimize their exposure to police repression, by reducing residents' need to call police and by ensuring their loyalty (and hence material aid) during police raids.

Throughout the 1990s and 2000s, despite ongoing and intense inter-faction and faction-state wars over the last thirty years, the overall "faction model" of trafficking-financed criminal governance remained quite stable. For the past 15-20 years, though, a new form of criminal organization has gained ground: police-linked *milícias*. The first milícias were essentially local neighborhood vigilante groups, but over time the milícia phenomenon has grown into full-blown criminal organizations, often expanding to multiple communities. Whereas the stereotypical faction finances governance through drug sales, the stereotypical milícia charges local businesses and residents a "security fee" to keep drug traffickers out of the community. Perhaps more importantly, milícias' close ties to the police mean that the sort of militarized police incursions that lead to shootouts and stray-bullet deaths in faction-controlled favelas are far rarer in milícia communities. Milícias also tend to be far more politically connected, and have at times managed to elect their own leaders to municipal and state offices.

This seemingly clear-cut distinction between types of criminal groups makes Rio a critical case for the study of criminal governance in general. More specifically, the COVID pandemic offers a focused opportunity to detect how criminal organizations respond to sanitary emergencies, and whether different types of groups respond differentially to increased demand for governance services. Anecdotal evidence suggests criminal organizations may have indeed played a major role in providing governance services during the COVID crisis (e.g., Cariello (2020)).[1]

3 Data

We partnered with Disque Denúncia (DD), a non-governmental organization that operates the city's main anonymous tip line. Residents call DD to report a wide range of situations and problems, including crimes, disturbances, police and official corruption, environmental emergencies, and much else. DD receives an average of 5 thousand calls per month from approximately YYY neighborhoods and favelas. We fielded a survey to be administered by DD operators upon completion of the initial DD call report, based on callers' locale of residence, and irrespective of the content of the original call.[2] Callers from target communities—any favela listed in the shapefile provided by Instituto Pereira Passos (IPP) —were asked if they wanted to answer some additional questions; about XXX percent of those asked agreed to participate and of those 93% percent completed the survey. We completed 337 surveys from 191 favelas over two collection periods: September-December, 2020 and February-March, 2021.[3] These favelas are spread throughout the city (see Figure 1).

To further examine selection issues in our sample, Table 1 compares favela characteristics between the universe of favelas and our survey sample. Broadly, we see that the sample of favelas from which we obtained information is relatively similar to the universe of favelas in terms of population and access to services such as electricity and garbage collection. However, the favelas from which we obtained information seem more vulnerable, having lower income and literacy levels, and fewer access to services such as public lightning or infrastructure.

[1]However, some of these anecdotes have been shown idiosyncratic and not general in other contexts. Blattman et al. (2020), for instance, show little involvement of gangs in COVID-related governance in Medellín.

[2]Originally, we aimed at reaching a representative sample of favelas selected at random. However, data collection proved difficult and we deferred to the conventional sample of favelas from which residents reported tips to DD.

[3]Technically, we collected data from 166 favelas and 25 housing projects. We refer to favelas throughout to simplify the analysis.

