

## Police use of deadly force in Brazil and the Philippines: what macro-level factors tell us

Kreuzer, Peter; Natal, Ariadne

Veröffentlichungsversion / Published Version

Arbeitspapier / working paper

**Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:**

Hessische Stiftung Friedens- und Konfliktforschung (HSFK)

### Empfohlene Zitierung / Suggested Citation:

Kreuzer, P., & Natal, A. (2023). *Police use of deadly force in Brazil and the Philippines: what macro-level factors tell us*. (PRIF Reports, 4/2023). Frankfurt am Main: PRIF - Peace Research Institute Frankfurt / Leibniz-Institut für Friedens- und Konfliktforschung. <https://doi.org/10.48809/prifrep2304>

### Nutzungsbedingungen:

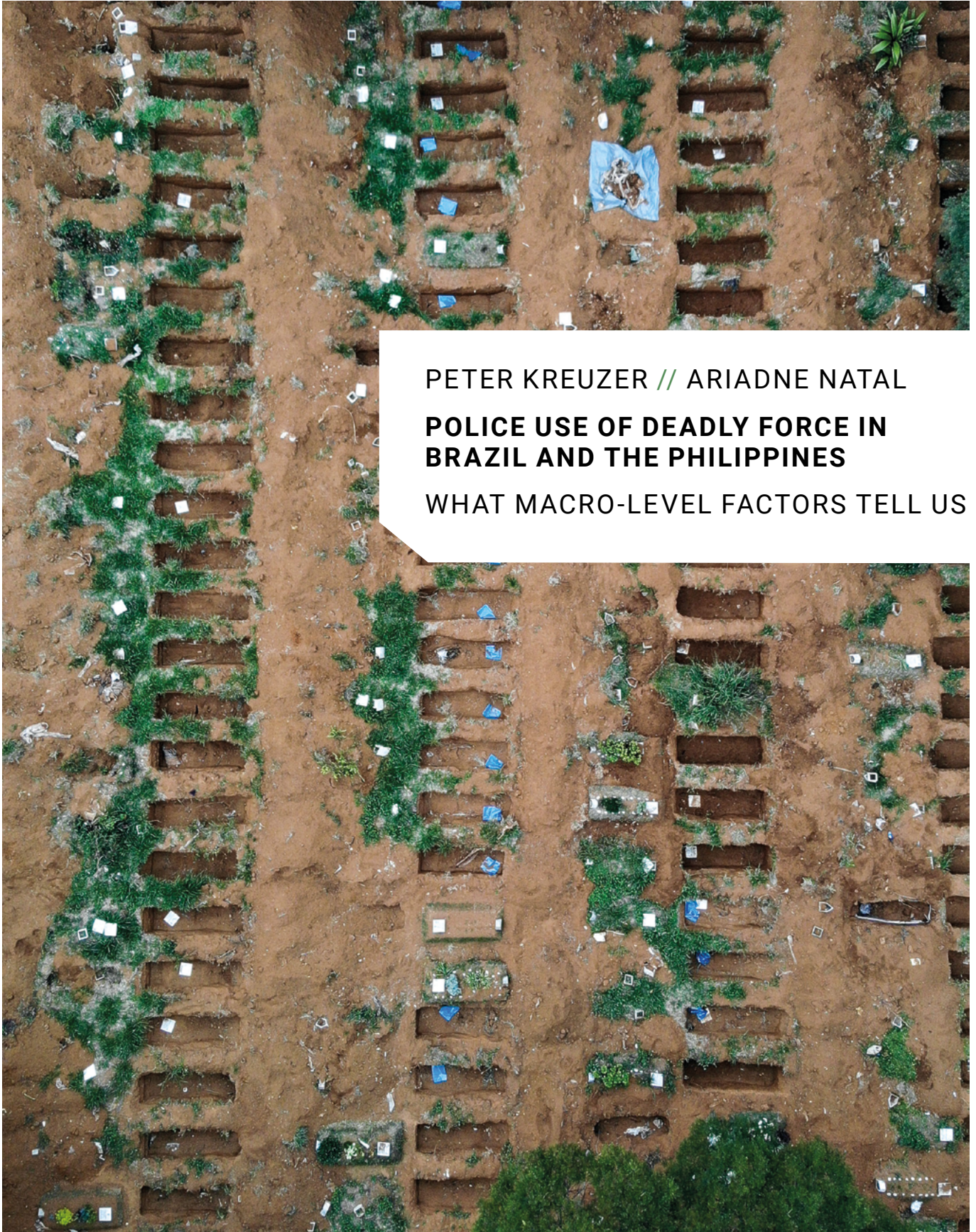
Dieser Text wird unter einer CC BY-ND Lizenz (Namensnennung-Keine Bearbeitung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier: <https://creativecommons.org/licenses/by-nd/4.0/deed.de>

### Terms of use:

This document is made available under a CC BY-ND Licence (Attribution-NoDerivatives). For more information see: <https://creativecommons.org/licenses/by-nd/4.0>

# PRIF REPORT

PEACE RESEARCH INSTITUTE FRANKFURT / LEIBNIZ-INSTITUT HESSISCHE STIFTUNG FRIEDENS- UND KONFLIKTFORSCHUNG



PETER KREUZER // ARIADNE NATAL

## **POLICE USE OF DEADLY FORCE IN BRAZIL AND THE PHILIPPINES**

WHAT MACRO-LEVEL FACTORS TELL US



PRIF Report 4/2023

## **POLICE USE OF DEADLY FORCE IN BRAZIL AND THE PHILIPPINES**

WHAT MACRO-LEVEL FACTORS TELL US

PETER KREUZER // ARIADNE NATAL

LEIBNIZ-INSTITUT HESSISCHE STIFTUNG FRIEDENS- UND KONFLIKTFORSCHUNG (HSFK)  
PEACE RESEARCH INSTITUTE FRANKFURT (PRIF)

**Cover:**

Sao Paulo, Brazil: Aerial view of the Vila Formosa cemetery, on the east side of Sao Paulo.  
© picture alliance / ZUMAPRESS.com | Paulo Lopes

**Text license:**

Creative Commons CC-BY-ND (Attribution/NoDerivatives/4.0 International).  
The images used are subject to their own licenses.



**Correspondence to:**

Peace Research Institute Frankfurt  
Baseler Straße 27–31  
D-60329 Frankfurt am Main  
Telephone: +49 69 95 91 04-0  
E-Mail: [kreuzer@prif.org](mailto:kreuzer@prif.org), [natal@prif.org](mailto:natal@prif.org)  
<https://www.prif.org>

**ISBN: 978-3-946459-88-0**

**DOI: 10.48809/prifrep2304**

Brazil and the Philippines stand out in their respective regions with regard to the people killed by on-duty police officers, both in absolute numbers and per capita. Whereas in Brazil, extraordinarily high levels of such killings have, to a greater or lesser extent, been a persistent phenomenon for the past decade, the Philippines saw rather low levels for at least a decade until 2015, which, however, then escalated in summer 2016 when Rodrigo Duterte became president with his promise to “fatten the fish” in Manila Bay with the corpses of the drug criminals (Duterte 2016, quoted in BBC 2016).

This report presents the initial results of a comparative analysis of police use of deadly force in Brazil and the Philippines over the last decade or more. Unlike previous studies, it is not centered on individual cases or national analyses. Instead, after a descriptive analysis of the situation at the national level, it focuses on the subnational level of government in both countries, then going on to compare how the macro-variables analyzed correlate with the use of lethal force by the police in the two cases, with the objective of verifying whether the dynamics and explanatory factors are similar.

Police violence is not uniformly distributed in the two countries, but varies significantly over time and space. We argue that this difference can be explained in two ways: first, as the outcome of variation in structural variables, such as levels of poverty, inequality, urbanization, or crime levels, and second, as an outcome of variation in subnational “political will” and the actions of political executives, who may use the means at their disposal to influence policing practice in their respective jurisdictions.

This report, which will be the first in a series, focuses exclusively on the first of these explanations: the influence of broad structural factors on police use of deadly force.

In terms of theory, the report relies on two competing explanations for police use of force. Conflict theory assumes society to be economically and *racially* divided, with elites using state institutions, especially the police, to safeguard their interests and suppress discontent. Thus, police violence should overwhelmingly impact members of groups that are perceived as potentially dangerous underclasses. Consensus theory emphasizes the dimension of shared values and goals of a society, arguing that security and order are common objectives and the police a core state institution working for the common good of all. Thus, police violence should, in principle, not target any particular group, but result from actions against criminals challenging the established orders in defense of a shared societal consensus about a preferable order.

Both theories translate into different assumptions about the determinants of police violence. Consensus theory argues that, in principle, policing pays no regard to person or status, the core denominators of use of deadly force should directly relate to the danger or threat emanating from the environment or specific situation in which the police operate. Police use of force should be largely reactive to threats from individuals or groups in this environment. Conflict theory links police violence to the repression of marginalized groups, with police use of force aiming at averting any danger to elite interests emanating from these groups. Therefore, police violence should primarily focus on members of such disadvantaged and potentially dangerous groups as the urban poor, or ethnic or *racial* minorities.

For both Brazil and the Philippines, our analysis considers the influence of core structural variables on police use of deadly force, as suggested by consensus and conflict theory, focusing on demography (population density), economy (inequality, poverty,) and crime (homicide/index crime, drug trafficking/affectation). Moreover, each of the two studies includes further variables that allow for additional details, based on data only available in one country. For both cases, we separated the analysis into two periods: before 2016 and after, when in both countries, new national governments explicitly called for a much tougher approach to crime.

As with most of the empirical literature on this topic, a mixed picture emerged in our two comparative case studies. Overall, the explanatory power of structural variables was stronger in the Philippines than in Brazil.

For Brazil we find mixed results for conflict and consensus theory. In the first period (2011–2015), population size is positively correlated to the use of police deadly force, whereas poverty showed a negative correlation. This means that in these years, police lethality was more frequent in more populous and less poor states. In the second period (2016–2021), only unemployment shows a correlation – a change in the dynamics of police lethality, in which the economic crisis may have played a role. Regarding consensus theory, only carjacking correlates with police use of deadly force in the first period, while homicide is the only variable that correlates in the second period, indicating that there is a change in the context of violence in which police lethality occurs.

The analysis of the subnational units in the Philippines produced a number of unexpected results. While police use of force varied with the population density and population size of the subnational units, it was negatively correlated with poverty, i.e., poorer units recorded higher levels of police use of deadly force. Further, levels of inequality did not influence police use of deadly force. Thus, overall, support for conflict theory is lacking for the case of the Philippines. Levels of serious crime likewise showed no correlation with police use of deadly force, but police use of deadly force rose with drug affectation in provinces and cities for both periods, signaling some support for consensus theory. Based on this, it could be argued that police use of force varies with levels of crime, here, with a specific focus on drug crime.

It is important to note the lack of “fit” between the significant variables in the two countries. Despite possible methodological limitations, what we in fact observe from the data is that the variables that are correlated with the use of lethal force by the police mostly differ between the two countries, that is, each country has its own dynamics and even macro-level explanations have considerable contextual limitations. When examining possible explanations for the use of lethal force by the police, it is important to consider intermediate factors of meaning, culture, normative order, and socially established practice.

1. Introduction	1
1.1 Conflict or consensus: contending theories situating police and police use of force in society	2
2. Police use of deadly force in Brazil	8
2.1 The structure of the police in Brazil	8
2.2 A brief sketch of the data	9
2.3 Descriptive analysis	9
2.4 Structural explanations for police use of deadly force	14
3. Police use of deadly force in the Philippines	18
3.1 The structure of the Police in the Philippines	18
3.2 A brief sketch of the data	19
3.3 Descriptive analysis	20
3.4 Structural explanations for spatial and temporal variation of police use of deadly force	27
4. Social threat and consensus theory: what can we say?	31
References	35





## 1. INTRODUCTION

On a superficial level, what differentiates a police officer from an ordinary citizen is the former's prerogative to use force for a legitimate reason. Acting as a branch of the state, police officers are the most visible aspect of the state's claim to a monopoly on violence. Of course, in a democracy, it is expected that this force be used reasonably and only when strictly necessary, always geared toward guaranteeing and respecting the rule of law.

The precise definition of reasonable and necessary use of force, especially deadly force, is vague, subjective, and open to discussion depending on circumstances. Nevertheless, some general principles apply to the legitimate use of deadly force that are, in one way or another, replicated in national laws and police regulations worldwide. The United Nations have elaborated on these in the "Basic Principles on the Use of Force and Firearms by Law Enforcement Officials":

Law enforcement officials shall not use firearms against persons except in self-defense or defense of others against the imminent threat of death or serious injury, to prevent the perpetration of a particularly serious crime involving grave threat to life, to arrest a person presenting such a danger and resisting their authority, or to prevent his or her escape, and only when less extreme means are insufficient to achieve these objectives. In any event, intentional lethal use of firearms may only be made when strictly unavoidable in order to protect life. (United Nations 1990)

Nevertheless, the indiscriminate use of deadly force by police institutions has been a serious and widespread problem in several countries. Use of deadly force constitutes extreme actions that should be rare, but are in fact very frequent in Brazil and the Philippines, the countries we focus on.

Although both are relatively consolidated democracies, Brazil is one of the countries with the highest level of police use of deadly force worldwide and the Philippines have the highest in the Southeast Asian region, with the latter exhibiting a steep rise from July 2016 onward during the war on drugs initiated by newly elected President Duterte. The use of high levels of deadly force by those who should be enforcing the law signals the absence of a credible commitment to due process and the rule of law by the most visible state institution of law enforcement — the police. Almost complete impunity illustrates that the mindset extends well into other law enforcement institutions. Thus, these dynamics indicate a major problem for democracy.

The aim of this research is not only to identify the incidence of police use of deadly force but in fact chiefly to explore the reasons that help explain the subnational variation of its occurrence. The core question of the project is simply: Which factors can explain variation in police use of deadly force across time and space in the two countries.

In this first report on the use of deadly force in Brazil and the Philippines, we establish the structural baseline by analyzing to what extent subnational violence levels relate to structural variables,

such as poverty, inequality, urbanization, or criminal violence. These factors affect police perceptions of their working environment, thereby also influencing policing strategies, tactics, and practices.

The juxtaposition between these two countries proposed in this report is justified not only because of their high rates of lethal use of force, but also because both have seen an increase in such violence in recent years, specifically coinciding with the rise of national governments with an iron-fisted agenda. Further, although there is substantial research on the predictors of lethal force by the police, most studies focus on the United States, which has a very different reality to countries in the developing world. Bearing this in mind, we will try to observe the internal dynamics of each country to then reflect on what they have in common and how they differ.

In the following chapter, we will first introduce two general theories on the causes of police use of deadly force that take two different perspectives on the police role in society as their starting point. We will then establish several macro-determinants of police use of deadly force that relate to one or both theories. Chapters three and four provide an analysis of the role of those determinants in explaining spatial variation of police use of deadly force between and temporal variation within sub-national units in Brazil and the Philippines. Chapter five places the findings in a comparative perspective, discusses their implications and limitations, and points to potential areas for future research.

