Journal of Peace Research, 2026, 00(0), 1–8
https://doi.org/10.1093/jopres/xjag079
Published: 02 September 2026
Research Note

Journal of Peace Research OXFORD

Guardians of the regime: secret police formation in autocracies

Marius Mehrl[1], Mila Pfander[2], Theresa Winner[3], and Cornelius Fritz[4]

[1]School of Politics and International Studies, University of Leeds, Leeds, United Kingdom
[2]School of Basic Sciences, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
[3]Department of Statistics, LMU Munich, Munich, Germany
[4]School for Computer Science and Statistics, Trinity College Dublin, Dublin, Ireland
Corresponding author. School of Politics and International Studies, University of Leeds, Social Sciences Building, Leeds LS2 9JT, United Kingdom.
Email: m.mehrl@leeds.ac.uk.

Abstract

Autocrats use secret police to stay in power, deterring and suppressing opposition to their rule. Existing research suggests that secret police succeed at this but also that they are not as ubiquitous as one may assume. We thus explore under which conditions secret police emerge in dictatorships. We develop a theoretical framework for potential predictors and apply statistical variable selection techniques to identify which of several candidate variables extracted from the literature on state security forces and authoritarian survival hold explanatory power. Our results suggest that secret police are more likely to emerge where rulers face structural, regime-external threats, such as organized anti-system mobilization and international rivals, witness successful regime-internal contestation abroad, and have sufficient material resources and personalized power to establish such organizations. This research contributes to our understanding of autocrats' institutional choices and authoritarian politics.

Keywords secret police, security force structure, authoritarian politics, autocracy, variable selection

Introduction

Secret police are a key instrument in the autocrat's quest to suppress opposition and remain in power. They are specialists in surveillance and preventive repression, as they are tasked with instilling fear, deterring dissident political mobilization, and, where such mobilization takes place, putting an end to it before it can escalate to threaten the ruler. Accordingly, existing work shows that secret police reduce both individual and collective resistance (Choulis et al., 2024; Hager & Krakowski, 2022), as they are associated with increased physical repression (Mehrl & Choulis, 2024) but also succeed at deterring dissent, with evidence from Eastern Germany linking their presence to reduced political imprisonment (Steinert, 2023).

Recent research has thus begun to elucidate how secret police, such as the Stasi, Pinochet's DINA/CNI, and Assad's Political Security Directorate, keep autocrats in power. Secret police can be defined as "an internal security agency that uses violent policing practices and intelligence operations against political opponents or dissidents while being autonomous from the rest of the security apparatus" (Mehrl & Choulis, 2024, p.995). They thus differ from internal security institutions that report to the military, conduct operations combining violent policing and intelligence against criminal rather than political targets, target political opponents exclusively through intelligence work, or, like paramilitaries and militias, combine violence against such opponents with minimal intelligence activity[1] (Mehrl & Choulis, 2024; Plate & Darvi, 1982).

Earlier work has studied the principal-agent relationship between ruler and secret police, highlighting autocrats' incentives to limit their subordinates' competence (Dragu & Przeworski, 2019; Egorov & Sonin, 2011; Zakharov, 2016), and the career pressures pushing subordinates to join secret police (Scharpf & Gläßel, 2020, 2022). More recently, research investigates how secret police handle intelligence supplied by informants at risk of exposure (Liu et al., 2026). What may get lost across this body of work is that secret police are not an automatic feature of autocratic governance as global data documents them in less than a third of nondemocracies over the period 1950–2018 (Choulis et al., 2024). This raises the question—when and where are secret police formed in autocracies?

Here, we answer this question. We develop a framework distinguishing potential predictors of secret police formation along three dimensions—willingness–opportunity, structure–shock, and regime internal–regime external—and then identify candidate predictors from existing research on authoritarian

[1] Additionally, militias differ from secret police in their informal links to the state (Carey et al., 2015).

Received: June 12, 2025; **Revised:** August 5, 2026; **Accepted:** August 6, 2026
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security force design and survival. We apply a least absolute shrinkage and selection operator (LASSO, Tibshirani, 1996), which we modify to facilitate variable selection for binary outcomes with rare events, to select the subset of these predictors that are associated with the onset of secret police organizations. Results suggest that secret police are most likely to be established when rulers face specific, structural rather than acute threats from outside of the regime, and possess the necessary material resources and power-base to act upon them.