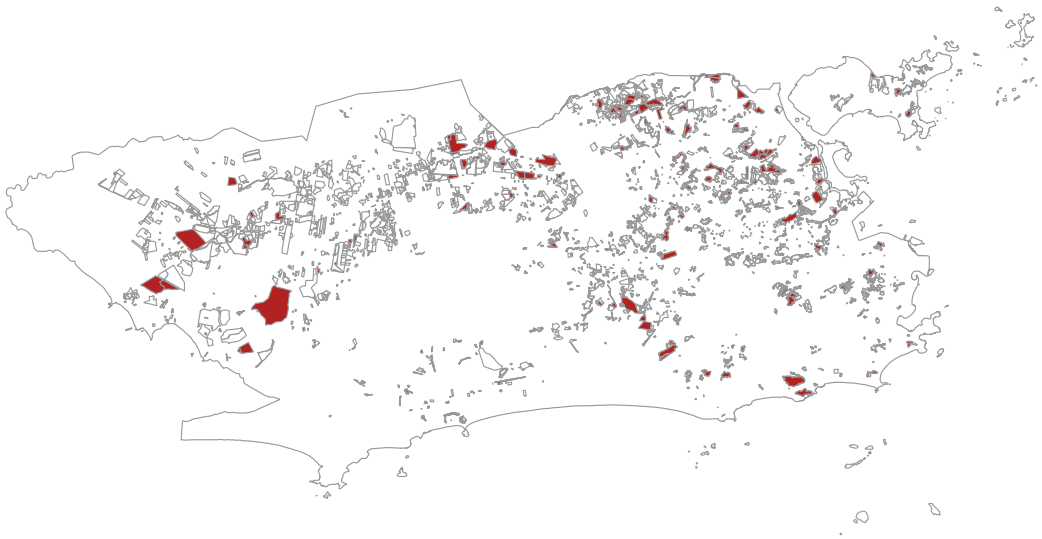

Figure 1: Favelas with information

Note: The favelas in red are the ones we have information from our survey.

Since we cannot completely control for the selection into our sample, we interpret our results descriptively and with caution.

Table 1: Favela characteristics

	Universe	DD Survey Sample		
	Mean	Mean	T-Statistic	P-value
	(1)	(2)	(3)	(4)
Permanent households	238.116	234.070	0.560	0.576
Population	743.17	746.818	-0.167	0.867
% Garbabe on the streets	0.043	0.057	-15.659	0.119
% Open sky sewage	0.050	0.053	-0.471	0.639
% Sidewalks	0.510	0.349	8.003	0.000
% Paved streets	0.578	0.405	8.553	0.000
% Public lighting	0.611	0.434	85.901	0.000
Permanent households monthly income	720.186	604.686	40.117	0.000
% Literacy among 15 year old	0.658	0.640	45.932	0.000
% Access to water at home	0.962	0.948	12.894	0.199
% Access to bathroom at home	0.999	0.999	19.516	0.052
% Access to energy at home	0.999	0.999	0.591	0.555
% Access to garbage collection	0.990	0.987	11.221	0.263
N	1021		142	

Note: the unit of analysis is the favela. This data is from the 2010 demographic census.

Table 2 examines the determinants of civilian willingness to provide information. Each column reports the results of a favela-level regression of the number of calls for our survey (column 1), the number of general DD calls (column 2) and the number of calls to the official emergency line (column 3) on a range of favela characteristics. Broadly, we see that we were more likely to collect information from less populated favelas, with higher levels of overcrowding, with fewer access to street lightning services.

We asked survey respondents about the criminal organization controlling their community. In 161 out of the 191 favelas, people referenced only one group. In the remaining 30 we had inconsistent reports. We reviewed each favela independently, looking at our survey reports, transcripts from other DD calls, and official information from the Ministério Público

Table 2: Determinants of civilian willingness to provide information

	Dependent variable:		
	Survey Calls	General Calls	190 Calls
	(1)	(2)	(3)
General DD calls			0.36^{***}
			(0.03)
Presence of Police Pacifying Units	-0.03	-0.03	0.03
	(0.03)	(0.05)	(0.04)
Average number of households	0.10^{**}	0.11	0.03
	(0.05)	(0.11)	(0.09)
Average population	-0.30^{**}	-0.20	-0.08
	(0.15)	(0.34)	(0.27)
Average monthly income	-0.03	-0.14^{***}	-0.08^{**}
	(0.03)	(0.04)	(0.04)
Average people per household	127.16^{**}	-20.87	-10.74
	(61.47)	(100.53)	(82.87)
% Households with electricity	-1.94	24.36^{***}	3.68
	(4.26)	(8.04)	(8.71)
Households with access to street lighting	-0.19^{***}	-0.003	-0.19^{***}
	(0.05)	(0.07)	(0.06)
Planning area 2	0.07	0.02	-0.02
	(0.07)	(0.08)	(0.08)
Planning area 3	-0.01	-0.02	0.15^{**}
	(0.05)	(0.07)	(0.07)
Planning area 4	0.01	-0.05	0.18^{**}
	(0.05)	(0.07)	(0.07)
Planning area 5	-0.10^{*}	-0.02	0.19^{**}
	(0.05)	(0.08)	(0.08)
Observations	1,018	1,018	1,018
Number of calls	337	10973	16651
Average calls	1.76	8.42	12.98