### **1.1 CONFLICT OR CONSENSUS: CONTENDING THEORIES SITUATING POLICE AND POLICE USE OF FORCE IN SOCIETY**

In this section, we will present some of the causes set out by the literature that could help explain the magnitude and variation of the use of deadly force by the police from a macro perspective.

It goes without saying that individual decisions by police officers to use deadly force depend on a vast array of factors that relate to multiple analytical perspectives, ranging from macro to micro levels, such as historical, social, political, institutional, organizational, situational, cultural, and psychological factors. We can therefore examine the individual level (viewing police officers as autonomous agents with specific personal and psychological profiles that impinge on their willingness to use force), situational (considering the contextual dynamics in which the police carry out violent actions), organizational (taking the specific attributes of police institutions and their leaders into account), political (regarding the political and ideological direction of those in positions of power), or the social and cultural environment (the relationship between the police and the community, and the values and attitudes of citizens) (Belur 2010; Cubas et al. 2015; Kania and Mackey 1977; Mesquita Neto 1999; Worden 1995).

Any study that aims to look at the issue of the use of deadly force from only some of the aforementioned perspectives, including this report, must make a disclaimer regarding the limits of the work. We are taking just a few perspectives into account when addressing a complex and multidimensional problem. This study only considers issues related to macro aspects of the use of deadly

force by the police. Here we can draw a distinction between two major perspectives on the macro-determinants of police use of force: the conflict and the consensus theory.

### 1.1.1 CONFLICT OR SOCIAL THREAT THEORY

Conflict theory's core assumption is that societies are economically and *racially* divided.<sup>1</sup> For this reason, hegemonic groups, especially those belonging to political and economic elites, use state institutions and apparatus to safeguard their interests. In this sense, law enforcement is not a neutral actor but rather a tool to secure the demands of ruling classes. For this reason, state institutions target and criminalize minorities, treating them as "dangerous underclasses", while guaranteeing protection and security for those in power (Liska 1987; Liska and Yu 1992; Renauer 2012).

In this view, inequality is at the core of coercive control that targets some groups more than others. The greater the inequality, the worse the living conditions, the larger the threat to elite interests, the more substantial the role of coercion as a control strategy. This happens because the status quo "is an unstable condition that must be sustained by sanctions or their threat" (Jacobs and O'Brien 1998: 838–9)839. Excessive police use of deadly force is expected in environments with a large "economic underclass with little to lose and much to gain from redistributive violence" (Jacobs and O'Brien 1998: 839). This situation is most likely to occur in densely populated urban areas, where there is a higher chance of political and economic divisions having severe political consequences if not controlled, and where higher levels of social disorganization lower the social integration of neighborhoods and result in higher levels of crime (Bellair 2017; Kubrin and Weitzer 2003).

Such a perspective echoes many aspects of the police forces we study here, since they operate in deeply elitist, hierarchical, and unequal societies, in which rights depend on social position. In the Brazilian case, Pinheiro (2001; 1994) states that the use of violence by police forces should be analyzed under the aspect of a resilient authoritarian political culture which results in a schizophrenic democracy, in which governments' exercise of power mirrors a hierarchical and violent society.

---

1 *Race* and ethnicity are socially constructed terms used to divide humans into groups based on perceived visible and non-visible characteristics. This categorization can be self or other-based and is often linked to a differential treatment of certain groups. The term is a particular focus of concern in policing where *race* influences treatment, threat perception, policing styles, and ultimately the use of force. Ethnicity/*race* data in datasets relies on self-categorization or *racial* attribution by others and neither provides any form of "objective" categorization, referring instead to an imagined construction of self, we, and other that is meaningful for the person who makes the attribution. With respect to police use of force it is important that the attributes are visible or audible, be it in the form of skin color, style of clothing, language or dialect, specific location, etc. in a way that resonates with the ethnic/*racial* stereotypes in the minds of the individual police officers, so that they establish the categorization.

Thus, given our research question, the term is unavoidable insofar as it can guide the action of police officers in the field. That being said, in order to signal its fundamentally problematic character we choose to put it into italics.

Several other authors use arguments from conflict theory to explain the high rates of police use of deadly force in Brazil (Huggins 2000; Pinheiro, Izumino, and Fernandes 1991; Paixão 1988; Paixão and Beato 1997; Caldeira 2002; Caldeira 2000). In an in-depth study on the authoritarian profile of Latin American police, Gonzalez (2020) shows that “[d]ifferences in the distribution of protection and repression often reproduce social cleavages and inequalities” (González 2020: 105). For the Philippines, the literature is scarce. Jensen and Hapal (Jensen and Hapal 2022: 154) argue that the securitization of the drug problem in Duterte’s war on drugs “represents a depoliticisation of marginalisation and exclusion that serves to preserve elite privilege”. While there is a consensus that, in absolute numbers, police and vigilante violence during the war on drugs targeted mostly urban poor, a comparatively large number of local government officials and police officers were also killed in police operations and as a result of the accompanying rise in death squad activities (Atun et al. 2019: 105), suggesting more complex dynamics. Similarly, other analyses find vast support for the war on drugs among all segments of the population, including the urban poor (Curato 2016; Arguelles 2019; Jensen and Hapal 2022).

Whereas *race* as a discriminatory category plays no role at all in the Philippines, it seems to be far more significant in Brazil. Similar to the US, *blacks* are overrepresented among the victims of fatal police violence compared to their population share (Bueno et al. 2019). Further, it seems that this is just the tip of the iceberg when it comes to differential treatment of *blacks* by the police in Brazil. Sinhoretto et al. found evidence of *racial* filtering in police action, which is reflected in the total number of arrests made and in police lethality (Sinhoretto et al. 2020).

The *racialized* aspect of police use of deadly force is also a pressing theme in the literature on the United States that draws on conflict theory. Undoubtedly, relative to their share of the population, *blacks* are disproportionately victimized by deadly police violence. In a number of multivariate analyses, however, this overrepresentation disappears as soon as other factors are considered. Thus, while some studies argue that population increase and criminal violence, as well as inequality and *race*, are highly predictive in explaining police use of deadly force (Jacobs and Britt 1978; Worden 1995)“plainCitation”:(Jacobs and Britt 1978; Worden 1995, others conclude that economic inequality and *racial* variables are unrelated to police killings, as other environmental variables can explain why *blacks* are more likely to be killed in the US (Jacobs and O’Brien 1998: 853)853.

In a survey of multivariate analyses of the determinants of police use of fatal and nonfatal force in the US, Klahm and Tillyer (2010) point out that despite several decades of research, evidence is still mixed, even for essential structural variables such as *race* and social class. While the authors do not document negative findings, positive findings are countered by mixed results (*race/ethnicity*: 2 positive, 7 mixed, 8 no relationship; social class: 5 positive, 2 mixed, 2 no relationship). Overall, the authors argue that “there is little consistency in terms of reported effects of exogenous variables across studies”. A qualitative review of more than 40 studies that focused explicitly on the role of *race* in actual police use of force (fatal and nonfatal) also concluded that the relationship remained unclear (Hollis and Jennings 2017).

To sum up, while the relationship between police use of (deadly) force and *race* and *class* is seemingly self-evident at first glance, quantitative studies considering a more significant number of variables signal that the relationship might receive qualified support at best.

### 1.1.2 CONSENSUS THEORISTS

Early consensus theorists came from a functionalist perspective and envisaged societies as places of shared values, goals, and articulation, which worked to establish harmony. From this perspective, law enforcement is geared toward reflecting society's aims and acts to guarantee them. So, the function of the police is "to meet the defense needs of society as a whole rather than any subdivision within it" (Chamlin 1989: 554). Thus, law enforcement should, in principle, not target or protect any particular status group, but equally distribute resources and actions according to necessity in the face of law violations.

Consensus theory recognizes that the definition of threats to society, which are classified as violations of the law that law enforcement institutions must address, varies across countries, as does the assessment of the level of threat and the appropriate level of punishment. Consensus theory argues that this threat perception is more grounded in socially shared values than in the interests of a few powerful groups. In this sense, it is not the assumed interest of a dominant class that triggers coercive police behavior, as "police officers are hardly automatons blindly following dominant group imperatives. [...] The salience of threats perceived directly by the police should be more important than distal threats to the dominant group" (Holmes 2000: 349).

The more significant and violent the specific social threat, the greater the reaction of law enforcement institutions. Thus, environments with higher levels of crime and police victimization should coincide with higher levels of policing and police use of deadly force (Liska 1987; Liska and Yu 1992; Renauer 2012). Overrepresentation of certain groups among the victims of police use of force could then be explained, on the one hand, by higher levels of crime among these groups, resulting in, for example, variation in policing styles toward members of these groups and, on the other hand, by differential exposure to the police due to them residing in specific neighborhoods with high levels of crime.

In principle, consensus theory would suggest that police use of deadly force should be proportional to the level of (serious) crime and threat in the environment in which the police operate. At first glance, clearly excessive use of force, as in the case of extralegal killings, then seems difficult to explain by means of this theory, insofar as the victims in the specific situations did not necessarily pose any danger and extralegal violence breaks the very laws that society agrees upon. However, this argument overlooks the fact that with both conflict and consensus theory, the same problem must be explained: the massive transgression of the law by law enforcers in order to enforce the law. While conflict theory assumes that excessive violence necessitates the unspoken consent of the ruling elites, consensus theory assumes that the police act against a background of a much broader tacit societal consent. Examining the case of Brazil, Willis (2015) shows that from the construction of the bandit as an evil and amoral subject who harms the community a consensus emerges — a tacit

agreement, which allows the execution of people who are considered criminals (even without due process of law) as a strategy to protect the community and ensure its safety. The same holds true for the Philippines (Kreuzer 2020; Jensen and Hapal 2022), where there was broad tacit societal support for Duterte's war on drugs. In both cases, consensus on the use of deadly force necessitates the official denial of illegality and requires the actions of deadly force to be carried out under the guise of self-defense or defense of others if those actions are to be officially linked to the law enforcement intuitions and not to death squads or other vigilante groups.

Empirically, serious crime is probably the only predictor of police use of deadly force for which, in this perspective, there are comparative analyses across many countries. While of limited validity due to severe data problems, a study by Osse and Cano (2017) comparing crime and police use of deadly force across 11 countries concluded that available data "supports the idea that police reliance on firearms is related to the violence experienced in a given country" (Osse and Cano 2017: 645). In a similar vein, a qualitative comparison of the US and Canadian experience finds that "the perceived threat and calculated risk for police officers in the United States is substantially higher [...]. As a result, police officers in the United States utilize deadly force in greater frequency than in most western nations" (Parent 2006: 236).

Extensive research on the US suggests that violent crime rates are the best predictors of police use of deadly force. The differences between societal groups when it comes to involvement in certain forms of crime, resulting in differences in police exposure, is one explanation for the *racial* disparity in police use of deadly force. A recent micro-level multivariate analysis showed that "police use of deadly force is a function of serious crime-firearm violence in particular. *Race* does matter but only insofar as it increases the level of firearm violence" (Klinger et al. 2016: 212). Another county-level analysis similarly concludes that there is a strong correlation between police-related fatalities and murder rates, also observing a clear-cut correlation between property crime and assaults on officers, all of which is in line with the consensus perspective on police use of force (Kopkin 2019). Explicitly analyzing the relevance of crime rates and socioeconomic disadvantage, Weisheit et al. (2022) find that "both play a role in police killings", concluding, however, that socioeconomic disadvantage is the more important determinant (Weisheit et al. 2022: 145). Thus, there is substantial prior research which suggests that variables deriving from both models may matter.

### 1.1.3 MACRO-DETERMINANTS OF POLICE USE OF DEADLY FORCE

The US studies provide an important blueprint for research, if only because they identify structural factors which probably impact police use of deadly force: *race*, poverty and inequality, urbanization, and city size, as well as the level of violent crime. Further, there is some empirical evidence for both the conflict and consensus theory of police use of deadly force. According to these theories, police use of deadly force is an expression of the aim of the dominant societal groups to exercise repression to keep the threats of the unruly subaltern classes in check, on the one hand, and a result of a societal consensus on the need to "maintain society's values, goals, and needs" (Liska and Yu 1992: 11) through crime control, on the other.

The analyses below apply this perspective on the structural determinants of police use of deadly force to two countries in the Global South, one which is rife with *racial* prejudice, the other without visible *racial* divides which might impinge on police use of force.

Both countries qualify as democracies, albeit with defects. However, the last few decades have seen regular elections with government changes in both countries. While some criticism of specific governments would be justified, overall, the media enjoy high levels of freedom in both countries, with scandals being exposed regularly. At the same time, both countries have high levels of criminal violence and poverty, as well as inequality.

The selection of the study variables based on the US seems appropriate, not so much because the US is by far the most accurately “measured” country in terms of determinants of police violence, but mainly because the US is significantly closer to the Philippines and Brazil in terms of the dependent, as well as a large number of independent, variables than to the core countries of the Global North (see the tables in the online appendix). Brazil, the Philippines, and the United States all have high levels of inequality and violent crime, as well as high levels of police use of deadly force.

The following empirical part of this report will focus on the core question of how far the structural dimensions discussed above matter in terms of explaining the within-country variation of police use of deadly force in Brazil and the Philippines. Each of the following two chapters is structured according to the steps followed in the study:

First, each chapter presents the choice and limits of the datasets used for analysis. Second, they provide descriptive mapping of police use of deadly force at the national and state levels. Third, they make correlations between the structural variables discussed above and police use of deadly force. Due to space constraints, more detailed explanations for the choices we made when selecting data have been moved to the online appendix which can be viewed here: <https://www.hsfk.de/police-use-of-deadly-force-in-brazil-and-the-philippines>.

Our analyses include variables deriving from conflict hypothesis according to which we would expect police use of deadly force to be higher in environments characterized by significant economic and social inequality and higher levels of poverty, as in such environments threats to the elite should be most prevalent. In multi-*racial* settings, we would also expect *racial* bias in such violence.

While the consensus hypothesis would acknowledge that these factors have a certain value, its focus is on the direct relationship between the level of crime and police use of force. It argues that, to a large extent, police violence is a reaction to or mirrors the violence encountered in the environment in which the police are policing. In high-crime environments, we may expect higher numbers of police-citizen encounters, resulting in an increased threat of escalation.



## **2. POLICE USE OF DEADLY FORCE IN BRAZIL**

In Brazil, violence is not only widespread in society, but is also the language and instrument employed by authority. In this context, the exercise of power by the police is marked by arbitrary practices and coercive methods, including the use of excessive force. These practices are not only present during regimes of exception but also in democratic periods. This model of authority is not established and maintained based on the legitimate right to exercise power but rather on the imposition of coercive methods, which guarantees submission through feelings of resignation and fear (Oliveira, Zanetic, and Natal 2020).

This background allows us to understand what makes systemic police brutality possible but is insufficient to explain spatial and temporal variation in the Brazilian context. To advance our understanding of this phenomenon, it is necessary to observe its dynamics in detail, analyze its spatial-temporal variations, and verify whether and how these relate to other variables.