This research advances the literature on authoritarian security institutions and survival in several ways. First, we develop a theoretical framework to categorize different arguments regarding the drivers of security institutions, and test them against each other in a principled fashion, finding that some prominent explanations offer little to understanding secret police formation. Second, we provide the first study of when rulers institute secret police organizations, thereby, third, providing a foundation for further research to investigate the role of single predictors from a more theory-focused and/or causal perspective. Finally, our research emphasizes that what has regularly been considered a static feature of autocratic governance—secret police—is a variable to be explained, highlighting important variation in authoritarian institutional choices.

Predictors of state security force structure

Existing research has identified several predictors of state security force structure, that is, how governments structure their security apparatus and what types of institutions they choose to invest in. This research has focused on counterbalancing paramilitaries and progovernment militias, but also begun to investigate when governments recruit private military contractors and legionnaires. As these types of security forces may share commonalities with secret police, but also important differences such as their main targets, emphasis on intelligence versus on violence, and clarity of links to the regime, their identified predictors provide a useful starting point to understand when rulers choose to establish a secret police.

A first set of drivers of state security force structure directly pertain to the ruler's risk of deposition. Along these lines, several studies find that facing a higher risk of being deposed by regime elites via a coup d'etat, i.e. the level of internal threat, increases rulers' extent of coup-proofing, via the establishment of paramilitaries such as presidential guards (Belkin & Schofer, 2003) or progovernment militias (Ash, 2016; Carey et al., 2016), but also by hiring private military contractors (Gentil-Fernandes et al., 2024). But beyond coup risk, research argues that rulers are susceptible to threats external to their regime, in particular mass-based challenges such as protests or intrastate conflict (Akins, 2021; Böhmelt & Clayton, 2018; Carey et al., 2016; Klosek & Souleimanov, 2025), or even their country, pointing to the role of interstate rivalries and conflict (Akins, 2021; Ash, 2016; Grasmeder, 2021). Böhmelt et al. (2017) focus again on the role of coup risk, but show that regimes learn from external events as they react to the experience and behaviour of countries facing similar threats.

These studies also identify less direct, structural state features that rulers can observe to learn about their level of threat, and then decide on establishing specific security forces, but which may also constrain rulers in translating these decisions into action. Democracies are less likely to coup-proof via paramilitaries while weakly democratic countries are most likely to form progovernment militias (Carey et al., 2015; Pilster & Böhmelt, 2012). Focusing on autocracies, recent research shows that modes of autocratic rule matter, with increased personalist power concentration corresponding to an increased probability of employing counterbalancing paramilitaries (Escribà-Folch et al., 2020), progovernment militias (Klosek & Souleimanov, 2025), and legionnaires (Mehrl & Escribà-Folch, 2024). Finally, focusing on the constraints rulers face, Böhmelt and Clayton (2018) highlight that some security force configurations require higher state capacity.

(Potential) predictors of secret police

The literature on state security forces offers a starting point to identify factors that push rulers towards or away from establishing secret police. To facilitate the identification and eventual systematic theorization of factors, we distinguish them along three dimensions. First, willingness and opportunity (Most & Starr, 1984): is the variable expected to affect the ruler's motivation to establish a secret police, the ruler's constraints on this policy choice, or both? Second, structure versus disruptive events (Bermeo, 2016; Timoneda et al., 2023): does a variable capture structural conditions which may affect the baseline probability of secret police formation, and gradually shift it over time, or a shock-like event indicating instantaneous changes in the dictator's willingness or opportunity for secret police formation? Third, regime-internal versus external drivers (Bueno de Mesquita et al., 2003; Roessler, 2011): is a factor located within the regime itself, for instance as a result of power distribution or regime emergence, or does it capture the attributes and actions of regime outsiders?

These three dimensions offer a framework to identify and categorize the potential predictors of secret police formation, and of policy shifts within authoritarian politics more generally. Accordingly, the distinction between willingness and opportunity reflects what payoffs a leader expects, and what constraints they face, when forming secret police, mirroring the distinction between militaries' disposition and ability to carry out coups d'etat (Finer, 1962; Powell, 2012). Here, willingness captures that secret police may assist dictators in navigating a challenging threat environment (Choulis et al., 2024; Hager & Krakowski, 2022), but also impose political costs and present threats to the dictator (Egorov & Sonin, 2011). The opportunity dimension captures that dictators, even if willing to form a secret police, may be constrained to do so by their position vis-a-vis other elites (Svolik, 2012) or a lack of material resources to train and maintain costly security forces (Böhmelt & Clayton, 2018). The first dimension therefore covers several dynamics ascribed to authoritarian decision-making, and captures whether a potential predictor of secret police affects the rulers' motivation or obstacles to form such an institution.