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

The dependent variable in column 1 is a dummy equals to one when a favela received a call at the survey. At column 2, the dependent variable is a dummy equals one when DD received a call in 2019 from this favela. The dependent variable at column 3 is a dummy when 190 received a call at 2018 from this the favela.

de Rio de Janeiro. With these data, we were able to identify the groups controlling 179 favelas.

Table 3 reports the results. Territorial control by criminal organizations is widespread. Milítias and CV are the most powerful groups, controlling more than one-third of all communities in our sample each. TCP and ADA follow with 15% and 4%, respectively. About 4% of the favelas have a joint control by milítias and TCP. We were not able to atribute control to any group in 12 communities (6%).

Table 3: Distribution of criminal groups across favelas

	No. of favelas	Percent
	(1)	(2)
Comando Vermelho (CV)	67	37%
Amigos dos Amigos (ADA)	8	4.2%
Terceiro Comando Puro (TCP)	29	14.6%
Milicia groups	78	39.8%
Total	191	100%

Note: the missing category is the favelas we could not attribute a commando.

4 Results

4.1 Extortion and protection fees

Table 4 reports the results on protection fee rates per criminal organization. Militias charge protection fees from business in virtually all favelas they control. They also charge protection fees to residents in more than two-thirds of the favelas under their rule.

Drug gangs, on the contrary, engage in charging protection fees less frequently. There are differences across groups, however. TCP charge protection fees to businesses in nearly half of the favelas under their control. Also, in roughly 16% of these favelas they charge protection fees to residents. At the lower end are CV and ADA, both charging businesses in some favelas and charging residents in nearly all favelas—all in the case of ADA.

Table 4: Protection fee charged by criminal group (%)

	Business		Residents	
	N favelas with information	Percent	N favelas with information	Percent
Drug gangs	93	33.3%	93	10.7%
Milicia groups	75	98.6%	76	68.5%
Total	168	62.5%	169	36.7%

Note: This table shows the % of "Yes" answered to the question "Does the business at this favela pay protection fee?" and "Does the residents at this favela pay protection fee?". The denominator only considered valid answers, where we excluded the "Don't Know" and "Missing".

4.2 Market diversification

We asked residents about the involvement of criminal groups in local markets. We focused on illegal drugs, cable TV, cooking gas, internet and electricity. In each case, we asked the residents whether the local market was controlled by either any legal supplier or the armed group ruling the favela.

We report the results in Table 5. As we did above, each panel presents the responses for favelas under the control of one group—or the combination of milícias and TCP. Drug markets are controlled by drug trafficking organizations, as expected. Moreover, we see that only one-fifth of the favelas controlled by milícias seem to have a local drug market. More broadly, criminal groups engage in local markets for other goods and services.

4.3 Governance and service provision

We asked residents about the involvement of gangs in governance services. We focus on three situations, that resemble different domains of governance: domestic violence, neighborhood fights and robberies. We selected these because are more frequent, hence more likely to show in our data.

Table 6 reports the results. Each panel presents the responses for favelas under the control of one group—or the combination of milícias and TCP. In each case, we show the distribution of "who intervenes" when each situation happens. Broadly, we see that residents

Table 5: Who controls the following economic activity?