### **2.1 THE STRUCTURE OF THE POLICE IN BRAZIL**

Under Brazil's last authoritarian military regime (1964–1985), the police were directly subordinated to the army and acted as auxiliary forces of political repression. The permanent exchange between the police and the army on training, experiences, repression, and abusive tactics exacerbated the preexisting violent tendencies of the police. The worst years of the dictatorship were a period of intense political violence, in which persecutions, kidnappings, torture, deaths, and disappearances of political opponents were carried out by the Brazilian government, with the direct participation of the police (Coimbra 2000).

With the end of the military dictatorship and the return to democracy, public security was largely delegated to the 27 federal states, which took over responsibility for maintaining the police forces and formulating and implementing public security policies. This civilianization and decentralization occurred with no institutional reforms regarding the forces' ideological orientation, techniques, and action strategies.

The democratic constitution of 1988 stipulated two separate police forces: the civil police and the military police. The first is defined as the civil and judicial police, responsible for registering and investigating crimes; the second is the police in charge of prevention and street patrol. Importantly, the military police are defined as an auxiliary force of the army, preserving military aspects in the corporation's structure, training, ranks, and, especially, the mindset of police officers. Both police forces are organized on the federal state level, i.e., Brazil has a total of 27 military and civil police forces, one for each state.

## 2.2 A BRIEF SKETCH OF THE DATA

Essentially, there are two primary data sources on police use of deadly force, each with considerable problems. The Mortality Information System (SIM) is a national database which compiles information on the cause of death based on death certificates filled out by doctors. The database also includes the category of “legal intervention”. Here underreporting is estimated to be between 50 percent and close to 80 percent (Jesus and Mota 2010; Lopes et al. 2018; Ryngelblum and Peres 2021).

In the absence of an official national database, accessing data on people killed by the police in Brazil therefore means collecting it from each of the police forces of the 27 states. It also necessitates the development of strategies for dealing with missing information, intermittent data, and a lack of standardization in the categorization the information. We mainly relied on Brazil’s Access to Information Law to gather the necessary information.<sup>2</sup> We sent petitions to the states requesting data on police lethality (people killed by civilian and military police, on and off duty) and police victimization (civil and military police officers killed on and off duty) between 2007 and 2020. While far superior to the above datasets, our data still suffered from missing information. We compensated for the missing data by adding data published in the “Anuário do Fórum Brasileiro de Segurança Pública” and inputs from the “Pesquisa Perfil das Instituições de Segurança Pública” (for the detailed data and information on the sources, see the online appendix). The same strategy was used to determine the number of police victimized during the period under study.

As there was a large concentration of missing data in the first four years of the data collection (2007–2010), we decided to start the analysis in 2011, allowing us to improve the quality and reliability of data significantly.

## 2.3 DESCRIPTIVE ANALYSIS

The overwhelming number of people killed by the police died in on-duty encounters with members of the military police (84 percent; for details, see the online appendix). This is to be expected as the military police are tasked with patrolling the streets and consequently have the highest number of citizen encounters. In addition, 10.5 percent of deaths resulted from off-duty actions by members of the military police. Considering our research interests and corresponding information quality and reliability, we decided to focus on data on people killed by military police on duty.

---

2 This law, enacted in 2011, provides publicity and transparency of information related to public authorities (except when protected by secrecy). The law determines that all states of the federation maintain, on their official websites, a communication channel that allows the registration and monitoring of requests for information by citizens.

### 2.3.1 THE NATIONAL SCENARIO

Overall, police use of deadly force has seen a solid upward trend of around 210 percent over the past decade, with the sharpest growth from 2016 to 2018, followed by stabilization at a high level during the subsequent years (see Figure 1). Adjusted to population, this translates as a rate of 1.05 police killings per 100,000 inhabitants in 2011, which peaked in 2020 at 2.7. The dramatic rise in killings from 2016 to 2018 coincides with the presidential term of Michel Temer,<sup>3</sup> who took over as president after the impeachment of Dilma Rousseff. Unlike his predecessor, who largely avoided the issue of public safety and left it to the state governors, Temer took a rather bellicose stance which focused on a tougher approach and brought the armed forces (controlled by him) into the equation as a security provider in Rio de Janeiro. Temer's successor, Jair Bolsonaro, advocated even more repressive, iron-fisted approaches, among them providing the civilian population with firearms and introducing policies endorsing official tolerance of and support for police use of deadly force, while voicing opposition to the prosecution of such acts at the same time.

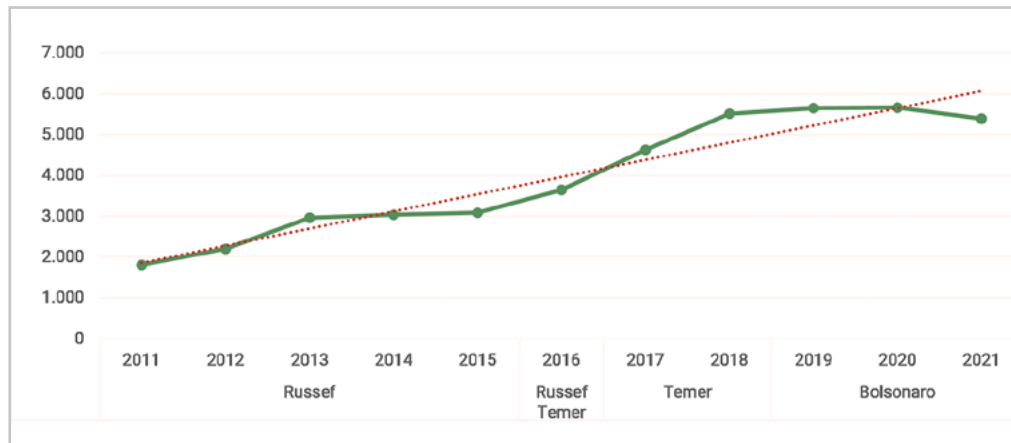


Fig. 1: People killed by military police on duty, 2011–2021, Brazil (count).

Overall, the data related to social conflict theory at the national level shows that the rise of people killed by the police corresponds to a broadly similar rise in unemployment (see Figure 2) with a time lag of approximately one year. This signals that heightened police use of force could be interpreted as a reaction to rising unemployment, which in turn is associated with economic crisis.

From a consensus perspective, there is some evidence of the link between police use of deadly force and the level of serious violent crime (homicide; see Figure 3) for a period, but this does not

<sup>3</sup> During Michel Temer's presidency, there was a significant shift in public security policies, characterized by a more repressive and overt approach, compared to the more preventative stance of the Dilma Rousseff era. This shift was reflected in initiatives such as a federal military intervention in the security of Rio de Janeiro, proposals for constructing additional federal prisons, and a belief that the country needed more weapons and less research.

hold over time. During the first wave of rising police killings, we find a similar increase in homicides, but in the following years, there is an abrupt downward turn in homicides in 2018 and 2019, i.e., the opposite trend, with homicide falling while police lethality rises. It could possibly be argued that there is a negative correlation between the two, which would mean, for example, that the increase in police killings would result in a reduction of homicides by eliminating potential offenders. We will return to this point later in the chapter.

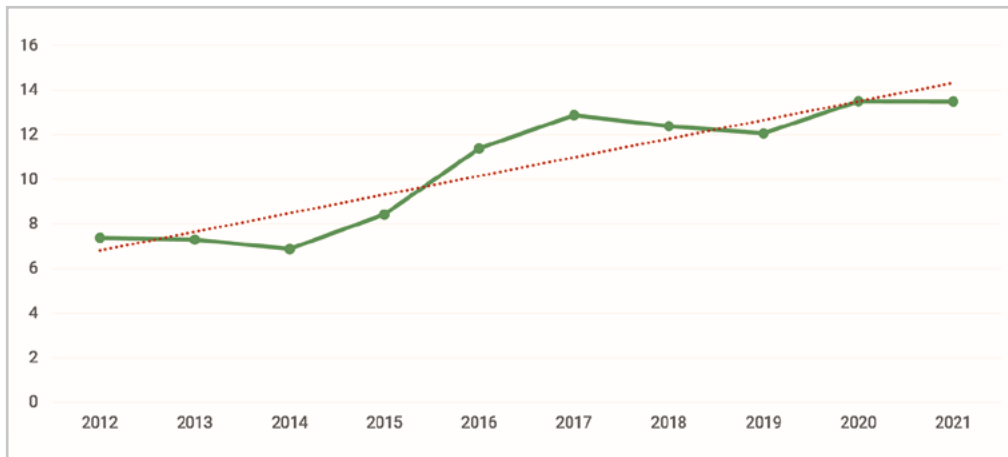


Fig. 2: Unemployment, 2012–2021, Brazil (rate).

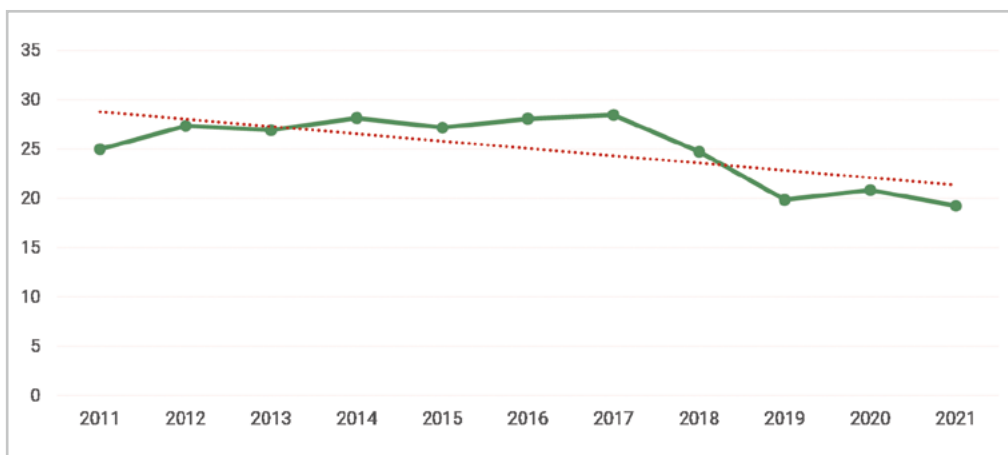


Fig. 3: Homicide, 2011–2021, Brazil (rate).

On the national level, we find no support for consensus theory regarding the relationship between police use of deadly force and the rate of police killed (see Figure 4). If at all, a negative relationship can be hypothesized for the second post-2016 period, when the steep rise in police use of deadly force occurred in parallel to an equally steep fall in the number of police officers killed on duty. This

suggests that from 2016 onward, police used deadly force even more indiscriminately, including in situations where there was no threat to the police.

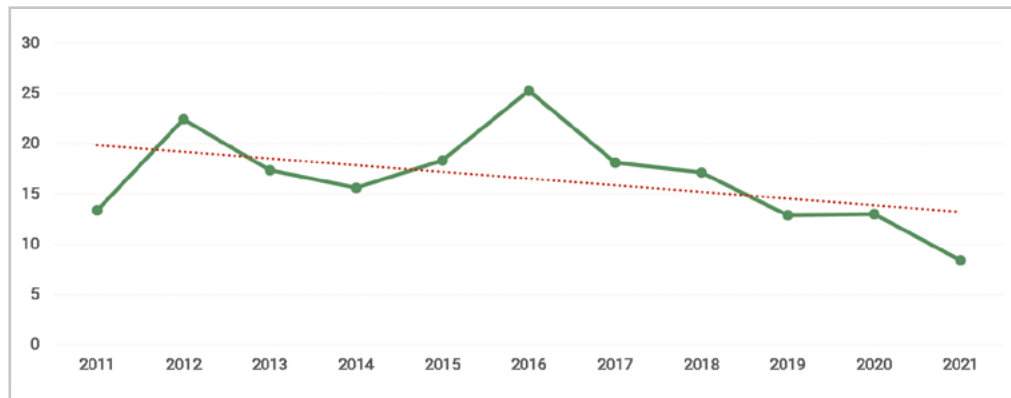


Fig. 4: Military policemen killed on duty, 2011–2021, Brazil (rate per 100,000 officers).

Nevertheless, one key problem of national aggregate data is the high level of aggregation that hides not only subnational variation but also allows strong effects in a small number of units to have an excessive distorting influence on the perceived development over time. Rio de Janeiro, with less than 8 percent of the country's population, was regularly responsible for 15 to 27 percent of police killings, with numbers rising from approximately 440 to over 1,500 between 2011 and 2018. On the other hand, São Paulo, with approximately 21 percent of the Brazilian population, accounted for a share of police killings that fluctuated between 25 and 11 percent, with a clear downward trend during the past decade. Finally, the Federal District, with 3 percent of the population, accounted for less than 0.1 percent of police killings throughout the decade.

This small number of examples of variation between subnational units and within units over time illustrate that the lack of fit between potential independent variables and police use of deadly force may be a result of a problematic level of observation, where specific relationships cancel each other out in the summation at a highly aggregated level. Thus, in the following analysis, we will turn to the state level, i.e., the level on which the various police forces are organized and to whose political establishment they are answerable.

### 2.3.2 TEMPORAL AND SPATIAL COMPARISON WITHIN AND BETWEEN STATES

As previously mentioned, the Brazilian federation is composed of 27 federal units (26 states plus the Federal District), which are, according to the Federal Constitution, responsible for formulating and implementing public security policies and managing state police forces.

Each state has a civil police and a military police, which are usually under a secretary of public security, who is appointed and dismissed according to the governor's wishes. This means that, within the hierarchy, the police are subordinate to the state-level executive branch and can have the focus of their work and policing practice changed depending on who is in charge at the time.

National-level data mask significant variation in the extent of police killings in the various political units. For the whole period from 2011 to 2020, Rio de Janeiro police proved the most fatal, killing approximately five civilians per 100,000 inhabitants each year, whereas in the Federal District the rate stood at 0.11 killings. Overall, 13 states and the Federal District have rates lower than 1 and a further 5 states have rates of between 1 and 2.

These substantial differences suggest that while overall violence is relatively high, the excesses are driven by a much smaller number of subnational units and would be better explained by a spatial variation on the subnational level. Given that besides Rio de Janeiro, the highly rural and peripheral Amapá and Rio Grande do Sul stand out, we can conclude that the variation is also neither a simple geographical nor an urbanization-related phenomenon.

Further, as shown in Figure 1, national data indicate strong growth in police killings of 210 percent between 2011 and 2020. However, this overall trend masks significant subnational variation. While the rates of police killings rose in all but one state between 2011 and 2020, the magnitude of growth differed dramatically (see Figure 5). While in São Paulo, police killings rose by 35 percent, killings in Goiás increased by more than 8,000 percent. Goiás actually moved from the second lowest rate in 2011, with 0.1 deaths to the second highest in 2020 with 8.63 deaths per 100,000 inhabitants. A more detailed analysis, going beyond these illustrative examples, shows that this trend toward higher levels of police use of deadly force is mainly stronger among the states with high police fatality rates, i.e., they pull the national trend.

