Pro-Government Militias for Penetrative Political Control: A Broad Logic of State-PGM Collaborations

Devin P. Brown

September 1, 2025

Working Paper, Last updated September 2025. Feel free to reach out to via email.

Abstract

What motivates states to collaborate with pro-government militias (PGMs)? Existing research has outlined primarily violent motivations for states that collaborate with PGMs, however, global data on PGMs finds that only 60% of PGMs are reported having committed violence. I propose an underlying logic for state-PGM collaborations based on the states desire for penetrative political control—the ability to shape the local distribution of political power in areas that have lacked previously lacked state authority. PGMs give states the local information they need to selectively reward and punish citizens, extending the state's influence over local institutions. I support this theory with both time-series, cross-sectional models of PGM usage in a global sample and with a subnational case study of Turkey and the Village Guard. The findings have implications for understanding state capacity development and the growth of hybrid security orders.

1 Introduction

Pro-government militias (PGMs) tend to be associated with disorder. Some of the most well-known PGMs like the Janjaweed in Sudan or the Interhamwe in Rwanda were heavily involved in genocidal violence. These high profile examples have motivated a growing body of research on PGMs, linking these groups to longer (Aliyev 2020), intractable (Aliyev 2019) and recurrent (Steinert, Steinert, and Carey 2019) civil wars. Other studies have argued that PGMs exacerbate existing political cleavages (Abbs, Clayton, and Thomson 2020), increase terrorism against the state (Akins 2021), and are a useful predictive indicator for strategic mass killings (Koren 2017).

These infamous examples of PGM violence have also guided the predominant explanations for why states collaborate with these groups. Some have argued that states use PGMs for plausible deniability specifically for egregious violence (Carey, Colaresi, and Mitchell 2015, 2016; Ambrozik 2019; DiBlasi 2020). The separate organizational structure of PGMs enables the state to plausibly deny responsibility for the PGM violence, allowing the state to target opponents while avoiding blame. Other research has highlighted how PGMs may augment state military forces (Eck 2015; Biberman 2018) and assist the state during civil war (Jentzsch, Kalyvas, and Schubiger 2015; Clayton and Thompson 2016; Kone 2015).

Each of these theories emphasize the violent, military functions of PGMs. However, in the Pro-Government Militias Database (Carey, Mitchell, and Paula 2022), roughly half of all PGMs are recorded as committing no violence. Given the heavy emphasis on PGM violence in existing research, this fact presents a puzzle. To address this, I revisit the fundamental question: What motivates states to collaborate with PGMs? Is there some common logic that can both explain state's use of both violent and non-violent PGMs?

In this paper, I seek to situate PGMs in the larger process of state authority projection and consolidation. I argue that states collaborate with PGMs to increase their penetrative political control. Fundamentally, states provide order and security, setting and enforcing institutions and shaping the distribution of political power. These behaviors constitute po-

litical control (Hassan, Mattingly, and Nugent 2022). In many contexts, states may struggle to exercise political control in all areas of their territory. When seeking to penetrate new areas and establish political control, centrally controlled options like the police or military tend to be exceedingly costly and may still lack a key competency required for exercising political control—the legibility to selectively punish and reward citizens.

PGMs are a cheap, readily available, and locally-connected alternative for states seeking to penetrate new communities, providing states with a political foothold in areas where it lacks influence. The PGM monitors local populations and defends incipient state institutions when required, providing critical legibility to the state both during and beyond the potentially violent process of institutional turnover. In this way, collaborating with PGMs is a cost-effective way for states to enhance their penetrative political control. PGMs enable the state to extend its influence into new areas, setting a foundation for additional government services like taxation, adjudication, and other economic or social initiatives.

My theory has key advantages over existing explanations for why states use PGMs. The logic of expanding political control can account for the violent and non-violent functions of PGMs, both within and outside of civil war. Most existing theories focus on how PGMs augment the state's violent capabilities, enabling the state to repress citizens or to wage an effective counterinsurgency. If PGMs commit no violence, then the state has no need to deny its connection, and plausible deniability breaks down as a satisfying explanation. Once a civil war is over, the state has no more need for effective counterinsurgents, yet many PGMs persist well after violence concludes (Steinert, Steinert, and Carey 2019). The logic of expanding political control can explain these non-violent and persistent PGMs while also accounting for their violent behaviors during a civil war. My theory applies more broadly than existing explanations while also accounting for the behaviors that motivated those explanations.

Furthermore, my theory outlines tangible domestic benefits for using PGMs. According to plausible deniability theory, a state uses PGMs to decrease the probability that they are

punished by international or domestic actors for repressing their citizens. In this theory, the payoff for using PGMs is very uncertain. Collaborating with PGMs is an anticipatory attempt to shift perceptions of blame for violence in order to prevent potential backlash against the state. It is unclear, however, that observers differentiate between PGM and state violence to such a degree that it would pacify their intentions to punish the state. In other words, whether a state is punished for repressing their citizens is a highly uncertain process. It is also very uncertain to what extent using a PGM shifts perceptions of government blame. In this sense, plausible deniability theory outlines abstract and uncertain benefits for using a PGM, whereas my theory highlights clear, tangible increases in political control associated with using PGMs.

I support this theory with both cross-national and subnational evidence demonstrating that states which lack high quality information about civilians are more likely to collaborate with PGMs. I operationalize the quality of local information with data on census quality from Lee and Zhang (2017) and data on bureaucratic quality from the International Country Risk Guide (ICRG)(The PRS Group 2025). Both measures correlate strongly with PGM usage across multiple specifications and when controlling for multiple alternative theories.

As further evidence in support of my thoery, I present a short case study of Turkey and the Village Guard, employing geo-referenced data on subnational legibility, violence, and Village Guard deployment. Active during the civil war between Turkey and the PKK, the Village Guard was used for a variety of purposes, both violent and non-violent, all in service to extending the Turkish state's political control in southeaster regions. Despite being mobilized during a counterinsurgency campaign, Village Guard presence remained nearly unchanged even after most intense period of the civil war. Furthermore, the geographic distribution of the Village Guard closely mirrored areas where the Turkish state lacked local legibility, demonstrating the informational motivations for using a PGM.

This project pushes forward theory on why states collaborate with PGMs, proffering a broader logic based on enhancing the state's penetrative political control. This emphasis on

state authority situates PGMs into the broader process of state penetration and capacity development, pushing beyond the current emphasis on PGM violence and highlighting a common theoretical motivation for states to collaborate with PGMs. My theory also comports with other research on militia selection and the state's tolerance for agency slack (Biberman 2018; Cohen and Nordås 2015). States can attempt to exercise political control with a variety of strategies, and this tactical choice will shape the state's selection of a particular militia. Where states seek to govern through physical repression, states should be more likely to select violent PGMs. On the other hand, where states seek to induce compliance with social or economic coercion, they may select relatively non-violent PGMs. At the core of this selection is the common motivation of extending state authority, whereas the specific choice of militia likely accounts for the observed outcomes (Suryanarayan 2024).