Aligning with recent research on authoritarian politics (Timoneda et al., 2023), the second and third dimension indicate whether a candidate predictor is a structural feature of or rather a shock-like shift to a given autocratic context, and whether it pertains to regime insiders or to actors and dynamics that are outside of it. This framework, as illustrated in Table 1, enables the

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Table 1 (Potential) predictors of secret police along three dimensions.

	(a) Regime-internal predictors	
	Structure	**Shock**
Willingness	Regime & leader duration	Coup attempt
Opportunity	Personalism; State capacity	Coup attempt
	(b) Regime-external predictors	
	Structure	**Shock**
Willingness	Excluded ethnic population; substitute security forces	Protests; Neighbour coups & protests
Opportunity	Wealth; Oil & gas production	Economic Growth

Table 2 LASSO variable selection using logit- (Model 1) and cloglog-link (Model 2).

Variable	Selected in model	Variable	Selected in model
Intrastate conflict: Dummy	–	Clientelism	–
Intrastate conflict: Years since	–	Ethnically excluded population (%)	–
Neighbourhood intrastate conflicts (count)	–	Counterweight Forces	–
Democracy score	–	Counterbalancing	–
Coup attempt: Dummy	–	Military expenditures (Latent score, *ln*)	1, 2
Coup attempt: Years since	–	Oil production (Financial value, *ln*)	–
Human rights (Latent score)	1, 2	Gas production (Financial value, *ln*)	–
State capacity (Latent score)	–	Election year	–
Bureaucratic capacity	–	Leader duration	1, 2
Fiscal capacity	–	Regime duration	1, 2
Territorial control	–	Neighbourhood unsuccessful coups (count)	–
CSO entry and exit	–	Neighbourhood successful coups (count)	1, 2
CSO repression	1, 2	International rivalry: Dummy	–
CSO participatory environment	1, 2	International rivalry: Count	1, 2
CSO anti-system movements	1, 2	MID: Dummy	–
CSO strength	–	MID: Years since	–
Regime change	–	MID: Count	1, 2
Urban population (%)	–	Protest (Latent score)	1, 2
Economic growth	–	Neighbourhood protest (average score)	–
Personalization (Latent score)	1, 2	GDP p.c. (*ln*)	1, 2
Ideological legitimization	–	Population (*ln*)	–
Affiliated forces	–	Neighbourhood: Secret Police (count)	–

structured identification and selection of variables to be included in the empirical models, and facilitates model interpretation.

Here, we provide a first indication of which factors are associated with the establishment of secret police institutions. We thus do not develop a specific, fully formulated theory for each of them. Instead, we lay the groundwork for such theory development via the framework introduced here and exploring which of the several potential theoretical dynamics actually appear worthy of investigation.[2]

In line with earlier research on security force structure, we include several indicators of events directly threatening the ruler in our models. For instance, coup attempts are regime-internal shocks that may shift the ruler's willingness and opportunity to form a secret police, while other domestic threats, such as protests, civil and interstate conflict, or those occurring in their neighbourhood, represent external shocks. In contrast, autocratic regime type and financial and administrative state capacity represent structural factors linked to the regime which should mainly affect the dictator's opportunity to institute secret police, but leave their willingness to do so comparatively unaltered. These factors are placed accordingly into Table 1 and we list their operationalization in Table 2.

Beyond the predictors taken from existing research on state security forces, we turn to the broader literature on authoritarian politics to identify further factors within and outside of the regime, structural or shock-like, that may affect dictator's opportunity and/or willingness to create secret police. First, we include several structural covariates that capture societal risk factors associated with anti-government mobilization, which should increase the ruler's risk perception and, accordingly, willingness to invest in

[2] We also opt against developing theoretical hypotheses as testing them together would likely prove impossible (Keele et al., 2020).