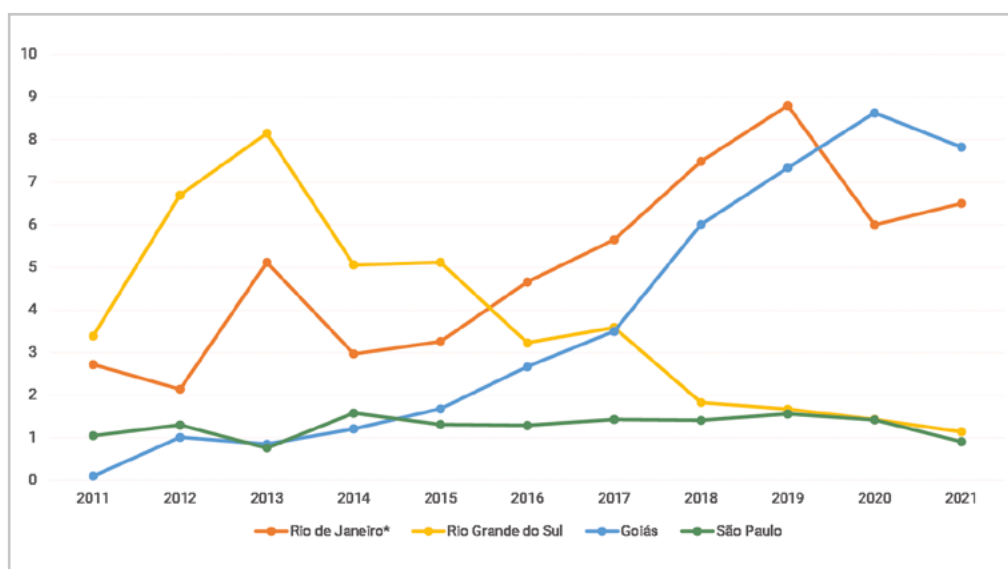


Fig. 5: Temporal and spatial variation in police use of deadly force, 2011–2021, Brazil.

The illustration above compares four of the 27 political units. It illustrates our argument about the crucial importance of considering subnational temporal and spatial patterns (for the complete data on all units, see the online appendix).

The extent to which structural variables can account for this development across units and over time is examined in the following section.

## 2.4 STRUCTURAL EXPLANATIONS FOR POLICE USE OF DEADLY FORCE

In this section, we look at explanatory variables suggested by the literature, examining their correlation with police use of deadly force. These variables comprise socioeconomic conditions with respect to conflict theory (such as poverty and inequality), and crime rates and police victimization with respect to consensus theory.

Our variable of interest here is police use of deadly force, i.e., the rate of people killed by military police officers in the line of duty. The correlated variables for structural conditions linked to conflict theory are *race* (i.e., the percentage of self-declared white people), Gini index (measuring levels of inequality in the states), poverty and unemployment (measurement for economic conditions).

The variables related to the consensus hypothesis are rates of homicide, carjacking, drug trafficking, drug use, possession of illegal firearms, and military police killed on duty (police victimization) as a direct threat to police officers' lives (on the sources for the different variables, see the online appendix).

The analyses performed in this section are simple Pearson correlations, that is, a statistical construct that measures the linear association between two continuous variables, indicating the strength and direction of the relationship, with a value between -1 and 1, where a 1 and -1 indicates a perfect linear relationship and 0 indicates that the two variables are not correlated at all. For the interpretation of the correlations, we consider results below 0.29 as weak, from 0.3 to 0.59 as moderate, 0.5 to 0.79 as high, and above that as very high.

For analytical purposes, the data presented here were divided into two time series, the first 2011–2015 and the second 2016–2021. In making this choice we considered both the dynamics of the national political context, which involved an impeachment, and the changes in the public security paradigm, indicating a split between the two periods. We also took into account the general trend of the data on people killed by the military police, which show acceleration of growth starting in 2016.

The results of the correlation between use of deadly force and demographics can be seen in Table 1. Among the related variables, population size shows a weak (0.25) but significant (at the 0.05 level) positive correlation with police use of deadly force in the first period, but this correlation does not extend to the second period. This means that between 2011 and 2015, police lethality tended to be slightly more concentrated in the most populous states, but when the numbers of killings by the

police increased this dynamic changed, probably because cases increased more in less populous states. Population density, in turn, showed no correlation, indicating that in the Brazilian case, police lethality is not necessarily concentrated in the more densely populated states.

	2011-2015		2016-2021	
	Correlation	Significance	Correlation	Significance
<b>Population</b>	<b>0.257</b>	<b>0.0028</b>	-0.046	0.5560
<b>Density</b>	0.091	0.2956	-0.074	0.3435
<b>Race</b>	<b>0.4831</b>	<b>&lt;0.0001</b>	-0.2032	0.0093

Table 1: Correlation results: Demography and police use of deadly force, Brazil.

The *racial* composition of states mattered for the first period, during which police use of deadly force was comparatively lower ( $r=0.48$ ;  $p<0.001$ ). It is, however, important to bear in mind that *race* was measured by the percentage of whites in the population. Thus, the positive relationship observed means that the more whites, the higher the lethality rates. This result contradicts the conflict thesis which proposes that police lethality can be used as a strategy of *racial* control, especially in situations where whites feel their hegemony is threatened. The literature on the role of *race* in police use of force suggests that *racial* threat is a direct function of the share of blacks in the population, only mediated by blacks in local positions of political authority, such as mayors for example. Thus, the divergent result for Brazil needs additional research. The more detailed data show that in the first period, states with more whites tended to have more cases of police use of deadly force, but this correlation loses its effect in the second period, most probably because, during this period, the lethality rates also increase in states with a lower concentration of whites.

The economic variables (see Table 2) provide only mixed support for conflict theory. Before turning to the individual variables, we should note that for all three variables, the strength and direction of the correlation changes between the two periods analyzed, suggesting that the national government perspective and policy on crime control can actually override structural determinants.

	2011-2015		2016-2021	
	Correlation	Significance	Correlation	Significance
<b>Gini</b>	-0.170	0.0509	0.132	0.0929
<b>Poverty</b>	<b>-0.311</b>	<b>0.0002</b>	0.174	0.0264
<b>Unemployment</b>	-0.183	0.0359	<b>0.382</b>	<b>&lt;.0001</b>

Table 2: Correlation results: Economic variables and police use of deadly force, Brazil.

The indicator for economic inequality, the Gini coefficient, is not significant in either of the two periods analyzed, suggesting that the use of lethal force is unrelated to inequality at state level. Poverty shows a moderate (-0.31) negative and significant correlation (at the 0.05 level) in the first period analyzed, i.e., between 2011 and 2015, the use of deadly force by the police tended to be concentrated in the less poor states, also contradicting what would have been expected based on conflict theory.



However, once again these variables cease to correlate in the second period analyzed, suggesting that as police lethality increases, it tends to spread to the country's poorer states.<sup>4</sup>

Unemployment levels only have an effect in the second period, in a moderate correlation (0.38), which is positive and significant (at the 0.001 level). This means, as conflict theory would lead us to suspect, the more unemployment, the greater the use of deadly force by the police. In general, unemployment is one of the consequences of economic crises. It reflects periods of economic recession which cause the formal labor market to shrink and push part of the population toward informality, mostly workers with low education (Pochmann 2015). For low-income people, being without a formal job implies a drastic change in daily life. They tend to be more exposed in public spaces while searching for some form of paying activity, increasing their physical vulnerability. In addition, other serious consequences of unemployment are a greater propensity for alcohol abuse, violent behavior, and crimes against property (Oshiro and Marques 2017). The police are frequently summoned to deal with the repercussions of this crisis. Thus, according to the logic behind conflict theory, rash policies may be used in moments of crisis to increase social control over the most vulnerable. This is what can be observed here – when unemployment rose, police lethality went in the same direction.

In sum, what we observe here offers some arguments supporting the application of conflict theory, but also points to certain limitations. In the first period analyzed, when rates of police use of lethal force were lower, there was a correlation with variables such as population size, race, and poverty, so police lethality tended to be concentrated in more populous, majority-white, and wealthier states. However, when we examined the period with the sharpest growth in lethality rates, this only correlated with unemployment, indicating that economic crisis tends to result in the spread of this type of behavior, in accordance with its dynamics. In this sense, our results only provide partial support for the conflict theory.

When it comes to consensus theory discussions, we move now to correlations with the variables measuring crime rates (see Table 3). The data show that homicides only have a low positive (0.22) and significant (at the 0.05 level) correlation for the second period analyzed. This means that the higher the homicide rate, the higher the rate of police use of lethal force. This contradicts the negative relation hypothesized in Section 2.3.1 when we observe from the national data that homicides showed a falling trend during the same period in which lethality rose. What we can see here, therefore, is that even in the face of a national trend of declining homicide rates, in some states homicides rose and police lethality followed in a positive relation.<sup>5</sup>

As for carjacking, we find a moderate positive (0.32) correlation, significant at the 0.001 level, but only for the first period. In other words, the more cars stolen, the more police lethality. Broadly speak-

---

4 The data on *racial* composition and poverty follow the same trend, also because the two variables are significantly and highly negatively correlated, meaning that whiter states are less poor (see correlation matrix in the appendix).

5 This trend has mainly been observed in the northern region of the country, in areas adjacent to the Amazon rainforest. These states belong to Brazil Legal Amazon (BLA), where violence is mainly linked to illegal deforestation, illegal mining, and organized crime (de Lima et al. 2022; Human Rights Watch 2019).

ing, both homicides and carjacking produce elements to support the consensus theory, based on the idea that the police react and tend to be more violent to protect society in a situation where they perceive a serious threat. These are violent crimes and signal the level of danger emanating from the environment in which the police operate. Nevertheless, the type of situation that would trigger a police response is contextual and inconstant.

According to the data, in the first period, higher police lethality rates were correlated in states with high rates of carjacking, indicating the presence of organized gangs focused on this market. In the second period, however, this element loses its effect and the threat that is most likely to trigger a police reaction is homicide. This shift between homicide and carjacking in their relation to police use of deadly force is surprising from the perspective of conflict theory, which would assume that in economic crises, police subservient to elite interests would focus on repressing crimes against property, thus increasing the chances of fatal outcomes in this context. This is not the case, however.

	2011-2015		2016-2021	
	Correlation	Significance	Correlation	Significance
<b>Homicide</b>	-0.098	0.2605	<b>0.227</b>	<b>0.0035</b>
<b>Carjacking</b>	<b>0.328</b>	<b>0.0001</b>	0.137	0.0874
<b>Drug trafficking</b>	0.001	0.9840	-0.149	0.0606
<b>Drug</b>	0.129	0.1524	-0.1399	0.0803
<b>Firearm</b>	-0.056	0.5364	-0.1847	0.0310
<b>Police killed</b>	0.124	0.1639	0.1365	0.0855

Table 3: Correlation results: Criminality variables and police use of deadly force, Brazil.

Further, levels of drug trafficking, drug use, and availability of illegal firearms had no correlation in either period, indicating once again that not all potentially violent contexts trigger a violent response by the police. Most importantly, drug-related organized crime, which is generally seen as one of the main public security concerns, seems not to correlate with police lethality rates at the state level.

Finally, the variable that measures police victimization, that is police officers killed on duty, is not correlated with police use of deadly force in either period. This indicates that the violent actions of the police are not a reaction to a perceived threat to their own lives as police officers. The use of lethal force is not a proportional reaction to the level of individual threat that police officers face on a daily basis.

Taken together, the variables analyzed offer only weak support for consensus theory, since most of the variables that indicate a criminal and potentially violent context do not correlate with police use of deadly force.

### **3. POLICE USE OF DEADLY FORCE IN THE PHILIPPINES**

#### **3.1 THE STRUCTURE OF THE POLICE IN THE PHILIPPINES**

The Philippine National Police (PNP) is a national organization administered by the National Police Commission (Napolcom) under the Department of the Interior and Local Government. Below the national level are the regional, provincial, city, and municipal levels. The PNP developed in 1991 from a merger of the national Philippine Constabulary and the local city and municipal police forces that had already been organized into the Integrated National Police and provided a joint command structure under then president Ferdinand Marcos in the 1970s. The 1991 merger also meant a civilianization of the force, as the police was separated from the armed forces of which it had been a separate branch.

Despite having a national chain of command from the chief of police down to the municipal level, the PNP is far from insulated against political interference. On the contrary, the PNP is directly linked in a relationship of dependency to the chief executives on the subnational levels, who are deputized as representatives of the Napolcom and as such wield significant powers. Provincial governors can choose their preferred candidate for the position of provincial police director from a shortlist of three candidates provided by the PNP. They also head the provincial peace and order council (POC) and in this position oversee and participate in the drafting of the provincial public safety plans. City and municipal mayors have even more wide-ranging powers. Similar to provincial governors, they can choose their preferred police director from a shortlist of five candidates. In addition, they can also recommend the reassignment of PNP members and the appointment of new PNP members. Moreover, they hold certain disciplinary powers for minor offenses committed by members of the PNP. Most importantly, they “exercise operational supervision and control over PNP units in their respective jurisdiction” meaning they have “the power to direct, superintend, oversee, and inspect the police units and forces,” which includes “the power to employ and deploy units or elements of the PNP [...] within the locality” (Philippines 1990, sec. 51b). Together with the largely civilian POC, they also establish, develop, and amend the local community safety plans, encompassing priorities for action and program aims for implementation by the local PNP stations.

This localized pattern of organization counteracts a vertical chain of command by creating a direct horizontal link to political actors. It provides the latter with significant options for influencing policing in their respective spheres of control. Horizontal dependency also extends to the financing of the PNP, as the PNP budget is far from sufficient for operation. In general, local government units (LGUs) pay for most of the operating expenses, buy new equipment, and also finance the police stations. In addition, a large number of LGUs may grant additional “financial incentives” to PNP members in their jurisdiction, “subject to the availability of funds” (Republic Act 6975 Philippines 1990, sec. 36; as amended in Republic Act 8551 Philippines 1998), which provides these LGUs with plenty of leeway to wield carrots and sticks.

Thus, both the history of a police, which to a significant extent developed out of autonomous city and municipal police services, and the post-martial law legal assurance of control by local political

executives suggest that local policing is not against the interests of the local political establishment, but is in fact subject to a process of negotiation.

### 3.2 A BRIEF SKETCH OF THE DATA

There are no official data on police use of deadly force in the Philippines. Since early 2017, the Philippine government has been publishing what it calls “#realnumbers” on the government’s anti-drug campaign, including data on suspects killed by the PNP. However, these data only cover the national level, and no lower. Further, they often cannot be divided into uniform periods. Likewise, there are no data on police officers killed or wounded, except for some rather arbitrary data presented haphazardly in some of the PNP annual accomplishment reports (Philippine National Police n.d.).

Thus, all data on police use of force were collated by one of the authors through online media analysis for the pre-Duterte period from 2006 to June 2016 and by ABS-CBN Investigative and Research Group for the period from July 2016 to June 2021 (ABS-CBN Investigative and Research Group n.d.). The latter is still the most reliable and comprehensive dataset on police killings in the context of the war on drugs. One alternative, the Armed Conflict Location and Event Data (ACLED) coding of violent incidents in the Philippines, tracks similar acts of violence by police and vigilantes. However, compared to the ABS-CBN dataset, it is less comprehensive, capturing significantly fewer incidents.