2 Theory

The core function of the state is to provide order and security (Hobbes 2016; Olson 1993). The state is the authority, setting and enforcing institutions, thereby shaping the distribution of political power and resources in society. The exercise of this political control is the fundamental task of government. Distinct from other conceptions of state capacity (Mann 1984; Migdal 1988), the term political control specifically refers to the tactics that states use to influence and shape society according to its desires (Hassan, Mattingly, and Nugent 2022). The exercise of political control may involve physical violence but often entails non-violent forms of coercion and influence through the selective distribution of resources or by infiltrating local political networks. Political control provides a foundation for additional governance initiatives like adjudication, taxation, or other services. The state's domestic strength relies on the extent to which the state possesses broad political control. Thus, maximizing and maintaining the state's influence over local institutions—political control—is a key objective for state leaders.

In practical terms, exercising political control relies on two interrelated capabilities: coercion and discrimination. Institutions, by definition, entail punishment for violation, necessitating some form of coercive enforcement by the state. States often possess a variety of tools for coercion. The military is nearly always the strongest violent actor in a state. The state may also use the police or other law enforcement agencies for physical coercion. In addition to violence, the state also has access to numerous economic resources that that can be used to induce or coerce citizens to comply with state institutions. Taken together, states often have sufficient coercive capabilities to exercise political control.

The key challenge for political control, however, is applying coercion selectively. In order to reliably establish political control, the state must be able to discriminate between rule-breakers and followers. This identification usually stems from the state's persistent monitoring presence in the community, enabling the state to detect challenges to its authority while gaining critical information about local political, social, and economic networks. Existing research has clearly highlighted the foundational role that local legibility plays in supporting state initiatives and contributing to state power (Lee and Zhang 2017; D'Arcy, Nistotskaya, and Ellis 2019; Brambor et al. 2020). Without some idea about who or what is present in a community, the state would struggle to influence local institutions or establish political control.

Naturally, weak or low capacity states are the most likely to suffer from a widespread lack of political control. Sub-Saharan Africa contains numerous examples where governments struggle to exercise authority broadly, governing the capitol and little else (Herbst 2015). Even so, some strong states may confront certain areas in which they lack robust institutional influence. Russia has historically struggled to control Chechnya (Kramer 2004); the Indian government has only a weak central government presence in many north-eastern communities (Jones 2009); and England has faced persistent resistance to their rule in Northern Ireland (Weitzer 1987).

These brief examples can provide some insight into why states might not possess broad

authority and shed light on how states might exert *penetrative political control*—the ability to expand the state's influence into new areas.

States may lack functional authority in an area for two related reasons: little historical interaction or local rejection. Although increasingly uncommon, some communities may have developed and survived in relative isolation, establishing their own institutions free of the central government's influence. More commonly however, communities may reject government authority. Negative historical experiences with the state can create grievances that drive communities to support alternative political authorities, as is the case in many civil wars. Alternatively, where regime turnover is very common, communities may still follow institutions from a previous administration and resist the new leader's initiatives.

In either case, when states seek to extend their authority into these areas—exercising their penetrative political control—they do not confront anarchic or disordered communities (Arjona 2016). Rather, these communities will have already established institutions, regardless of central government interaction. The government must contend with this institutional arrangement, and potentially its defenders, as it attempts to extend its influence and exert political control in the area. Where public support for existing institutions is strong, the institutional turnover process may be particularly violent.

Highly developed states usually rely on the police to exercise political control. Locally stationed and attuned to political dynamics, the police monitor the population, providing critical legibility to the state and securing institutions against many forms of subversion. However, establishing and maintaining an effective police force requires significant financial and bureaucratic investment over an extended period of time. Even in states with robust police forces, increasing the police's reach or developing new competencies takes a long time, requiring hiring, training, and oversight. In less developed states, the police are often corrupt, ineffective, and severely underresourced (Mbaku 2012). In these circumstances, creating a new police force or reforming a dysfunctional one is prohibitively complex, time-intensive, and expensive (Goldsmith 2005; Baker 2018; O'Shea 2023; Baranyi and Salahub 2011).

Alternatively, these weak states could ostensibly station the military in these communities (semi-)permanently to extend government authority. This strategy would demand significant resources, however, and still may not translate into increased authority. As with police forces, supporting and supplying military contingents in potentially hostile communities requires significant administrative effort and resources. Furthermore, research has demonstrated that official militaries are ineffective at managing and monitoring civilian populations (Lyall and Wilson 2009). Although the military already possesses sufficient coercive power to punish rule-breakers, it lacks the second competency required for authority—discrimination. Lacking the capability to apply coercion selectively, military involvement is unlikely to inaugurate state authority.

Furthermore, centrally available agents of state authority may lack local trust and legitimacy, further reducing the effectiveness of these options for extending political control. Especially in cases where communities harbor grievances against the central government, the local population would be skeptical of police or military authority, impeding the state's core goal of exercising political control.

In short, centrally available options for extending the state's local institutional influence are often prohibitively costly in terms of both time and resources and may fail to reliably translate into greater political control. In these circumstances, states must turn to external alternatives. Often, pro-government militias represent a cheap and readily deployable option for extending state authority.

Pro-government militias are independent armed organizations, separate from the official military, that support or receive support from the central government (Carey, Mitchell, and Lowe 2013). PGMs are ubiquitous political actors, present in over 110 different countries (Carey, Mitchell, and Lowe 2013). Militarily strong and weak states, democracies and autocracies have collaborated with PGMs. Groups may be composed of local civilians, former members of the military or police, or even recruited from the ranks of anti-government insurgents. Some groups are tightly regimented and trained in military tactics while others possess

minimal formal training. Despite these qualitative differences in country, membership, or training, PGMs have multiple common advantages for extending state authority.

To begin, PGMs are less resource-intensive than centralized strategies for extending political control. Their independent organization and administration enables the government to efficiently contract with the militia without needing to provide auxiliary administrative support to the group. PGMs may also have their own revenue streams, further decreasing the necessary investment from the central government.

Furthermore, PGMs have numerous strategic advantages for extending state authority. Militias regularly hail from and, operate in areas outside of government authority. In many cases PGMs are already embedded in the competition for local or regional political influence. In this way, they are intimately familiar with local institutions and political leaders (Kalyvas 2006; Branch 2007; Lyall 2010). This knowledge makes PGMs highly effective at co-opting or transforming these institutions according to state desires. Since PGMs often live in the communities in which they operate, they provide persistent security for state-provided institutions. Their local roots bridge the legitimacy gap, too, equipping them to efficiently and effectively navigate and monitor the civilian population even when the military or other central state agents are absent. In short, PGMs are discrimination specialists who may also wield coercive capabilities whereas the state military are coercive specialists with weak discriminatory capabilities.

The PGM also reaps benefits from its collaboration with the state. As mentioned previously, PGMs and their members often have a clear stake in local political competition. Support from the state can shift power in the PGM's favor, enabling them to subdue their local rivals and to enjoy the tangible and intangible rents from being the local authority. Although this local strength comes with constraints from the PGM's state patron, the PGM is nearly always better off trading some autonomy for the security of state backing.