	N favelas with information	Legal Supplier		Armed Group	
		N favelas	Percent	N favelas	Percent
Panel A. Favelas controlled by drug gangs					
Drugs	101	0	0%	101	100%
Cable TV	85	12	14.1%	73	85.9%
Cooking Gas	79	23	29.1%	56	70.9%
Internet	87	13	14.9%	74	85%
Electricity	62	53	85.5%	9	14.5%
Panel B. Favelas controlled by militia groups					
Drugs	76	0	0%	22	28.9%
Cable TV	75	8	10.7%	67	89.3%
Cooking Gas	70	8	11.4%	62	88.6%
Internet	75	9	12%	65	86.7%
Electricity	52	19	36.5%	33	63.5%
Panel C. All favelas					
Drugs	177	0	0%	123	69.5%
Cable TV	160	20	12.5%	140	87.5%
Cooking Gas	149	31	20.8%	118	79.2%
Internet	162	22	13.6%	139	85.8%
Electricity	114	72	63.2%	42	36.8%

report that the criminal group is overwhelmingly the main provider of governance services for these situations. The police has somewhere between a small and no role.

Table 6: Who intervenes when there the following problem?

	N favelas with information	Police Percent	Armed Group Percent	Nobody Percent
Panel A. Favelas controlled by drug gangs				
Domestic Violence	75	4.0%	56.0%	40.0%
Neighborhood Fight	91	3.3%	68.1%	28.6%
Robbery	91	4.4%	71.4%	24.2%
Panel B. Favelas controlled by milicia groups				
Domestic Violence	54	7.4%	51.9%	40.7%
Neighborhood Fight	64	6.3%	53.1%	37.5%
Robbery	67	6.0%	56.7%	37.3%
Panel C. All favelas				
Domestic Violence	129	5.4%	54.3%	40.3%
Neighborhood Fight	155	4.5%	61.9%	32.3%
Robbery	158	5.1%	65.2%	29.7%

Note: This table shows the % of respondents reporting who intervenes to the question "Who intervenes when there is the following problem?". The denominator only considered valid answers, where we excluded the "Don't Know" and "Missing".

4.4 Perceived legitimacy

As we describe below, criminal groups in control of favelas provide a variety of governance services to residents. In our survey, we asked residents how they rated the services provided by these groups. For comparison, we also asked them how they rated services provided by the natural competitor of criminal organizations: the police. Table 7 reports the results. We normalize responses in a 0-1 index (higher values imply a better assessment). Broadly, we see that both criminal groups and the police are badly assessed by survey respondents, though the police receives a higher rating.

4.5 COVID-13 response

Finally, gang involvement in pandemic response seems exceptional and mostly idiosyncratic. We asked residents about whether the gang ruling the favela handed out food boxes and hand sanitizers, imposed curfews or forced businesses to stay open. We report the results in

Table 7: Residents assessment of police and criminal groups services

	Police (1)	Criminal group (2)
Comando Vermelho (CV)	0.143	0.048
Amigos dos Amigos (ADA)	0.166	0.125
Terceiro Comando Puro (TCP)	0.148	0.049
Milícia	0.167	0.051
Milícia and TCP	0.190	0.048
No data	0.190	0.028
Total	0.167	0.058

Note: The index was based on the answers Very Good, Good, Bad and Very Bad to the questions "How do you classify the police (criminal group) work to protect the favela?". The very bad assume value 0, the bad 0.33, the good 0.66 and very good 1. We grouped by who controlled the favelas and then took averages.

Table 8. We see that only ADA seems to have provided residents with food boxes, although the sample size is small and we cannot generalize. For other groups, involvement in COVID-related governance activities seem relatively low. We do find, however, that milícias and TCP forced businesses to stay open in more than one-fifth of their favelas. We hypothesize that this was to allow themselves to charge protection fees.

Table 8: Covid criminal group involvement

	N favelas with information	Handed out Food Box	Handed Out Hand Sanitizer	Imposed Curfew	Forced Business to Stay Open
Drug gangs	99	12.1%	3%	9.2%	17.6%
Milicia groups	74	2.7%	1.4%	13.8%	19%
Total	173	8.1%	2.3%	11.1%	18.2%

Note: This table shows % of "Yes" answered to the following questions: "Was there distribution of food boxes in the favela?", "Was there distribution of hand sanitizer in the favela?", "Was there imposition of curfew in the favela?" and "Was there orders to business to stay open?". The denominator only considered valid answers, where we excluded the "Don't Know" and "Missing".

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