Despite its relatively comprehensive nature, the ABS-CBN dataset underreports actual rates, as even the official government data report the death of 6,252 persons during anti-drug operations until May 31, 2022, whereas ABS-CBN reports less than 5,000. This would suggest an underreporting of approximately 25 percent, which is supported by a comparison with local data that exists for the province of Bulacan. The latter comparison provides details on all major police operations in the province (Bulacan Police Provincial Office n.d.). Given that ABS-CBN data only document deaths that are perceived to be related to the war on drugs, these data were complemented by our own data documenting police killings beyond this frame, such as robberies or kidnappings, for example (for further data on sources, see the online appendix).<sup>6</sup>

It could be suggested that media analysis may also result in a spatial bias, as remote and rural areas are rarely covered by journalists and are underrepresented in the media. This cannot be dismissed out of hand, in principle, but it should be borne in mind that another dataset by the author on targeted killings of politicians shows maximum values for a number of peripheral and rural provinces, suggesting that news from such areas does find its way into the media.

The differences between the analysis of the Philippines and the Brazil study not only concern the data on our dependent variable, but also the data we use to operationalize our independent variables. While Gini and poverty data exist, as does HDI, there is insufficient data on serious violent crimes,

---

6 For the Philippines, data on police use of deadly force only include suspects killed by the police. They do not include bystanders and others that were killed by the police in armed police encounters reported by the press.

such as murder and homicide, on the provincial level. The vast majority of crime data are only reported systematically at the national and regional levels. Fairly comprehensive provincial-level data only exist for the wider category of index crimes,<sup>7</sup> and even these have to be collected from various sources published by the Philippines Statistics Authority. Poverty data differ significantly from those for Brazil, as the Philippine statistics office does not employ absolute reference points but instead constructs subnational equivalents for certain consumption baskets, which are then used to establish subnational poverty prevalence, in general, every three years.

Finally, it is important to note that for the analysis, the data were aggregated based on electoral terms (e.g., from July one year to June the following year),<sup>8</sup> resulting in six periods under consideration. This was deemed reasonable because, first, several pieces of core data were only available every three years (Gini, poverty, HDI), which happened to be around the middle of the aforementioned periods. Second, in the pre-Duterte period, the vast majority of cases had at least one or several years with zero killings by the police. Combining three years into one period thus reduced the zero share in the sample and linked crime levels directly to political officeholders. The following analyses are based on the overall sample of 81 provinces plus the 17 LGUs of the NCR (16 cities and one municipality).

### 3.3 DESCRIPTIVE ANALYSIS

#### 3.3.1 THE NATIONAL SCENARIO

In Brazil, the advent of populist and hardline President Bolsonaro does not coincide with a sudden shift in levels or patterns of police use of force but signals more of a continuity with and stabilization of the levels reached under his predecessor Michel Temer. In the Philippines, however, Rodrigo Duterte brought a dramatic rise in the practice of police use of deadly force, which already became visible in the months before Duterte took over as president in July 2016. Figure 6 shows that in the decade before Duterte, election years (2007, 2010, 2013) typically saw a dip in police violence. This no longer holds for the 2016 election. Here, the election period saw a distinct rise in police use of deadly force to unprecedented heights. However, this period can be divided into one before the elections, characterized by a relatively low level of violence, and one after Duterte's election victory was certain. Then the number of suspects killed in Police operations increased significantly.

As pronounced as this growth might have been during this election period, it is essential to note that underlying the wave-like movements of police use of deadly force between 2006 and 2015 was a linear rise of approximately 100 percent within one decade.

---

7 The category of index crime includes homicide, murder, rape, and physical injury, as well as robbery, theft, carjacking, and stealing of motorcycles.

8 Elections take place in May, with new officeholders taking office in July.

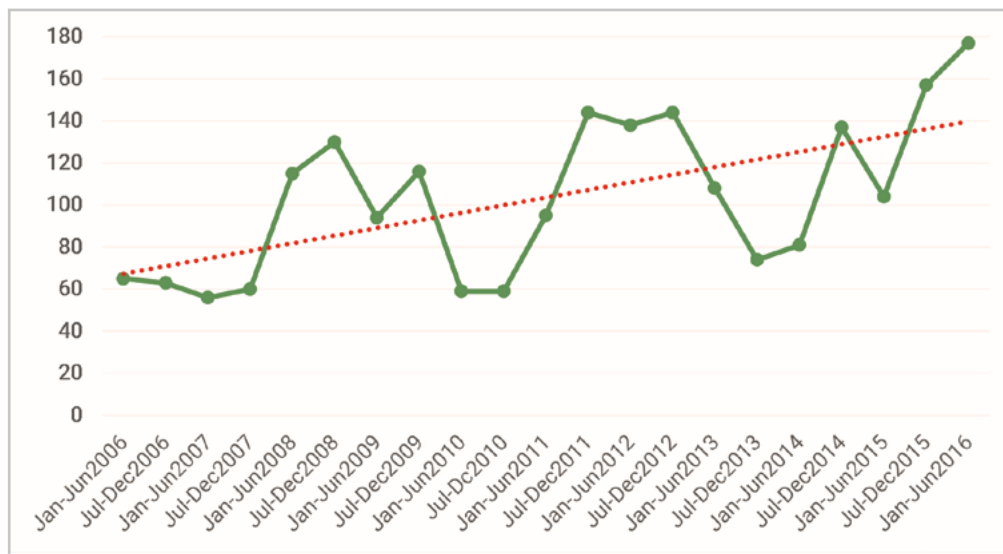


Fig. 6: Suspects killed in police shootouts, January 2006–June 2016, Philippines.

One explanation for the probable violence-reducing effect of elections in pre-Duterte Philippines is that the police are tasked with a multitude of additional tasks to ensure peaceful elections, secure election hotspots, and enforce the gun ban during the election periods. An already overstretched police force thus reduces operations that directly target certain criminals, thereby also reducing police-suspect encounters that may result in violence.

An analysis of the types of crimes mentioned in the media in connection with the armed encounters between January 2006 and June 2016 produces an astonishing result (see Figure 7): drugs had not played any role in police armed encounters before 2013. Until 2012, the vast majority of encounters for which types of suspected crimes could be established belonged to the broad category of robbery/holdup, and, to a much lesser extent car or motorcycle napping. While numbers were still relatively low, the years 2014 and 2015 already saw a significant and unprecedented rise in the role of illegal drugs as contextualization of fatal armed encounters. Put simply, these data suggest that the shift in police attention had already occurred before the topic of drugs became a media hype in late 2015 and early 2016 due to the radical narrative of presidential candidate Rodrigo Duterte.

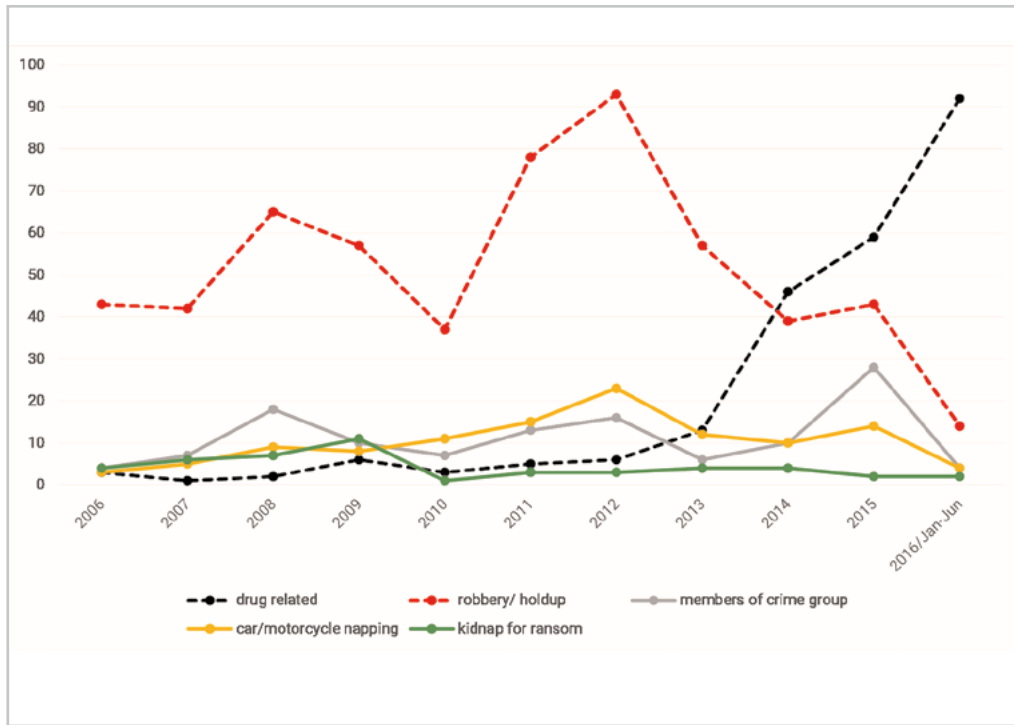


Fig. 7: Encounters by types of suspected crimes, 2006–June 2016, Philippines.

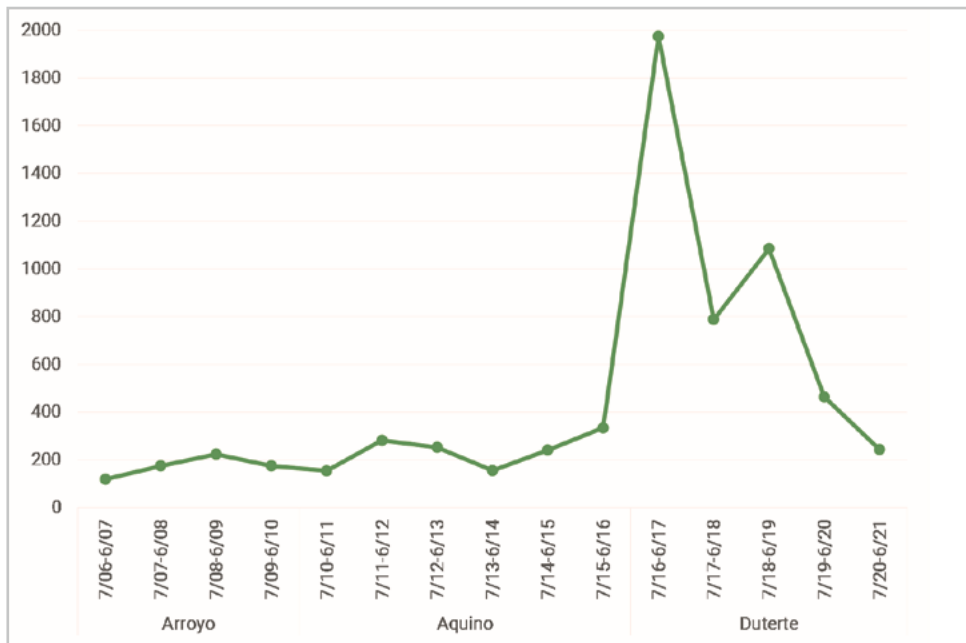


Fig. 8: Suspects killed by PNP, July 2006–June 2021, Philippines.

Figure 8 illustrates the dramatic and sudden rise in police killings that accompanied Duterte's call for a war on drugs. The first half of 2016 saw less than 200 killings, most of which were concentrated in the month of June, i.e., after the election victory of Rodrigo Duterte. This number shot up to almost 1,500 deaths in the following six months, which would correspond to an annual rate of 2.7 killings per 100,000 inhabitants – almost identical to the Brazilian rate for the three years between 2018 and 2020. Given some underreporting, it can be assumed that during the first six months of the Duterte presidency, Philippine police killed more people, adjusted to population size, than the Brazilian police. However, while in the Philippines, the level of police killings dropped significantly after a few months, the Brazilian situation is more of a constant state of exception. This holds despite the fact that the Duterte government featured in many more headlines concerning police killings than the Temer or Bolsonaro governments.

While the police use of deadly force during the Duterte period also follows a wave-like pattern, links to elections (2018, 2019) are no longer evident. Further, the upward dynamics are countered by downward dynamics, which might lead to a new equilibrium of police use of deadly force at approximately the pre-Duterte level. However, it should be noted that the years from 2020 to the present have been affected by the Covid-19 pandemic and repeated lockdowns that brought public life to a standstill and also affected the likelihood of police-citizen encounters.

Applying our independent structural variables to the data shows no relationship at the national level. Neither the wave-like movement nor the overall rise of police use of deadly force in the Philippines is reflected in any of the indicators for the core structural dimensions of poverty and inequality or murder and homicide.<sup>9</sup> Both Gini (see Figure 9) and poverty (see Figure 10) are slowly receding, the latter at a faster pace up until the onset of the pandemic. Violent crime (murder and intentional homicide) does have a distinct curve profile (see Figure 11). However, the overall curve is in no way related to the observable curves concerning police use of deadly force. Here a caveat seems in order, that being the partly inverse relationship between homicide and police use of deadly force observed under Duterte. In the Philippines, as in Brazil, it is important to note the significant reduction in homicides coinciding, with a time lag of one year, with rising levels of police use of deadly force. In the Philippines, the initial rise in homicides can be explained by the increase in the number of vigilante killings that accompanied the iron-fisted police campaign. However, the following years saw a steady drop to levels that were way below those seen in earlier years, a trend that clearly preceded the Covid-19 pandemic and the effects it might have had on crime levels. The same holds true for robbery (see Figure 12), although here, the downward trend already set in earlier, challenging the otherwise reasonable assumption that there might have been a causal relationship between the hardline approach and subsequent drop in crime.

---

9 Both murder and homicide include intentional killings. However, murder has additional circumstances. See Philippines revised Penal Code, article 249 for homicide and article 248 for murder (Philippines 1930).



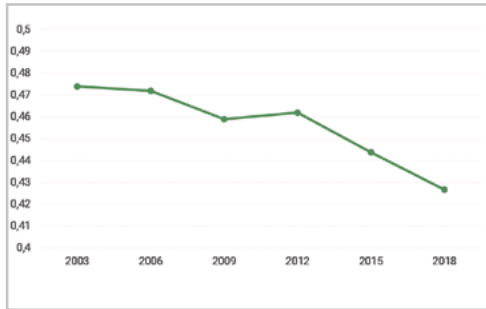


Fig. 9: Gini Index, 2003–2018, Philippines.

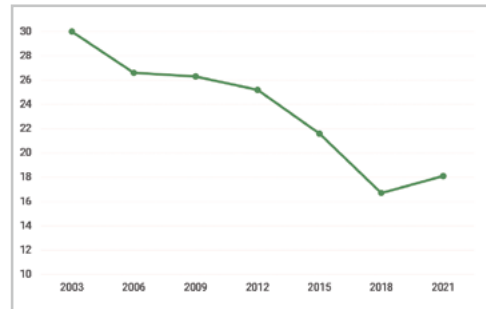


Fig. 10: Poverty rate, 2003–2021, Philippines.