In short, collaborating with PGMs is a cost-effective way for states to gain a political foothold in areas where it would struggle to penetrate otherwise. As experts in local and

regional political competition, PGMs provide the government with critical information about local institutions and leaders, enabling the state to use the PGM to co-opt or replace those local institutions to support central state aims. This process of institutional turnover can be messy and violent when entrenched political authorities resist state initiatives. PGMs, like any other state agent, may resort to violent repression to impose the new state order. However, the PGMs' primary advantage to the state is the PGMs' persistent monitoring presence both during and after the violence, giving the state critical legibility to implement other governance or institutional reforms.

3 Hypotheses

The previous section has highlighted a core objective for the states—broadly exercising political control—and outlined the key strategic options and constraints that states face when seeking to penetrate new areas. Expanding the state's political influence critically relies on local legibility and the persistent ability to selectively apply punishments and incentives to citizens. Very often states lack the centralized ability to gather this local information and therefore collaborate with militias to gain this local information. This leads to the following testable hypothesis:

> **H1**: States with high quality information about local citizens should be more likely to collaborate with PGMs than states with lower quality information.

The following section will outline the data, operationalizations, and empirical tests used to evaluate this hypothesis.

4 Empirical Analysis

To test this empirical expectation, I use data on pro-government militias and the state's ability to collect high quality local information. As my outcome variable, I use data on

PGM usage in a global country-year sample spanning from 1981 to 2014 from the updated Pro-Government Militias Database 2.0 (PGMD) (Carey, Mitchell, and Paula 2022). The PGMD is the current standard and most comprehensive dataset on PGMs available featuring information on more than 500 PGMs across 171 countries.[1] Given my theoretical interest in explaining when states are likely to cooperate with PGMs, I use a binary dependent variable reflecting whether the state actively collaborates with a PGM in a given year.

Proxying a state's local information presents a few challenges. In my theory, the state's exercise of political control hinges on its ability to monitor citizens' political behaviors and loyalties. Unfortunately, there does not exist a perfect measure of the state's ability to collect this exact information about its citizens. For this reason, I rely on two imperfect operationalizations of a state's local information.

4.1 Independent Variable: Census Quality

First, I rely on a measure of census quality from Lee and Zhang (2017) to proxy for the state's demonstrated ability to collect information about its citizens. In their paper, Lee and Zhang propose the Myers Index as a measure of the state's administrative capacity.

The Myers Index quantifies the severity of age heaping in the census age distribution. True age distributions in the population are smoothly declining functions. As age increases, the number of people in the population at the age should decrease. However, in collected censuses, often the recovered age distribution features heaping at round ages i.e. 35, 40, 45. Briefly, the Myers index is based on the premise that if we group the population by the ending digit of their age, each group should represent roughly 10% of the total population. In line with this, the Myers index calculates the proportion of the population in each ending-digit group and then takes the absolute difference from the expected, 10% proportion. These absolute differences are then summed and halved to generate a Myers Index.

To illustrate age heaping and the Myers Index, Figure 1 shows two simulated censuses.

1. State inclusion in the sample is based on Gleditsch and Ward's Interstate System Membership (Gleditsch and Ward 1999).

Notes: Census data is simulated. Greater age heaping results in a relatively higher Myers Index, reflecting lower quality legibility.

In the first, accurate census, the age distribution smoothly declines and the associtaed Myers Index is very low. In the second, inaccurate census, there are major mass points at round ages, resulting in a relatively higher Myers Index.

One of the key determinants of age heaping is whether the state regularly interacts with its citizens. When the state has fully penetrated its territory and exercises authority, census enumerators are more easily able to reach local citizens for data collection, and citizens are more likely to know their exact age. The resulting census will feature a relatively accurate age distribution. Conversely, when the state lacks effective influence, census enumerators may be unable to sufficiently access communities and citizens may not know their exact age. The resulting census features falsified or approximated estimates of ages causing heaps at round ages.

It should be noted that accurate information about citizens ages is not the theorized information required for political control. However, if states cannot even collect accurate information about citizens' ages, then states are extremely unlikely to be able to collect

information about citizens' preferences and networks. In this way, the quality of the state's census can provide a reasonable measure of the state's level of information about citizens. Where states have broad legibility and political control, they can collect higher quality census information.

In my primary analysis, I use the Myers Index calculated from a nation-wide census. This operationalization provides a shapshot of overall, country-wide legibility. Where available, Lee and Zhang also provide subnational breakdowns of census quality, reporting a Myers Index for each region or province of the state. As a robustness check, I estimate models using the maximum, average, subnational Myers Index as the independent variable for each country-year in the sample.

The key drawback of using Lee and Zhang's (2017) Myers index is sparse temporal coverage. Since Myers indices are calculated from a census, we only have legibility estimates for years in which a state ran a census. Furthermore, the sample may suffer from systematic bias since states must possess some level of capacity and stability to run a census. Despite these challenges, the sample still still provides a useful test for the role that (a lack of) legibility plays in motivating states to use PGMs.

First, the particular direction of non-random sample selection in this case biases against finding support for my theory. If states that lack legibility are more likely to use PGMs, then states that run a census should have baseline higher levels of legibility and be less likely to use PGMs. The states with the worst legibility are the likely ones that never run a census in the first place and should be the ones that use PGMs more frequently. The timing of the census may also be impacted by instability such that states only run a census during times of relative stability. This bias should, again, result in a sample of more stable country-years, decreasing the probability that states collaborate with PGMs. Thus, insofar as the sample is biased toward higher capacity states and stable years, then it should make it more difficult for me to find an effect.

Rather than attempt to extrapolate sparse census data to non-census years, I simply an-

alyze legibility and PGM usage in the sample of census years to evaluate my first hypothesis. The analysis sample still includes 124 countries and more than 250 country-year observations. Despite deficiencies, this sample can provide a helpful snapshot in time of a state's legibility and their use of militias. Because of this sparse temporal coverage, I estimate additional models in a much larger sample to demonstrate the robustness of my theorized relationships.

4.2 Independent Variable: Bureaucratic Quality

The second independent variable I use is a measure of bureaucratic quality from the International Country Risk Guide (ICRG) published by the PRS group (2025). The primary function of bureaucracies is to collect and manage information about citizens. Where states have high quality bureaucracies, they should be better able to establish political control in new areas without relying on PGMs.

The ICRG compiles expert assessments of country characteristics from 1984 to 2014 including information about the state's bureaucracy. The measure of bureaucratic quality ranges from zero to four. Higher scores are awarded to states with more professionalized bureaucracies that operate smoothly during government transitions and remain free from undue political influence. These professional and independent bureaucracies should be more effective at collecting and managing citizen information.

The ICRG codes data on bureacratic quality for a slightly smaller sample of countries than the full PGMD. Thirty-six countries are dropped from the analysis sample based on this missingness.[2] The resulting sample includes more than 4,000 observations across 144 countries with an average of 29 yearly observations for each country. Thus, this provides a much more expansive sample than the previous analysis of subnational legibility.

2. Table 3 in the appendix lists all countries that were dropped from the analysis sample because of a lack of coverage from the ICRG.

4.3 Control Variables

I include a variety of additional variables to address alternative theories and to improve the precision of my models. First, to account for the idea that states may use PGMs for counterinsurgency and military augmentation, I control for whether a state is in active civil war (Davies et al. 2025) and for the number of military personnel (Singer 1988). Although military personnel is a rough proxy for military strength, multiple projects have argued that states use PGMs specifically in response to smaller, weak militaries (Eck 2015; Kone 2015).

I also account for plausible deniability with two controls, both mirroring Carey et al.'s (2015; 2016) modeling strategies. To proxy for potential domestic accountability mechanisms, I include an indicator for *Weak Democracy* that reflects whether the state falls between one and six on the Polity2 scale (Marshall, Jaggers, and Gurr 2010). Weak democracies should be the most likely face a domestic backlash for repressing citizens.[3] To address international accountability, I control for the state's dependence on foreign aid from democracies. Following Carey et. al (2015), for each country-year, I calculate the total amount of foreign aid from democracies (Tierney et al. 2011), log-transform this sum, and divide it by logged GDP (Feenstra, Inklaar, and Timmer 2015). This *Democratic Aid Dependence* variable reflects the state's sensitivity to international punishments.

Arguably, both civil war and the particular operationalization of *Weak Democracy* comport with my theoretical expectations. States in civil war are in active competition with an alternative political authority for political control. Polity may assign states a score between zero and six for a variety of reasons, many of which may stem from a lack of political control. However, given that these are the main ways that alternative theories have been tested, I include them to demonstrate the strength of my explanation.

I also include additional controls for the total country population (Singer 1988), real GDP (Feenstra, Inklaar, and Timmer 2015), and ethnic fractionalization (Dražanová 2020).

3. Strong democracies, according to Carey et al. (2015), have effective accountability mechanisms and institutional processes for resolving disputes such that these states would not resort to physical repression with a PGM or otherwise.

More populous states will be harder to manage since there is a greater number of people to monitor. This could result in low legibility and lead to PGM usage. Furthermore, richer states should have greater resources to develop central capacity and may be less likely to suffer from low political control or use PGMs. Finally, when societies are very heterogenous, the state will likely face more challenges to exercising legibility or developing bureaucratic capacity. Other models of PGM presence have employed similar combinations of control variables (Carey, Colaresi, and Mitchell 2015).

Table 1 shows descriptive statistics for each variable in the analysis. I made a few practical adjustments to the data before estimating models. Military personnel and country population are expressed in thousands. Real GDP is expressed in millions of purchasing power parity adjusted 2017 US dollars. To correct their skewed distributions, I log transform Myers Scores, military personnel, population, and Real GDP. There is overlapping missingness in the measures of democracy, aid dependence, GDP, and ethnic fractionalization. This results in 40 fewer observations in the legibility models and 700 fewer observations in the bureaucratic quality models.

Table 1: Descriptive Statistics

Variable	Min	Mean	Median	Max	SD	N
PGM Presence	0.000	0.339	0.000	1.000	0.473	5556
log(Myers Score)	-1.748	1.180	1.007	3.726	1.269	289
Bureaucratic Quality	0.000	2.145	2.000	4.000	1.179	4104
Civil War	0.000	0.145	0.000	1.000	0.353	5577
log(Military Personnel)	0.000	3.520	3.526	8.466	1.755	5464
Weak Democracy	0.000	0.171	0.000	1.000	0.377	5245
Democratic Aid Dependence	0.000	0.534	0.746	0.949	0.363	5614
log(Population)	5.004	8.974	9.026	14.145	1.679	5579
log(Real GDP)	6.303	11.029	10.831	16.718	1.998	5246
Ethnic Fractionalization Index	0.001	0.446	0.444	0.890	0.262	4931

To estimate my models, I use simple linear probability models. I employ OLS rather than probit or logit regression because OLS imposes fewer functional form assumptions on the data and directly reports substantive effects. In all models, I cluster standard errors on

the state. For both hypotheses, I estimate a bivariate regression of legibility or bureaucratic quality on PGM usage. I then estimate models including all previously mentioned controls. [4] The results of these models can be seen in the following section.

5 Results

The results of the cross-national regressions can be seen below in Table 2. Taking the two legibility models first, we can see that higher Myers index values, which reflect worse legibility, correlate with an increased probability of PGM usage. In substantive terms, a 10% increase in average Myers' Index is associated with a 1% increase in probability that the state uses PGMs. When we include controls, the magnitude of the coefficient shrinks by about half, yet maintains weak statistical significance.

The bureaucratic quality models return very similar results. Increases in bureaucratic quality are associated with decreased likelihood to use PGMs. Based on the results of the bivariate regression, a one-unit increase in bureaucratic quality decreases the probability of using a PGM by about 10%. This effect maintains statistical significance, even in the presence of controls, illustrating the strength of my proposed explanation.

Including control variables caused the coefficients on the primary independent variables to shrink by about half. This suggests that measures of informational quality and some of the included controls account for similar dimensions of variation in the outcome. *Civil War* and *Weak Democracy* both achieved statistical significance in each model. As mentioned in the discussion on control variables, low quality information will concentrate in years coded under *Weak Democracy* and during *Civil War*. In this way, the fact that these alternative explanations correlate strongly with PGM usage does not undermine the strength of my explanation.

4. In the appendix, I include models of bureaucratic quality including a country fixed effect. Given that PGM usage is binary and changes very little over time, the fixed effect accounts for a tremendous amount of variation in the outcome, and estimated coefficients are small.

Table 2: Cross national regression results. States with less legibility and lower quality bureaucracies are more likely to use PGMs.

	Dependent variable:			
	PGM Presence			
	(1)	(2)	(3)	(4)
log(Myers Index)	0.120^{***}	0.056^{*}		
	(0.025)	(0.031)		
Bureaucratic Quality			-0.108^{***}	-0.056^{**}
			(0.020)	(0.025)
Civil War		0.395^{***}		0.380^{***}
		(0.073)		(0.055)
log(Military Personnel)		0.030		0.056^{**}
		(0.035)		(0.028)
Weak Democracy		0.114^{*}		0.186^{***}
		(0.061)		(0.057)
Dem. Aid Dependence		0.156		0.054
		(0.101)		(0.059)
log(Population)		0.108^{***}		0.083^{**}
		(0.041)		(0.034)
log(RGDP)		-0.018		-0.020
		(0.034)		(0.034)
Ethnic Fractionalization		-0.060		0.087
		(0.143)		(0.099)
Constant	0.218^{***}	-0.783^{***}	0.616^{***}	-0.414^{*}
	(0.043)	(0.276)	(0.059)	(0.248)
Observations	289	252	4,052	3,368
R^2	0.101	0.393	0.068	0.365
Adjusted R^2	0.098	0.373	0.067	0.363
Residual Std. Error	0.457	0.384	0.469	0.388
F Statistic	32.145^{***}	19.636^{***}	293.531^{***}	241.011^{***}

Note: *p<0.1; **p<0.05; ***p<0.01
Standard errors are clustered on the country.