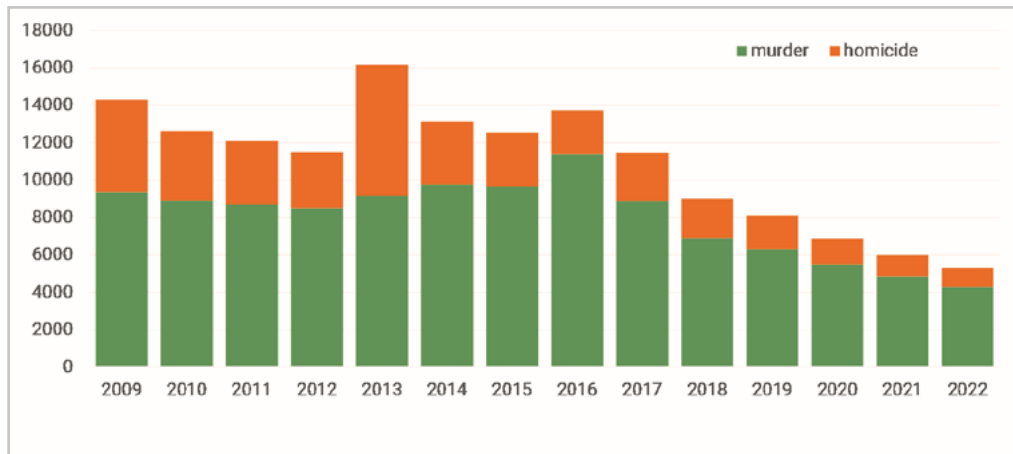


Fig. 11: Murder and intentional homicide in the Philippines, 2007–2021.

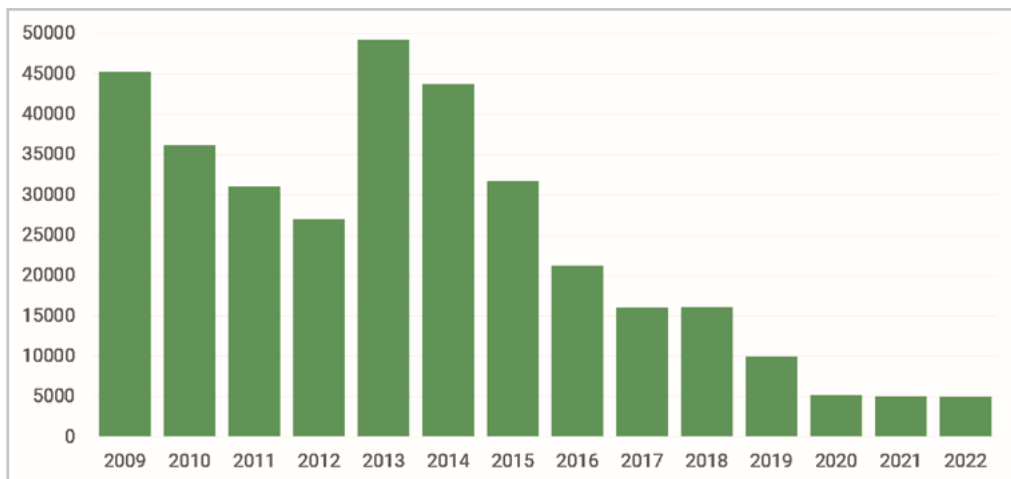


Fig. 12: Robbery in the Philippines, 2009–2022.

The analysis now shifts to the province and independent city level, which is the highest political level below the national. While in Brazil, there are 27 units at this level, with an average population of close to eight million inhabitants, in the Philippines, there are more than 100 such units with an average population of less than one million. Thus, results are expected to be more fine-grained compared to Brazil.

### **3.3.2 POLICE USE OF DEADLY FORCE: TEMPORAL AND SPATIAL COMPARISON WITHIN AND BETWEEN PROVINCES AND INDEPENDENT CITIES**

One of the questions not asked in the preceding chapter was to what extent pre-Duterte patterns of violence relate to patterns during the Duterte presidency. This question is basically about path dependency, asking to what extent LGUs that exhibited higher levels of violence during the earlier years also reacted more strongly to the president's call for a war on drugs. This was tested by comparing pre-Duterte and Duterte period kill rates for the 81 provinces and the 17 LGUs of the National Capital Region. The values for the two periods showed a strong and highly significant correlation ( $r=0.6745$ ,  $n=98$ ,  $p<0.0001$ ), signaling a fairly strong relationship between earlier and later levels of police use of deadly force.

An examination of spatial patterns showed that in the decade before Duterte, rates of police use of deadly force were significantly higher in urban regions. These are mainly the centers of the three macro-regions of Luzon in the north, the Visayas in the middle, and Mindanao in the south. These are the NCR and regions 3 and 4a in Luzon, Cebu City and province in the Visayas, and Davao City in Mindanao.

Rather surprisingly, levels of killing in Cebu surpassed overall levels of killing in the NCR during the decade before Duterte. The Duterte years confirmed these overall spatial patterns, adding a few hitherto largely violence-free regions such as several provinces in the far south of Luzon (Bicol region) and the southern part of Mindanao. Overall levels of violence remained lowest in the Visayas. A more detailed analysis of the components of the National Capital Region shows how prior levels of violence largely predetermine the local reaction to the Duterte campaign, with one notable exception – Caloocan in the far north of the National Capital Region. This city, which was among the top ranking with respect to police violence in the Duterte years, had low levels in the earlier decade (for a detailed graphic illustration of the shifts between the provinces of the Philippines and between the LGUs of the NCR, see the online appendix).

A look at the macro-regions and regions<sup>10</sup> (see Figure 12) shows significant differences concerning police use of deadly force during the pre-Duterte and Duterte period. The most crucial result of the

---

10 There are three "macro-regions", Luzon, the Visayas, and Mindanao, which are often treated separately for statistical purposes but have neither an administrative nor a political point of reference in the form of a macro-regional government. Regions are a purely administrative level of government between the national and the provincial/city level. While national agencies have regional branches, there are neither legislative nor execu-

comparison is that the macro-region Luzon and its core regions, the NCR, and the adjacent regions 3 and 4a are highly overrepresented with respect to their share of killings if adjusted to population size. Although Luzon only accounts for 57 percent of the population, 83 percent of pre-Duterte police killings occurred in Luzon. During the first five years of the Duterte era, the rate stood at 77 percent. Within Luzon, the NCR was the epicenter of police use of deadly force before Duterte. This changed during the years of the campaign, when the NCR share dropped from 42.5 percent of all killings to 25.8 percent, while region 3 (Central Luzon) almost doubled its share from 17.6 percent to 29.2 percent.

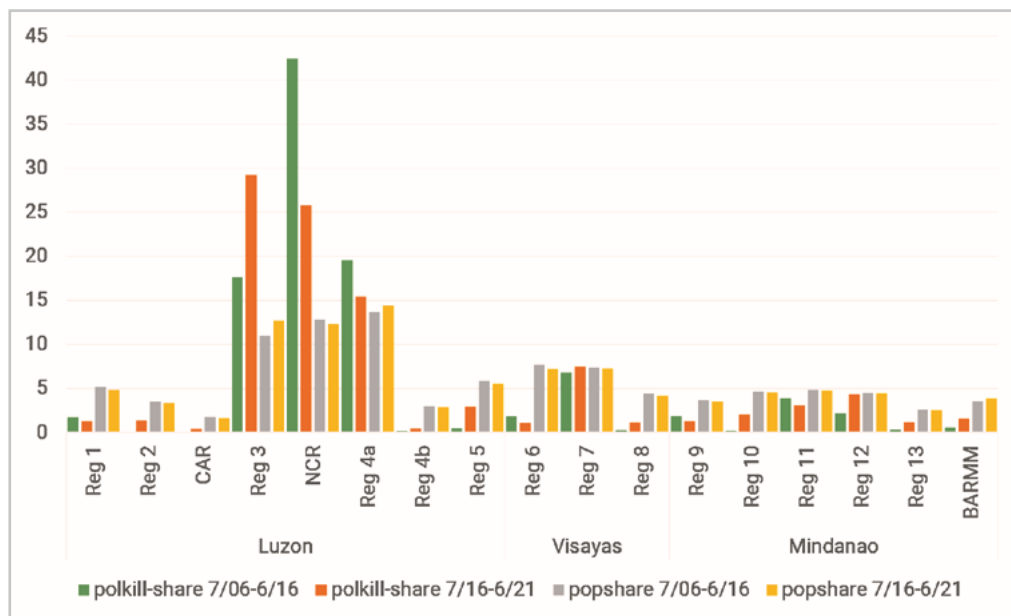


Fig. 13: Regions' share of police use of deadly force and population, July 2006–June 2016 and July 2016–June 2021, Philippines.

Temporal analysis of police use of deadly force for the various LGUs shows that while national dynamics do play a role, these can only partially explain local dynamics, which differ significantly even between adjacent LGUs. Overall variation in local temporal patterns within the LGUs was more prominent during the pre-Duterte period, while during the Duterte campaign, these local temporal patterns were much more uniform, broadly resembling each other. This is to be expected, given that neither the government of Gloria Macapagal-Arroyo (until 2010) nor the government of Benigno Aquino (2010–2016) made fighting crime a priority or developed an explicit national strategy that the police would then have had to implement.

Duterte was the first Philippine president to develop and implement a comprehensive national crime-fighting strategy, which included sustained efforts to enforce this line, top-down, from the national to the local PNP level. Despite this homogenizing effect, there is still significant temporal varia-

---

tive bodies on the regional level. There is also no consistent regional policymaking, as only joint councils with the participation of provincial governors make the decisions.

tion within LGUs. This shows that LGUs' "violence profiles" have certain unique characteristics which deviate from the violence profile we would expect based on the national-level political dynamics.

### 3.4 STRUCTURAL EXPLANATIONS FOR SPATIAL AND TEMPORAL VARIATION OF POLICE USE OF DEADLY FORCE

We now analyze the extent to and direction in which the core variables detailed above — i.e. demography, inequality, poverty, crime — can explain variation between police use of deadly force levels in the more than 100 LGUs that make up the Philippines' uppermost subnational level of politics. The war on drugs waged by Philippine law enforcers under President Duterte departs significantly from the policies of previous presidents, not only with respect to aims and means deemed legitimate but especially with respect to the extent to which the national-level politics and PNP leadership enforced lower-level compliance. In light of this, we assume this dual change of strengthening vertical top-down control and shifting to an iron-fisted national war on drugs situation to have considerable impact on the extent and way in which structural variables relate to police use of deadly force. While previously the main point of reference for the local PNP commander was the local mayor, under Duterte, vertical accountability and top-down pressure to perform plays a much stronger role for the local police directors. Further, the mayor, who, in the past, had, in principle, been free to independently decide on the local approach to crime control, was now under severe pressure to show dedication to the aim of eradicating the "drug menace" if he did not want to run the danger of being included on lists of "narco politicians". Thus, it seems appropriate to separate these two periods in order to ascertain how these political determinants impinged on the role played by structural variables.

A first group of indicators focuses on demographic characteristics, these being population size and density, as well as "urbanization" of the LGUs (see Table 4). All three of these indicators provide different continua that separate small rural LGUs with small populations from urban LGUs, which are generally larger and more densely populated with more and larger business enterprises.

Here, all three variables point in the same direction. Larger, more urbanized, and densely populated LGUs tend to experience higher levels of police use of deadly force. Thus, to a significant extent, police use of deadly force is an urban phenomenon, a characteristic that was actually strengthened to some degree during the war on drugs.

	Pre-Duterte 2006–2016		Duterte 2016–2019	
	Correlation (p)	Significance	Correlation (p)	Significance
<b>LGU population size</b>	0,30	<0.0001	0,39	0.0001
<b>LGU population density</b>	0,52	<0.0001	0,55	<0.0001
<b>LGU urbanization</b>	0,49	<0.0001	0,50	<0.0001

Table 4: Demography and police use of deadly force.

This observation is in keeping with the generally acknowledged fact that urbanization and crime tend to covary, with crime being more prevalent in urban environments. This provides some support for the consensus hypothesis, as then police use of deadly force would be a consequence of crime, levels of which tend to vary with urbanization. However, if the link between urbanization and crime is mediated by higher levels of poverty and inequality leading to higher levels of social disorganization in urban areas (Lowenkamp, Cullen, and Pratt 2003; Errol, Madsen, and Moslehi 2021; Bellair 2017), higher levels of police use of deadly force might also be a function of the repressive role of the police in the service of elite interests. Thus, it seems reasonable to analyze how police use of deadly force relates to those socioeconomic and criminogenic dimensions of the environment.

The second group of indicators are focused on the socioeconomic determinants of the LGU population, encompassing poverty, inequality, and overall “human development”,<sup>11</sup> a composite index that brings together the dimensions of human health, education, and economic development. All three deal, in one way or another, with the assumptions underlying the conflict hypothesis, according to which the police uses force in order to enforce the political and economic interests of the governing elite class. Thus, police use of force should be more pronounced in social settings that are characterized by higher levels of inequality and poverty. Higher levels of human development, in turn, signal better overall living conditions and chances to make a living without resorting to crime. Conflict theory should thus suggest an inverse relationship with police use of deadly force. The less this is the case, the more plausible the assumption of the consensus hypothesis, according to which police do not explicitly target marginalized social classes that are perceived as potential threats by the ruling elites.

	Pre-Duterte 2006–2016		Duterte 2016–2019	
	Correlation (p)	Significance	Correlation (p)	Significance
<b>Inequality (Gini)</b>	-0.12	<0.05		
<b>Poverty 1 (poverty level)</b>	-0,42	<0.0001	-0,29	<0.002
<b>Poverty 2 (subsistence level)</b>	-0,31	<0.0001	-0,13	<0.15
<b>Human development index (HDI)</b>	0,33	<0.0001		

Table 5: Socioeconomic situation and police use of deadly force.

Surprisingly, while only modest in strength, all four variables regarding the socioeconomic grounding of police violence produce highly significant correlations, which however, go in unexpected directions. Both measurements of poverty show a negative correlation with police use of deadly force, suggesting that in poorer LGUs, the police use less fatal violence. The same holds true for inequality: LGUs with less inequality tend to have higher levels of police use of deadly force, even though, in this case, the correlation is very weak. If, as conflict theory assumes, the poor are the underclass potentially threatening elite interests and therefore requiring repressive control, then control should

11 For both inequality (Gini) and human development (HDI), data are only available for the pre-Duterte period, precluding any comparison between periods and limiting the informative value to the earlier period only.

be more prevalent and more repressive in contexts with higher levels of poverty. However, this does not hold true either for “regular” poverty or for “subsistence-level poverty”.

Thus, the direction of correlation between inequality and poverty, on the one hand, and poverty, on the other, seem to undermine conflict theory’s assumption that police violence targets the poor and should thus be more prevalent in LGUs with higher levels of inequality and poverty.

For the Philippines it is important to note that populous and highly urbanized LGUs have significantly lower poverty levels compared to the countryside. Insofar as police use of deadly force is predominantly an urban phenomenon, prevalent in densely populated and populous cities and provinces, the inverse relationship to poverty can be explained by the fact that poverty is more prevalent in the comparatively sparsely populated areas outside the more densely populated centers. This is expressed by the negative correlation between population density and poverty ( $r=-0.466$ ;  $p<0.0001$ ).

The above results also suggest that the Duterte’s war on drugs had an effect on the distribution of police use of deadly force, insofar as violence also penetrated those poorer LGUs that had largely been devoid of police use of force in earlier years.