6 Subnational Evidence: Turkey and the Village Guard

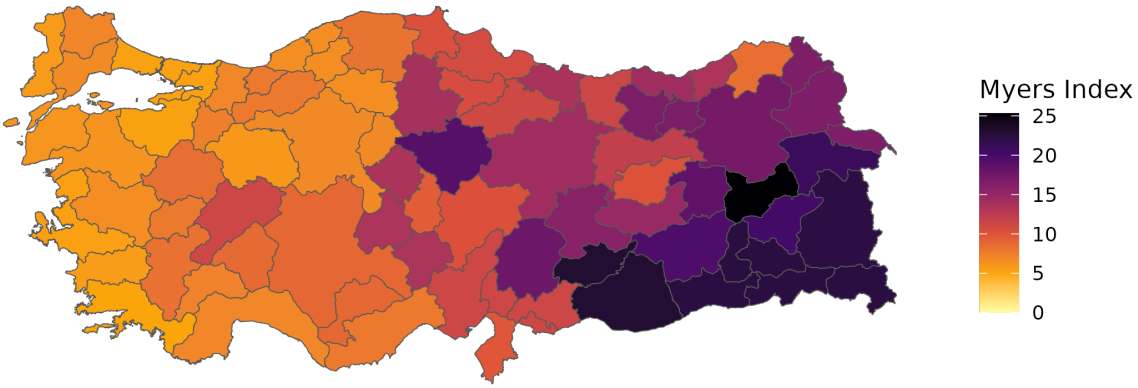
The previous models have shown that, on average, states with lower quality legibility and bureaucracies are more likely to collaborate with PGMs. While imperfect operationalizations of a state's information on its citizens, the fact that these variables correlate strongly with PGM usage lends support to my theory that states collaborate with PGMs for information and political control.

Additionally, these models cannot shed light on the subnational details of this process of penetrative political control. In my theory, I argue that states should be more likely to deploy PGMs to areas where the state lacks local information. The following case study seeks to demonstrate this pattern while also illustrating the relative weakness of violence as an explanation for PGM deployment.

The Turkish government originally established the Geçici Köy Korucusu, or Temporary Village Guard, in 1924 in response to a lack of authority in southeastern provinces (Balta 2019). After dropping out of use in the 1950s, the Turkish government reinstated the Village Guard system in the 1980s in response to increasing activities by the Partiya Karkerên Kurdistanê (PKK, Kurdistan Workers' Party in English)—a Kurdish ethnonationalist insurgent group.

Having originated in remote mountain villages in southeastern Turkey in the 1970s, the PKK had become a highly active political authority in the region by the early 1990s, collecting taxes, adjudicating disputes, conscripting soldiers, and even regulating construction and development (Marcus 2009, 177, 182–183). One of the PKK's primary strategies, especially at the beginning of the conflict, was to target any manifestation of Turkish authority (Gurcan 2015) and to "weaken the state's influence and authority in the region" (Marcus 2009, 117). In line with this aim, the PKK would routinely attack state security forces as well as teachers, healthcare workers, or other government staff. The PKK would sabotage state-sponsored infrastructure projects, intimidating workers and destroying supplies (117). In this sense, the conflict clearly centered around the exercise of political control in this

Figure 2: Subnational Myers Scores in Turkey, 1985



Notes: Higher Myers Index values reflect lower quality census information. In 1985, Turkey lacked local legibility in many regions across the southeast, especially compared to other regions of the country. Data from Lee and Zhang (2017).

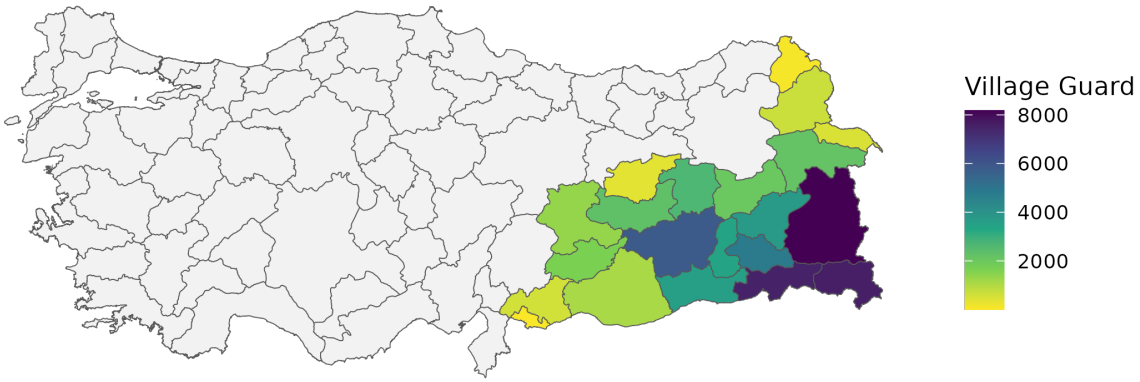
region.

In the early phases of the conflict (1984–1992), the Turkish government struggled to push back against the PKK's growing authority in the southeast. Military units stationed in the region struggled to navigate the unfamiliar terrain and population and therefore often remained within their bases, only leaving to respond to PKK attacks (Marcus 2009, 168). The lack of persistent state presence in local villages enabled the PKK to freely operate and solidify its authority in these areas. This lack of local legibility can clearly be seen in Figure 2 which shows the subnational breakdown of census quality in Turkey in 1985 (Lee and Zhang 2017). Turkey possessed very weak local legibility in areas where the PKK was most active.

Against this backdrop, the Turkish government reinstated and began recruiting local Kurdish citizens and tribal leaders to join the Village Guard in 1985. After a slow take-up in the late 1980s, Village Guard numbers skyrocketed from 1990 to 1994, tripling from 20,000 to more than 60,000 active guards (Balta 2019). The subnational distribution of Village Guards in 1995 can be seen in Figure 3 (Karataşoğlu and Akpınar 2011).[5] Note that Village

5. Karataşoğlu and Akpınar (2011) only provide a geographic breakdown of Village Guard deployment in 1995 and 2007. For this reason, I use these years in the visuals. Other sources indicate that the Village

Figure 3: Geography of Village Guard Deployment in Turkey, 1995



Notes: The Village Guard were deployed exclusively in southeastern regions of Turkey, closely mirroring the government's lack of legibility. Grey regions saw no Village Guard deployment. 62,500 total Village Guard are accounted for in this visual. Data from Karataşoğlu and Akpınar (2011).

Guard deployment closely mirrors areas where the state lacks legibility.

The time from 1990 to 1995 was also the most violent period in the conflict as local information from the Village Guard information enhanced the military's effectiveness in the region. Village Guard deployment also triggered intra-Kurdish violence. The Village Guard represented a new arm of Turkish state authority in the region and thus were heavily targeted by the PKK. From the PKK's perspective, "the existence of these guards...not only threatened to impede the PKK's growth in the region, but also undermined the PKK's claim to be the main force in the region" (Marcus 2009, 115). Figure 4 shows geo-located civil violence in Turkey from 1990–1995 (Sundberg and Melander 2013). As expected, the majority of violence occurs in the southeast border regions. However, the particular geographic patterns of violence in this time period only weakly corresponds to Village Guard deployment. Even during the conflict when we should expect a PGM to be violent, violence doesn't seem to strongly predict where the Village Guard operates.

During the civil war, Village Guard information was used to selectively target PKK

Guard maintained about 60,000 active guards throughout this time period and further into the 2010s (Gurcan 2015).

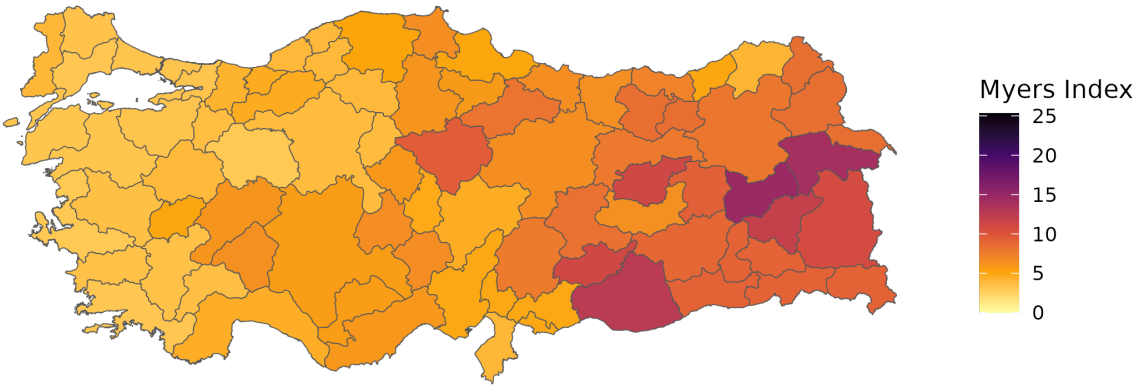
Figure 4: Geolocated Violence in Turkey, 1990–1995

Notes: Violence concentrated in regions along the Iraqi border. Other regions throughout the southeast saw moderate levels of violence, and the major metropolitan centers of Istanbul and Ankara also witnessed some civil violence. Data from the UCDP Georeferenced Events Dataset (Sundberg and Melander 2013).

members, their families, and other sympathetic citizens. In some cases, the Village Guard participated in the violence, settling local political scores or assisting the state military with village evacuations (Aras 2013). However, local information from the Guards was also used for other, non-violent forms of coercion and political control (Hassan, Mattingly, and Nugent 2022). Citizens who were labeled PKK sympathizers by the Village Guard could be fired from their jobs in state administration and even denied access to state-provided poverty assistance (Aras 2013).

Most importantly, the Village Guard undermined existing political networks and eroded social trust in the region. Throughout the history of the Turkish Republic, Kurdish social ties have been a key tool of resistance to Turkish state authority. "By subverting state practices to make citizens legible, kinship networks... undermined the [Turkish] state's attempt to establish bureaucratic authority" (Belge 2011, 95). The Village Guards enabled the Turkish state to infiltrate and break down these social networks that had enabled the PKK to take root in the region. The use of the Village Guard "generated an atmosphere of suspicion, distrust, anxiety, and intimidation" (Aras 2013, 91), increasing the perceived likelihood that a citizens would be punished for subverting state authority. The Village Guard's persistent

Figure 5: Subnational Myers Scores in Turkey, 2000



Notes: Higher Myers index values reflect lower quality census information. By 2000, legibility had improved significantly in the southeast compared to 1985; however, the southeast still featured relatively less legibility than western regions of Turkey. Data from Lee and Zhang (2017).

monitoring presence in southeastern communities finally provided the state with the legibility it needed to establish and effectively exercise political control in the southeast.

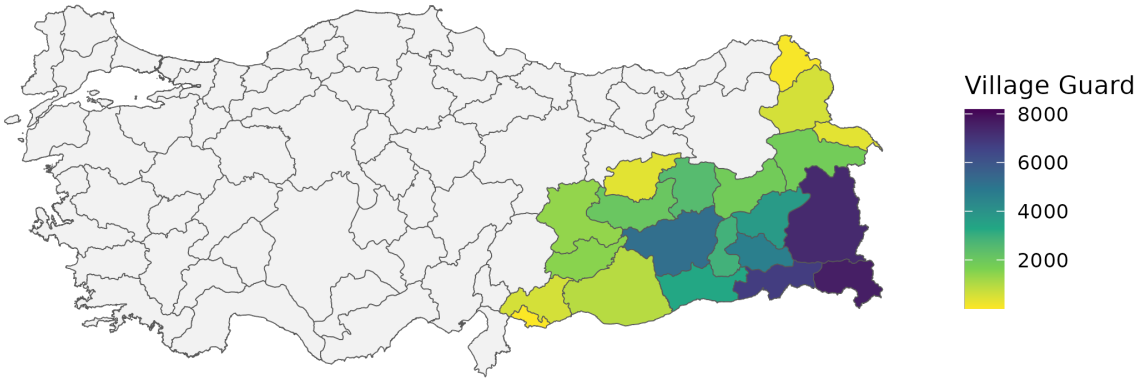
The war against the PKK waned in the second half of the 1990s. Higher quality intelligence from the Village Guard and increased investment from the central government enabled the military to contain the PKK, driving them into northern Iraq. In 1999, the military captured the leader of the PKK, Abdullah Öcalan, and has imprisoned him ever since. Violence in the region became sporadic as the Turkish government's increased presence significantly restricted PKK operations. The subnational breakdown of legibility in 2000 in Figure 5 demonstrates the increase in Turkish government political control in the southeast. Especially compared to 1985, local legibility increased tremendously during the civil war; however, within Turkey in 2000, the southeast is still relatively less legible than the rest of the country.

Despite the cessation of open hostilities, Village Guard presence in the region remained unchanged in the post-civil war period. Patterns of violence from 2002–2007 and Village Guard deployment in 2007 can be seen in Figures 6 and 7. These maps once again demonstrate that patterns of violence hardly predict the geographic distribution of PGMs. The

Figure 6: Geolocated Violence in Turkey, 2002–2007

Notes: Violence was very sporadic during this time period with the PKK carrying out limited, terroristic attacks rather than directly confronting Turkish security forces. Data from the UCDP Georeferenced Events Dataset (Sundberg and Melander 2013).

Figure 7: Geography of Village Guard Deployment in Turkey, 2007



Notes: Village Guard deployment remained generally unchanged from the height of the civil war in 1995 to 2007, after the civil war had subsided. Data from Karataşoğlu and Akpınar (2011).

relative lack of local legibility, however, still closely corresponds to where states decide to employ militias.[6]

Even though there is not an alternative political authority fighting against the state in this region, local resistance to Turkish state directives is still prevalant in the southeast. The

6. For ease of comparison between the civil war and post-civil war time periods, Figure **??** in the Appendix displays all three pairs of legibility, Village Guard deployment, and civil violence maps.

experience of the civil war had a tremendous impact on local civilians and has contributed to residual resentment against Turkish authority. The atmosphere of fear and distrust has persisted, and social divisions between state and PKK supporters still shapes daily life in this region (Aras 2013). And despite debates about ending the Village Guard system (Balta 2019), the Turkish state has continued to maintain and even grow the Village Guard, incorporating them into the official state security apparatus in the southeast (Gurcan 2015).

These dynamics of expanding political control are also not exclusive to the Turkish case. During the second Chechen civil war, Russia collaborated with numerous Chechen PGMs including the Kadyrovites. After the war ended, the leader of the Kadyrovites, Ahkmad Kadyrov, became the head of the regional Chechen government and his erstwhile militia assumed many functions of the police in the region (BBC 2000), ruling on behalf of the Russian government. Myanmar has historically collaborated with numerous local militias to exert political influence in their northern provinces. In 2008, Myanmar sought to incorporate these PGMs into the state military as the Border Guard . States in many parts of the world, at various stages of development, have relied on PGMs when their centrally controlled agents have lacked the local legibility required for political control.