These results suggest that the relationship between urbanization, poverty, and police use of force is much more complex than often assumed. Poverty and police use of force may correlate differently in urban and rural areas. However, research on both crime and its control is overwhelmingly focused on urban settings with specific characteristics, based, for example, on the assumption that social disorganization results in crime, increased police contact, and thus police use of force. As Weisheit, Falcone, and Wells (2006: 11) explain, “many of our basic models of crime don’t seem to fit rural areas, suggesting critical flaws in the models”. Similarly, research on rural policing shows that while in urban environments, organizational variables explain more variance in behavior (e.g., arrest rates), in rural environments, the opposite is true. Here, “police style [...] is more vulnerable to variation in environmental factors” (Crank 1990: 184). Thus, rural communities may experience low levels of police use of deadly force despite higher levels of poverty due to different styles of “rural” policing (Rodgers and Asquith 2022), lower levels of social disorganization, and still functioning community social control mechanisms.

Only with respect to human development is the direction of the correlation as assumed: higher levels of human development reduce police use of deadly force, which is to be expected, as HDI covaries to a significant extent with population density ( $r=0.526$ ,  $p<0.0001$ ).

A third group of indicators focus on crime and threat as determinants of police use of deadly force. Given the lack not only of data on police officers victimized in armed operations, but also systematic homicide data for all LGUs at the provincial/city level, we were forced to establish second-best alternatives. These are, on the one hand, the level of index crime, which encompasses homicide but goes far beyond it, also including physical injury and rape, as well as crimes against property such as robbery, theft, and carjacking. On the other hand, in the absence of data on drug crime, we decided to use data on the drug affectation of LGUs based on the share of barangays that are affect-

ed by drugs (for details, see the online appendix). The results of the correlations show either a negligible or no correlation for crime, but a modest and highly significant correlation for drug affectation (see Table 6).

	Pre-Duterte 2006–2016		Duterte 2016–2019	
	Correlation (p)	Significance	Correlation (p)	Significance
<b>Index crime</b>	0,09	<0.1	0,22	<0.02
<b>Drug affectation</b>	0,48	<0.0001	0,41	<0.001

Table 6: *Crime and police use of deadly force.*

These findings challenge explanations that tend toward the conclusion that violence committed by Filipino police officers is a reaction to a hostile and violent environment. If this were the case, we should see a positive correlation with index crime.

Instead, the link between drug affectation and police use of deadly force suggests that the police seem to have resorted to the use of deadly force in dealing with the problem of illegal drugs. Local government units with higher levels of drug affectation seem to have experienced more police use of deadly force. This may either be because of differences in policing in such environments, for example, more prevalent use of strategies that increase the probability of armed encounters, such as buy-bust operations that aim at apprehending drug suspects in the act of selling. Alternatively, the police may actually opt for targeted killings in particular in environments where illegal drugs are prevalent and experience shows that the police are incapable of building strong cases, resulting in widespread impunity and a feeling of frustration that is acted out in police aggression (Kreuzer 2022). Either way, this correlation, combined with the absence of a positive correlation between poverty/inequality and police use of deadly force, suggests that police use of deadly force generally targets a specific group deemed criminally deviant and not the larger underclass of the (urban) poor.

Summing up the Philippine case, three results stand out: police use of force is more prevalent in urban environments, it varies according to the perceived drug affectation of the LGU, and it has an inverse relationship to poverty. The latter seems reasonable, when we consider that in the Philippines poverty is more prevalent in rural areas, where police use of deadly force has been and still is rather restrained. The temporal and spatial analysis above shows, on the one hand, that three regions are clearly overrepresented with respect to their share of police use of force, both before and under Duterte, these being the National Capital Region and the adjacent regions 3 and 4a. A comparison of the shares during the pre-Duterte and Duterte periods reveals that the overall share for region 4a and the NCR fell, whereas the share for region 3 almost doubled, a shift for which a single province, Bulacan, was largely responsible. Cases like this point to the limits of any search for structural causes of police use of force.

While in many respects, the analysis was inevitably incomplete, mostly due to the lack of adequate data, the comparison of LGUs nevertheless showed significant results. These findings do not, however, clearly conform with either the conflict or the consensus model of police use of force. The

inverse relationship to poverty suggests that police use of deadly force is not a simple means of suppression of an unruly underclass. The negligible effect of inequality, which should be positively related to police use of force if the conflict hypothesis were to hold water, points in a similar direction.

The lack of fit with crime suggests that environmental threat is not relevant for police choice for or against use of force, as consensus theory would posit. The link with the drug affectation rate, a figure that is not based on police drug cases but on barangay officials' assessments of the severity of the problem in their barangay, indicates that police use of deadly force varies in relation to the local perception of the severity of an especially visible form of social deviance – drug addiction and pushing. The widespread approval of the brutal actions of the police, in turn, signals that, although the police violated laws in their choice of means, they could be sure that the vast majority of the population would consent to their actions, which provides significant support for consensus theory.

#### **4. SOCIAL THREAT AND CONSENSUS THEORY: WHAT CAN WE SAY?**

At this point it seems relevant to remind the reader of an important disclaimer already mentioned in the introduction. That is, the limited comparability of data used for the operationalization of the variables, differences in population size between the Brazilian and Philippine government units under study, and the problem that a number of variables, such as Gini, HDI, and poverty levels, are not measured on an annual basis and are not always available for the whole period for all LGUs.

Despite these limitations, our comparison goes far beyond what is known about the spatial and temporal variation of police use of deadly force in these two (or almost all other) countries worldwide. In both countries, comparisons systematically focusing on subnational variation are exceedingly rare.<sup>12</sup> Ours are by far the most complete with respect to the periods under study and government units, encompassing as they do the whole country in each case and analyzing change within and between subnational units over a decade or more.

To sum up our research, we argue that our results cast doubts on the general assumption that that macro-variables, such as poverty, inequality, or crime, used to explain a phenomenon should work similarly in different environments. However, comparing the results of our analyses of within-country variation, we conclude that this does not hold. First, while most of the independent variables had a positive or negative relationship with police use of force in the Philippines for both pe-

---

<sup>12</sup> For the Philippines, see Atun et al. 2019; Tusalem 2019. Both analyses focus solely on the first years of the Duterte campaign. Atun et al. differ further insofar as they use a different dataset, which includes reports on vigilante killings, eventually resulting in an almost doubling of the numbers. While the results with respect to the concentration of violence in the NCR are similar, their short observation period precludes observation of the shifts of violence from the NCR to other regions that occurred later. Tusalem's study comes to somewhat similar results to our analysis with respect to the role of population size and drug affectation of the provinces. However, while in our analysis, HDI is unrelated, in his analysis it is an important explanatory variable. However, his analysis is based on data for 62 provinces, excluding 19 provinces and all independent cities including those of the National Capital Region. Thus, his analysis excludes not only the units which (generally) have the highest HDI values, but also those with highest levels of drug affectation and population density.



riods, in the case of Brazil, no correlation could be found for the majority of variables tested (see Table 7). Second, while overall, the direction of relationships remained stable, with only slight shifts in the Philippines case, the divergence between the phases of more or less iron-fisted national governments reversed the direction of the relationships between the two variables, which remained significant in the Brazilian case (poverty, *race*). This strengthens the idea that there are two distinct moments in the dynamics of the use of lethal force by the police in Brazil, affecting formerly low-violence states more strongly and thereby actually cancelling out and reversing the influence of the two relevant macro-variables of poverty and *race*. In contrast, the much more radical shift in police use of deadly force triggered and enforced by the Duterte administration was implemented in a way that upheld previous patterns.

	Brazil		Philippines	
	to Dec 2015	since Jan 2016	to Jun 2016	since Jun 2016
<b>Population density</b>	none	none	positive	positive
<b>Population size</b>	positive	none	positive	positive
<b>Inequality</b>	none	none	negative	<i>no data</i>
<b>Poverty</b>	negative	positive	negative	negative
<b>Race</b>	positive	negative	<i>not applicable</i>	<i>not applicable</i>
<b>Serious crime</b>	none <sup>13</sup>	none	none	positive
<b>Drug crime</b>	none	none	positive	positive

Table 7: Correlation between police use of deadly force and core macro-structural variables.

Consensus theory would suggest that police violence varies with criteria pertaining to crime, as police would police differently in environments with higher levels of crime, police use of force being largely a reaction to threats emanating from environments with higher crime rates. Inequality, *race*, or poverty should only matter indirectly insofar as they may be perceived as determinants of crime rates. In contrast, conflict theory would assume a direct link between multiple forms of structural marginalization and police use of deadly force.

Put simply, whether or not our analysis supports either of these two theories depends crucially on which country we look at and when. As already detailed above, certain discrepancies in results may be explained by compromises we had to make due to different sets of available data. Nevertheless, we would not have expected such a huge difference with respect to the role played by the structural variables.

The Brazilian case provides some support for conflict theory, especially on account of the effects of unemployment and violent control of population during economic crises. In line with consensus theory, police violence correlates with homicide and carjacking, signaling that police use deadly force in order to contain or fight serious crime, probably in a highly excessive way. Possibly the most sur-

13 Of four variables measuring different aspects of crime we found a weak correlation with only car theft and homicides, but only for one (and a different one) period.

prising results were not only that inequality and population density did little to explain variation in police use of deadly force, but that the currently much discussed factor of *racial* composition seems to have only mixed results when it comes to variation in police use of deadly force between states. This result thus challenges the *racial* threat version of conflict theory. The results also show that when police lethality tends to change considerably in a short period of time, the dynamics and therefore correlated variables also change. The explanations used must thus be considered temporal and contextual, which in this case, strongly points to politics as a trigger for coercive policing.

Thus overall, our Brazil analysis would suggest that structural variables that are typically linked to both consensus and threat theory do not hold much explanatory power in this specific case.

In the Philippines, several results stand out that ultimately challenge both theories. While conflict theory would have us believe that poverty and police fatality correlate positively, consensus theory would suggest the same link for crime and police use of force. However, in the Philippines, poverty shows an inverse and significant correlation with police fatality, while there was no correlation with serious crime. Only drug use proved to be positively linked to police use of deadly force.

In contrast with our findings in the Brazilian case, in the Philippines the variables correlated with police use of deadly force do not change significantly between the period before and under Duterte. This signals that there is a path dependence, with use of force increasing according to previously established patterns, which, however, did not clearly conform with either consensus or conflict theory.

Thus, our analyses provided only weak and mixed evidence for both consensus and social threat theories. The case specificity regarding structural factors suggests that the relevance and consequences of structural conditions may differ according to other factors, such as national, subnational, or organizational cultures, or patterns of thought, norms, and values, as well as political institutional structure and culture.

With respect to police use of deadly force, it seems reasonable to link patterns of police violence to the levels of popular punitiveness and politicians' support for punitive or iron-fisted law-enforcement in the subnational working environment of the police, which should not be uniform but differ according to local circumstances (Pomerantz et al. 2021). While there has been much discussion on the "punitive turn" in public opinion, populist punitiveness of political elites at the national and subnational level, and increasingly harsh punishment policies since the late 1980s, much of the discussion overlooks the substantial variation of attitudes and practices between different states and within states alike. Given that a local chief executive has sufficient formal and informal power over the police, it can be assumed that the way in which they use their powers over the police, and their aims in doing so, may explain variation between local government units as well as within units in the case of a change of chief executive. From this political-ideological perspective, the use of lethal force by the police would be sensitive to the influence not only on national governments, but also of subnational chief executives' and administrations' policy preferences, with a tendency to increase when there is an expectation of tougher action focused on repression and tolerant of excessive violence.

How this political logic impacts on police fatality in the subnational political units of Brazil and the Philippines and how it relates to the structural determinants discussed in this report will be a topic of our future research.

- ABS-CBN Investigative and Research Group. n.d. "Map, Charts: The Death Toll of the War on Drugs." ABS-CBN News. Accessed January 17, 2023. <https://news.abs-cbn.com/specials/map-charts-the-death-toll-of-the-war-on-drugs>.
- Arguelles, Cleve V. 2019. "We Are Rodrigo Duterte: Dimensions of the Philippine Populist Publics' Vote." *Asian Politics & Policy* 11 (3): 417–37. <https://doi.org/10.1111/aspp.12472>.
- Atun, Jenna Mae L., Ronald U. Mendoza, Clarissa C. David, Radxeanel Peviluar N. Cossid, and Cheryll Ruth R. Soriano. 2019. "The Philippines' Antidrug Campaign: Spatial and Temporal Patterns of Killings Linked to Drugs." *The International Journal on Drug Policy* 73 (November): 100–111. <https://doi.org/10.1016/j.drugpo.2019.07.035>.
- BBC 2016. Philippines President Rodrigo Duterte in Quotes. September 30, <https://www.bbc.com/news/world-asia-36251094>.
- Bellair, Paul. 2017. "Social Disorganization Theory." In *Oxford Research Encyclopedia of Criminology and Criminal Justice*. <https://doi.org/10.1093/acrefore/9780190264079.013.253>.
- Belur, Jyoti. 2010. *Permission to Shoot? Police Use of Deadly Force in Democracies*. New York: Springer.
- Bueno, Samira, David Marques, Dennis Pacheco, and Talita Nascimento. 2019. "Análise Da Letalidade Policial No Brasil." In *Anuário Brasileiro de Segurança Pública 2019*, edited by Samira Bueno and Renato Sérgio LIMA, 58–65. Ano 13. São Paulo: Fórum Brasileiro de Segurança Pública.
- Bulacan Police Provincial Office. n.d. "Official Website of Bulacan Police Provincial Office." Accessed January 17, 2023. <http://bulacanpnp.com/>.
- Caldeira, Teresa P R. 2002. "The Paradox of Police Violence in Democratic Brazil." *Ethnography* 3 (3): 235–63.
- Caldeira, Teresa Pires do Rio. 2000. *Cidade de Muros: Crime, Segregação e Cidadania Em São Paulo*. São Paulo: Editora 34.
- Chamlin, Mitchell B. 1989. "Conflict Theory and Police Killings." *Deviant Behavior* 10 (4): 353–68. <https://doi.org/10.1080/01639625.1989.9967822>.
- Coimbra, Cecília Maria Bouças. 2000. "Doutrinas de segurança nacional: banalizando a violência." *Psicologia em Estudo* 5 (2): 1–22. <https://doi.org/10.1590/S1413-73722000000200002>.
- Crank, JOHN P. 1990. "The Influence of Environmental and Organizational Factors on Police Style in Urban and Rural Environments." *Journal of Research in Crime and Delinquency* 27 (2): 166–89. <https://doi.org/10.1177/0022427890027002004>.
- Cubas, Viviane, Ariadne Natal, F. C. Branco, and Bernardo Kucinski,. 2015. "Violência Policial: Abordagens Da Literatura." In *Bala Perdida: A Violência Policial No Brasil e Os Desafios Para Sua Superação*, 103–9. Tinta Vermelha. São Paulo: Boitempo.
- Curato, Nicole. 2016. "Politics of Anxiety, Politics of Hope: Penal Populism and Duterte's Rise to Power." *Journal of Current Southeast Asian Affairs* 35 (3): 91–109. <https://doi.org/10.1177/186810341603500305>.
- Errol, Zeresh, Jakob B. Madsen, and Solmaz Moslehi. 2021. "Social Disorganization Theory and Crime in the Advanced Countries: Two Centuries of Evidence." *Journal of Economic Behavior & Organization* 191 (November): 519–37. <https://doi.org/10.1016/j.jebo.2021.09.017>.