7 Discussion and Conclusion

This project has sought to revise our current understanding of why states use PGMs. Whereas existing explanations focus on PGMs as violent actors often within civil wars, my theory outlines a broader logic for state-PGM collaborations that can both account for violence and non-violence within and outside of civil war. States rely on PGMs for local information in service of the state's pursuit for political control. PGMs provide states with a foothold in local political competitions, enabling the state to transform institutions and shape society to its directives.

Empirical results demonstrate support for this theory. Quantitative analysis shows that

census quality and bureaucratic quality correlate strongly with PGM usage broadly. Furthermore, subnational evidence from Turkey clearly illustrates how PGMs enhance state surveillance and execute both violent and non-violent functions in service of establishing and defending state political control.

The findings in this project provide numerous avenues for further research. The theory may provide insight for understanding when PGMs commit violence and when they remain peaceful. Given the informational motivation for using PGMs, this theory should also provide guidance for understanding how and when states terminate their relationships with PGMs. Research may also consider how PGM usage and their information might lead to additional government services like taxation, adjudication, or social and health services.

This theory also might provide insight into how civil wars can enhance state capacity. By motivating states to extend their political control, civil wars might drive states to expand their network, incorporating political allies into a larger network of authority and security.

Given the recent proliferation of militia use across the globe, it is critically important to understand states' motivations to use these potentially dangerous actors. Hybrid security orders are becoming more common and understanding what drives them to form may also provide insight for how they are likely to behave and when they might break down.

References

Abbs, Luke, Govinda Clayton, and Andrew Thomson. 2020. "The Ties That Bind: Ethnicity, Pro-government Militia, and the Dynamics of Violence in Civil War." *Journal of Conflict Resolution* 64 (5): 903–932.

Akins, Harrison. 2021. "Delegating Repression?: Pro-government Militias and Domestic Terrorism." *Dynamics of Asymmetric Conflict* 14 (1): 72–91.

Aliyev, Huseyn. 2019. "'No Peace, no War' Proponents? How Pro-regime Militias Affect Civil War Termination and Outcomes." *Cooperation and Conflict* 54 (1): 64–82.

———. 2020. "Pro-regime Militias and Civil War Duration." *Terrorism and Political Violence* 32 (3): 630–650.

Ambrozik, Caitlin. 2019. "Not Whether, but When? Governments' Use of Militias in War." *Security Studies* 28 (5): 870–900.

Aras, Ramazan. 2013. "State Sovereignty and the Politics of Fear: Ethnography of Political Violence and the Kurdish Struggle in Turkey." In *The Kurdish Question in Turkey,* edited by Cengiz Gunes and Welat Zeydanlıoğlu, 89–113. Routledge.

Arjona, Ana. 2016. *Rebelocracy.* Cambridge University Press.

Baker, Bruce. 2018. "Is it Complex Environments or Complex Systems that Undermines Police Reform in Developing Countries?" *Police Practice and Research* 19 (4): 398–410.

Balta, Evren. 2019. "The Village Guard System: Counter-insurgency and Local Collaboration." In *The Routledge Handbook of Turkish Politics,* 275–283. Routledge.

Baranyi, Stephen, and Jennifer Erin Salahub. 2011. "Police Reform and Democratic Development in Lower-profile Fragile States." *Canadian Journal of Development Studies* 32 (1): 48–63.

BBC. 2000. "Russia Appoints Chechen Leader." Accessed August 25, 2025. http://news.bbc.co.uk/2/hi/europe/787811.stm.

Belge, Ceren. 2011. "State Building and the Limits of Legibility: Kinship Networks and Kurdish Resistance in Turkey." *International Journal of Middle East Studies* 43 (1): 95–114.

Biberman, Yelena. 2018. "Self-defense Militias, Death Squads, and State Outsourcing of Violence in India and Turkey." *Journal of Strategic Studies* 41 (5): 751–781.

Brambor, Thomas, Agustın Goenaga, Johannes Lindvall, and Jan Teorell. 2020. "The Lay of the Land: Information Capacity and the Modern State." *Comparative Political Studies* 53 (2): 175–213.

Branch, Daniel. 2007. "The Enemy Within: Loyalists and the War Against the Mau Mau in Kenya." *The Journal of African History* 48 (2): 291–315. https://doi.org/10.1017/S0021853707002812.

Carey, Sabine C, Michael P Colaresi, and Neil J Mitchell. 2015. "Governments, Informal Links to Militias, and Accountability." *Journal of Conflict Resolution* 59 (5): 850–876.

———. 2016. "Risk Mitigation, Regime Security, and Militias: Beyond Coup-Proofing." *International Studies Quarterly* 60 (1): 59–72.

Carey, Sabine C, Neil J Mitchell, and Will Lowe. 2013. "States, the Security Sector, and the Monopoly of Violence: A New Database on Pro-government Militias." *Journal of Peace Research* 50 (2): 249–258.

Carey, Sabine C, Neil J Mitchell, and Katrin Paula. 2022. "The Life, Death and Diversity of Pro-Government Militias: The Fully Revised Pro-government Militias Database Version 2.0." *Research & Politics* 9 (1): 20531680211062772.

Clayton, Govinda, and Andrew Thompson. 2016. "Civilianizing Civil Conflict: Civilian Defense Militias and the Logic of Violence in Intrastate Conflict." *International Studies Quarterly* 60:499–510.

Cohen, Dara Kay, and Ragnhild Nordås. 2015. "Do States Delegate Shameful Violence to Militias? Patterns of Sexual Violence in Recent Armed Conflicts." *The Journal of Conflict Resolution* 59 (5): 877–898.

D'Arcy, Michelle, Marina Nistotskaya, and Robert Ellis. 2019. "Mapping the state: Measuring Infrastructural Power Through Cadastral Records." *Proceedings of the International Federation of Surveyors' Working Week.,* https://fig.net/resources/proceedings/fig_proceedings/fig2019/papers/ts04j/TS04J_nistotskaya_darcy_et_al_9784.pdf.

Davies, Shawn, Therése Pettersson, Margareta Sollenberg, and Magnus Öberg. 2025. "Organized violence 1989–2024, and the Challenges of Identifying Civilian Victims." *Journal of Peace Research.*

DiBlasi, Lora. 2020. "From Shame to New Name: How Naming and Shaming Creates Progovernment Militias." *International Studies Quarterly* 64 (4): 906–918.

Dražanová, Lenka. 2020. "Introducing the Historical Index of Ethnic Fractionalization (HIEF) Dataset: Accounting for Longitudinal Changes in Ethnic Diversity." *Journal of Open Humanities Data* 6.

Eck, Kristine. 2015. "Repression by Proxy: How Military Purges and Insurgency Impact the Delegation of Coercion." *Journal of Conflict Resolution* 59 (5): 924–946.

Feenstra, Robert C, Robert Inklaar, and Marcel P Timmer. 2015. "The next generation of the Penn World Table." *American economic review* 105 (10): 3150–3182.

Gleditsch, Kristian S, and Michael D Ward. 1999. "Interstate system membership: A revised list of the independent states since 1816." *International Interactions* 25 (4): 393–413.

Goldsmith, Andrew. 2005. "Police Reform and the Problem of Trust." *Theoretical Criminology* 9 (4): 443–470.

Gurcan, Metin. 2015. "Arming Civilians as a Counterterror Strategy: The Case of the Village Guard System in Turkey." *Dynamics of Asymmetric Conflict* 8 (1): 1–22.

Hassan, Mai, Daniel Mattingly, and Elizabeth R Nugent. 2022. "Political Control." *Annual Review of Political Science* 25 (1): 155–174.

Herbst, Jeffrey. 2015. *States and Power in Africa: Comparative Lessons in Authority and Control.* Princeton University Press.

Hobbes, Thomas. 2016. *Thomas Hobbes: Leviathan.* Edited by Marshall Missner. Routledge.

Jentzsch, Corinna, Stathis N. Kalyvas, and Livia Isabella Schubiger. 2015. "Militias in Civil Wars." *Journal of Conflict Resolution* 59 (5): 755–769.

Jones, Reece. 2009. "Sovereignty and Statelessness in the Border Enclaves of India and Bangladesh." *Political Geography* 28 (6): 373–381.

Kalyvas, Stathis. 2006. *The Logic of Violence in Civil War.* Cambridge Studies in Comparative Politics. Cambridge: Cambridge University Press.

Karataşoğlu, Soner, and Mahmut Akpınar. 2011. " Geçici Köy Koruculuğu Sistemi Üzerine Bir Saha Çalişması: Beytüşşebap Örneği (Fieldwork on Temporary Village Guard: Beytüşşebap Example)." *Elektronik Sosyal Bilimler Dergisi (Electronic Journal of Social Sciences)* 10 (38): 367–369.

Kone, Gnangadjomon. 2015. "The Politics of Counter-insurgency: How Did the Young Patriots Emerge in Côte d'Ivoire?" In *Understanding collective political violence,* 33–49. Routledge.

Koren, Ore. 2017. "Means to an End: Pro-government Militias as a Predictive Indicator of Strategic Mass Killing." *Conflict Management and Peace Science* 34 (5): 461–484.

Kramer, Mark. 2004. "The Perils of Counterinsurgency: Russia's War in Chechnya." *International Security* 29 (3): 5–63.

Lee, Melissa M, and Nan Zhang. 2017. "Legibility and the Informational Foundations of State Capacity." *The Journal of Politics* 79 (1): 118–132.

Lyall, Jason. 2010. "Are Coethnics More Effective Counterinsurgents? Evidence from the Second Chechen War." *American Political Science Review* 104 (1): 1–20.

Lyall, Jason, and Isaiah Wilson. 2009. "Rage Against the Machines: Explaining Outcomes in Counterinsurgency Wars." *International Organization* 63 (1): 67–106.

Mann, Michael. 1984. "The Autonomous Power of the State: Its Origins, Mechanisms and Results." *European Journal of Sociology* 25 (2): 185–213.

Marcus, Aliza. 2009. *Blood and Belief: The PKK and the Kurdish Fight for Independence.* NYU Press.

Marshall, Monty G., Keith Jaggers, and Ted Robert Gurr. 2010. *Th Polity IV Project.* Center for Systemic Peace. https://www.systemicpeace.org/polityproject.html.

Mbaku, John Mukum. 2012. "Confronting Police Corruption in Developing Societies: The Role of the Rule of Law." In *Police Corruption and Police reforms in Developing Societies,* edited by Kempe Ronald Hope, 222–245. Springer.

Migdal, Joel. 1988. *Strong Societies and Weak States: State-Society Relations and State Capabilities in the Third World.* Princeton University Press.

O'Shea, Liam. 2023. "Why Democratic Police Reform Mostly Fails and Sometimes Succeeds: Police Reform and Low State Capacity, Authoritarianism and Neo-patrimonial Politics (in the former Soviet Union)." *Policing and Society* 33 (3): 245–263.

Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *American Political Science Review* 87 (3): 567–576.

Singer, J David. 1988. "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816–1985." *International Interactions* 14 (2): 115–132.

Steinert, Christoph V, Janina I Steinert, and Sabine C Carey. 2019. "Spoilers of peace: Progovernment Militias as Risk Factors for Conflict Recurrence." *Journal of Peace Research* 56 (2): 249–263.

Sundberg, Ralph, and Erik Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research* 50 (4): 523–532.

Suryanarayan, Pavithra. 2024. "Endogenous State Capacity." *Annual Review of Political Science* 27.

The PRS Group. 2025. *International Country Risk Guide.*

Tierney, Michael J, Daniel L Nielson, Darren G Hawkins, J Timmons Roberts, Michael G Findley, Ryan M Powers, Bradley Parks, Sven E Wilson, and Robert L Hicks. 2011. "More Dollars than Sense: Refining Our Knowledge of Development Finance Using AidData." *World Development* 39 (11): 1891–1906.

Weitzer, Ronald. 1987. "Contested Order: The Struggle over British Security Policy in Northern Ireland." *Comparative Politics* 19 (3): 281–298.

8 Appendix

Table 3: Countries that are dropped from Bureaucratic Quality analysis. These observations are dropped for lack of data in the Inter-Country Risk Guide.

Barbados	Belize	Montenegro
Macedonia	Bosnia-Herzegovina	Kosovo
Georgia	Cape Verde	Equatorial Guinea
Benin	Mauritania	Central African Republic
Chad	Burundi	Rwanda
Djibouti	Eritrea	Lesotho
Swaziland	Comoros	Mauritius
South Sudan	Yemen	Afghanistan
Turkmenistan	Tajikistan	Kyrgyz Republic
Uzbekistan	Bhutan	Maldives
Nepal	Cambodia	Laos
East Timor	Solomon Islands	Fiji

Table 4: Results from H2 Bureaucratic Quality regression with controls and country fixed effects. Fixed effects account for a tremendous amount of variation in the outcome, resulting in weak estimated coefficients for included regressors.

	Dependent variable:	
	PGM Presence	
	(1)	(2)
Bureaucratic Quality	−0.048	−0.047
	(0.031)	(0.032)
Civil War		0.118***
		(0.045)
log(Military Personnel)		0.082*
		(0.042)
Weak Democracy		0.077
		(0.055)
Dem. Aid Dependence		−0.019
		(0.035)
log(Population)		0.117
		(0.146)
log(RGDP)		−0.028
		(0.072)
Ethnic Fractionalization		−1.295**
		(0.636)
as.factor(ccode)20		
Constant	0.965***	−0.066
	(0.123)	(1.385)
Country FE	Y	
Observations	4,052	3,368
R^2	0.668	0.704
Adjusted R^2	0.656	0.693
Residual Std. Error	0.285 (df = 3911)	0.270 (df = 3238)
F Statistic	56.248*** (df = 140; 3911)	59.821*** (df = 129; 3238)
Note:		*p<0.1; **p<0.05; ***p<0.01
		Standard errors are clustered on the country.