- González, Yanilda María. 2020. *Authoritarian Police in Democracy: Contested Security in Latin America*. Cambridge University Press.
- Hollis, Meghan E., and Wesley G. Jennings. 2017. "Racial Disparities in Police Use-of-Force: A State-of-the-Art Review." *Policing* 41 (2): 178–93.
- Holmes, Malcom D. 2000. "Minority Threat and Police Brutality: Determinants of Civil Rights Criminal Complaints in U.S. Municipalities." *Criminology* 38 (2): 343–68.
- Huggins, Martha K. 2000. "Urban Violence and Police Privatization in Brazil: Blended Invisibility." *Social Justice* 27 (2 (80)): 113–34.
- Human Rights Watch. 2019. *Máfias do Ipê: Violência e Desmatamento na Amazônia*. São Paulo: Human Rights Watch. <https://www.hrw.org/pt/news/2019/09/17/333774>.
- Jacobs, David, and David Britt. 1978. "Inequality and Police Use of Deadly Force: An Empirical Assessment of a Conflict Hypothesis." *Social Problems* 26 (4): 403–12.
- Jacobs, David, and Robert M. O'Brien. 1998. "The Determinants of Deadly Force: A Structural Analysis of Police Violence." *American Journal of Sociology* 103 (4): 837–62. <https://doi.org/10.1086/231291>.
- Jensen, Steffen Bo, and Karl Hapal. 2022. *Communal Intimacy and the Violence of Politics: Understanding the War on Drugs in Bagong Silang, Philippines*. Ithaca: Cornell University Press.
- Jesus, Tânia de Jesus, and Eduardo Mota. 2010. "Fatores associados à subnotificação de causas violentas de óbito." *Caderno de Saúde Coletiva* 18 (3): 361–70.
- Kania, Richard R. E., and Wade C. Mackey. 1977. "Police Violence as a Functions of Community Characteristics." *Criminology* 15 (1): 27–48.
- Klahm, Charles F. IV, and Rob Tillyer. 2010. "Understanding Police Use of Force: A Review of the Evidence." *Southwest Journal of Criminal Justice* 72 (2): 214–39.
- Klinger, David, Richard Rosenfeld, Daniel Isom, and Michael Deckard. 2016. "Race, Crime, and the Micro-Ecology of Deadly Force." *Criminology & Public Policy* 15 (1): 193–222. <https://doi.org/10.1111/1745-9133.12174>.
- Kopkin, Nolan. 2019. "Where and When Police Use Deadly Force: A County-Level Longitudinal Analysis of Fatalities Involving Interaction with Law Enforcement." *Journal of Economics, Race, and Policy* 2 (3): 150–62. <https://doi.org/10.1007/s41996-019-00027-z>.
- Kubrin, Charis E., & Weitzer, Ronald. 2003. New Directions in Social Disorganization Theory. *Journal of Research in Crime and Delinquency*, 40 (4), 374–402. <https://doi.org/10.1177/0022427803256238>
- Kreuzer, Peter. 2020. *A Patron-Strongman Who Delivers: Explaining Enduring Public Support for President Duterte in the Philippines*. PRIF Report 1. Frankfurt: Hessische Stiftung Friedens- und Konfliktforschung. <https://www.hsfk.de/en/publications/publication-search/publication/a-patron-strongman-who-delivers>.
- Kreuzer, Peter.. 2022. "Impunity and Police Vigilantism – Is the highly excessive use of deadly force by the police in the Philippines now over?" *PRIF BLOG* (blog). July 26, 2022. <https://blog.prif.org/2022/07/26/impunity-and-police-vigilantism-is-the-highly-excessive-use-of-deadly-force-by-the-police-in-the-philippines-now-over/>.

- Lima, Renato Sérgio de, Samira Bueno, David Marques, Juliana Martins, Betina Warmling Barros, Dennis Pacheco, Isabela Sobral, et al. 2022. "Cartografias da Violência na Região Amazônica: Relatório Final." São Paulo: Fórum Brasileiro de Segurança Pública.
- Liska, Allen E. 1987. "A Critical Examination of Macro Perspectives on Crime Control." *Annual Review of Sociology* 13: 67–88.
- Liska, Allen E., and Jiang Yu. 1992. "Specifying and Testing the Threat Hypothesis: Police Use of Deadly Force." *Social Threat and Social Control*, 53–68.
- Lopes, Aloísio Sabino, Valéria Maria de Azeredo Passos, Maria de Fatima Marinho de Souza, and Angela Maria Cascão. 2018. "Melhoria da qualidade do registro da causa básica de morte por causas externas a partir do relacionamento de dados dos setores Saúde, Segurança Pública e imprensa, no estado do Rio de Janeiro, 2014." *Epidemiologia e Serviços de Saúde* 27 (November). <https://doi.org/10.5123/S1679-49742018000400011>.
- Lowenkamp, Christopher T., Francis T. Cullen, and Travis C. Pratt. 2003. "Replicating Sampson and Groves's Test of Social Disorganization Theory: Revisiting a Criminological Classic." *Journal of Research in Crime and Delinquency* 40 (4): 351–73. <https://doi.org/10.1177/0022427803256077>.
- Mesquita Neto, Paulo. 1999. "Violência Policial No Brasil: Abordagens Teóricas e Práticas de Controle." In *Cidadania, Justiça e Violência*, edited by Dulce Pandolfi, Leandro Carneiro Piquet, Mário Grynszpan, and José Murilo de Carvalho, 130–48. Rio de Janeiro: Ed. Fundação Getúlio Vargas. <https://bibliotecadigital.fgv.br/dspace/handle/10438/6742>.
- Oliveira, Thiago Morais, André Zanetic, and Ariadne Natal. 2020. "Preditores e impactos da legitimidade policial: testando a teoria da justiça procedimental em São Paulo." *Revista Dados* 63 (1): 1–40. <http://dx.doi.org/10.1590/001152582020197>.
- Oshiro, Felício, and Rosa Maria Marques. 2017. "O desemprego na sociedade contemporânea." *Pesquisa & Debate Revista do Programa de Estudos Pós-Graduados em Economia Política* 28 (2(52)): 75–92.
- Osse, Anneke, and Ignacio Cano. 2017. "Police Deadly Use of Firearms: An International Comparison." *The International Journal of Human Rights* 21 (5): 629–49. <https://doi.org/10.1080/13642987.2017.1307828>.
- Paixão, Antônio Luiz. 1988. "Crime, Controle Social e Consolidação Da Democracia: As Metáforas Da Cidadania." *A Democracia No Brasil: Dilemas e Perspectivas*. Rio de Janeiro: Vértice.
- Paixão, Antônio Luiz, and Cláudio Beato F. 1997. "Crimes, vítimas e policiais." *Tempo Social* 9 (1): 233–48. <https://doi.org/10.1590/ts.v9i1.86555>.
- Parent, Rick. 2006. "The Police Use of Deadly Force: International Comparisons." *The Police Journal* 79: 230–37.
- Philippine National Police. n.d. "Annual Reports." Accessed January 17, 2023. <https://pnp.gov.ph/annual-reports/>.
- Philippines. 1930. *Act No. 3815 – The Revised Penal Code*. *Penal Code*. [https://lawphil.net/statutes/acts/act\\_3815\\_1930.html](https://lawphil.net/statutes/acts/act_3815_1930.html).

- Philippines. 1990. *Republic Act No. 6975 – An Act Establishing the Philippine National Police under a Reorganized Department of the Interior and Local Government, and for Other Purposes*. <https://www.officialgazette.gov.ph/1990/12/13/republic-act-no-6975/>.
- Philippines. 1998. *Republic Act No. 8551 – Providing for the Reform and Reorganization of the Philippine National Police and for Other Purposes*. [https://lawphil.net/statutes/repacts/ra1998/ra\\_8551\\_1998.html](https://lawphil.net/statutes/repacts/ra1998/ra_8551_1998.html).
- Pinheiro, Paulo Sérgio. 1994. "The Legacy of Authoritarianism in Democratic Brazil." In *Latin American Development and Public Policy*, 237–53. London: Macmillan.
- Pinheiro, Paulo Sérgio. 2001. "Transição política e não-estado de direito na República." In *Brasil: um século de transformações*, edited by Ignacy Sachs, Jorge Wilhelm, and Paulo Sérgio Pinheiro, 261–305. São Paulo: Companhia das Letras.
- Pinheiro, Paulo Sérgio, Eduardo A. Izumino, and Maria Cristina Jakimiak Fernandes. 1991. "Violência Fatal: Conflitos Policiais Em São Paulo (81-89)." *Revista USP*, no. 9: 95–112.
- Pochmann, Marcio. 2015. "Ajuste econômico e desemprego recente no Brasil metropolitano." *Estudos Avançados* 29 (December): 7–19. <https://doi.org/10.1590/S0103-40142015008500002>.
- Pomerantz, Aaron L., Bell, Kevin, Green, Kevin et al. 2021. "Badge of Honor": Honor Ideology, Police Legitimacy, and Perceptions of Police Violence. *Journal of Police Criminal Psychology* 36, 473–89. <https://doi.org/10.1007/s11896-021-09433-2>.
- Renauer, Brian C. 2012. "Neighborhood Variation in Police Stops and Searches: A Test of Consensus and Conflict Perspectives." *Police Quarterly* 15 (3): 219–40.
- Rodgers, Jess, and Nicole Asquith. 2022. "Safety and Security in Remote, Rural, and Regional Policing." *International Journal of Rural Criminology* 7 (1): 96–123. <https://doi.org/10.18061/ijrc.v7i1.9103>.
- Ryngelblum, Marcelo, and Maria Fernanda Tourinho Peres. 2021. "Análise da qualidade dos dados das mortes cometidas por policiais no Município de São Paulo, Brasil, 2014-2015." *Cadernos de Saúde Pública* 37 (October). <https://doi.org/10.1590/0102-311X00317020>.
- Sinhoretto, Jacqueline, Eduardo Cerqueira Batitucci, Haydée Caruso, Luís Felipe Zilli, and Rodrigo Ghiringhelli de Azevedo. 2020. "Policiamento Ostensivo e Relações Raciais: Estudo Comparado Sobre Formas Contemporâneas de Controle Do Crime." Relatório CNPq. Chamada Universal CNPq/MCT 01/2016. São Carlos: Universidade Federal de São Carlos. <https://www.autografia.com.br/produto/policiamento-ostensivo-e-relacoes- raciais-estudo-comparado-sobre-formas-contemporaneas-de-controle-do-crime/>.
- Tusalem, Rollin F. 2019. "Examining the Determinants of Extra-Judicial Killings in the Philippines at the Subnational Level: The Role of Penal Populism and Vertical Accountability." *Human Rights Review* 20 (1): 67–101. <https://doi.org/10.1007/s12142-018-0535-1>.
- United Nations. 1990. *Basic Principles on the Use of Force and Firearms by Law Enforcement Officials. Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders, Havana, Cuba, 27 August to 7 September*. <https://www.ohchr.org/en/instruments-mechanisms/instruments/basic-principles-use-force-and-firearms-law-enforcement>.

- Weisheit, Ralph A., David N. Falcone, and L. Edward Wells. 2006. *Crime and Policing in Rural and Small-Town America*. Waveland Press.
- Weisheit, Ralph, Mark G. Harmon, Jason Ingram, and Clayton Cottle. 2022. "The Geography of Police Killings Utilising Crowdsourced Data." *The Howard Journal of Crime and Justice* 61 (2): 127–47. <https://doi.org/10.1111/hojo.12443>.
- Willis, Graham Denyer. 2015. *The Killing Consensus: Police, Organized Crime, and the Regulation of Life and Death in Urban Brazil*. Berkeley: University of California Press.
- Worden, Robert. 1995. "The 'Causes' of Police Brutality: Theory and Evidence on Police Use of Force." In *And Justice For All: Understanding and Controlling Police Abuse of Force*, edited by William A. Geller and Hans Toch, 31–60. Washington, D.C: Police Executive Research Forum.





## PRIF REPORT

*PRIF Reports offer background analyses on political events and developments and present research findings.*

Birchinger, Sophia / Jaw, Sait Matty / Bah, Omar M / Witt, Antonia (2023): "Siding with the people" or "Occupying force"? Local perceptions of African Union and ECOWAS interventions in the Gambia, PRIF Report 3/2023, Frankfurt/M.

Christian, Ben / Coni-Zimmer, Melanie / Deitelhoff, Nicole / Dembinski, Matthias / Kroll, Stefan / Lesch, Max / Peters, Dirk (2023): Multilateralismus als Rahmenordnung: Zur Krise und Zukunft der multilateralen Weltordnung, PRIF Report 2/2023, Frankfurt/M.



<https://hsfk.de/PRIF-Reports>

## PRIF SPOTLIGHT

*PRIF Spotlights discuss current political and social issues.*

Flamm, Patrick (2023): Is Antarctica Still Exceptional? The Case for "Co-opetition" at the South Pole, PRIF Spotlight 5/2023, Frankfurt/M.

Horváth, Sarah / Schwab, Regine (2023): The Externalization of EU Borders. The Case of Agadez, PRIF Spotlight 4/2023, Frankfurt/M.



<https://hsfk.de/PRIF-Spotlights>

## PRIF BLOG

*PRIF Blog presents articles on current political issues and debates that are relevant for peace and conflict research.*


**PRIF BLOG** 

PEACE RESEARCH INSTITUTE FRANKFURT / LEHRGEBIET FÜR FRIEDEN, FREIHEIT UND KONFLIKTFORSCHUNG

<https://blog.prif.org/>

PRIF Reports and PRIF Spotlights are open-access publications and are available for download at [www.prif.org](http://www.prif.org). If you wish to receive our publications via email or in print, please contact [publikationen@hsfk.de](mailto:publikationen@hsfk.de).

 [www.twitter.com/HSFK\\_PRIF](https://twitter.com/HSFK_PRIF)

 <https://blog.prif.org/>

PETER KREUZER // ARIADNE NATAL

**POLICE USE OF DEADLY FORCE IN  
BRAZIL AND THE PHILIPPINES**

WHAT MACRO-LEVEL FACTORS TELL US

This PRIF Report analyzes police use of lethal force in Brazil and the Philippines, two countries with comparatively high levels of police lethality and upward trends in recent years after political shifts toward iron-fisted policies. Based on competing explanations proposed by conflict theory and consensus theory, it analyzes how far variation can be explained by structural variables such as demography, economy, and crime levels on police use of deadly force at the subnational level. The results challenge both theories, suggesting that politics may be a relevant trigger for coercive policing.

Dr Peter Kreuzer is a senior researcher in PRIF's research department "Intrastate Conflict." In his research he focuses on Philippine domestic politics and violence in multiethnic societies, and maritime conflicts in East and Southeast Asia. Dr Ariadne Natal is a sociologist and postdoctoral researcher in PRIF's research department "Intrastate Conflict" and focuses on topics related to violence and public security in Brazil.