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secret police. Therefore, we incorporate covariates capturing population size, the population share of politically excluded ethnic groups, and urban population share. These variables have been linked to regime threats and survival strategies (e.g., Chenoweth & Ulfelder, 2017; Roessler, 2011). Along the same lines, but capturing closer structural precursors of political mobilization, we include measures of civil society independence, participation level, and anti-government civil society organizations. And as rulers may expect mass mobilization, and thus the need for secret police, to increase around elections, we include a dummy variable for election years.

Similarly, we add further structural characteristics of the regime that capture how established and cohesive the dictator's rule is, and hence should affect their perceived need and according willingness to create secret police. Here, we include variables counting the years the current leader and regime have been in power (Svolik, 2012). We include a measure capturing whether a regime uses ideological legitimization claims, as such regimes may have reduced needs for security institutions due to stability arising from shared goals (Escribà-Folch et al., 2020).[3] And given that the ruler's expected payoffs from, and thus willingness to invest in, repressive agents likely depend on their existing efforts at tackling threats, we include covariates that measure repression, both generally and targeted specifically at civil society organizations.

Relatedly, we include as a structural regime feature the existence of other security institutions with relatively similar tasks as secret police—counterweight paramilitaries, affiliated forces, and the overall degree of counterbalancing. Because these actors can all, to some degree, be used to counter threats emanating from within the regime as well as other domestic sources of danger, they may substitute for each other, with the presence of one reducing rulers' need to create another. For the same reason, we include a variable capturing clientelistic rule, which offers an alternative mode of generating information and control, reducing the need for formal secret police.

In theory, rulers may choose to create endless parallel security institutions to counterbalance each other, but forming even one such institution requires extensive resources (Böhmelt & Clayton, 2018; Geddes et al., 2018, p.157). We therefore include several structural features of the regime's resource environment, including the country's economic performance, defence spending, and oil and gas production as sources of disposable income (Fails, 2020). These structural characteristics should affect dictator's opportunities to fund the formation of new secret police institutions, as should shock-like economic growth shifts.

Table 2 lists all covariates included in our models, and their operationalization. In several cases, we include various operationalizations and leave selecting among them to the model. We report data sources for all included variables in the supplementary materials.

Research design

Our analyses employ a dataset covering 120 autocracies over the period 1951–2018 (Choulis et al., 2024), comprising 3,759 observations. The target variable $y_{i,t}$ is a binary indicator of secret police onset in country i and year t, using their first year of recorded existence to indicate formation, which takes the value 1 if a secret police is established and 0 otherwise. We set $y_{i,t}$ to missing if secret police exist but were established before (McGrath, 2015), and disregard formations at time point t if there was no autocracy or observation at $t-1$. We observe 31 secret police formations.

Secret police are coded in line with the definition introduced above along five criteria capturing their targeting of political opponents, operational independence and secrecy, specialization in intelligence operations, and regular violent policing practices (Mehrl & Choulis, 2024). We note that while these data represent the product of a systematic and sustained coding effort, they have the limitations of data collection reliant upon existing primary or secondary sources. Thus, these data may potentially miss secret police organizations that were insufficiently documented at the time of data collection, or for which documentation only exists in languages inaccessible to the coders, and thus may risk undercounting the number of secret police formations. Given the broad source basis underlying these data, we believe this risk to be relatively small. But to assess how such undercounting may affect the results presented here, we investigate how selection probabilities change when randomly adding or omitting secret police observations. This response perturbation exercise, presented in the supplementary materials, indicates that our results are robust to both modifications.

We lag all independent variables listed in Table 2 by one year to account for the time between changes in the covariates and their potential effect on secret police formation. Missing values are imputed using bootstrap-based methods with the `Amelia` package (Honaker et al., 2011).[4] For robustness, we impute the dataset five times, apply our methodology to each imputed version, and then average the resulting models to obtain stable estimates. As we are interested in when and where secret police are formed, we make use of variation across both countries and time. Our methodology follows a two-step approach: first, we identify the most relevant covariates via statistical variable selection, and second, we examine the magnitude, direction, and significance of their effects.

Since the sample size of our data is relatively small and our aim is to identify a parsimonious set of covariates from Table 2, we first fit a Lasso model to the data where the absolute value of all parameters is penalized with a parameter λ (Tibshirani, 1996). This penalization sets the parameters of some coefficients to zero and thus detects which variables are associated with the establishment of secret police organizations. Since the dependent variable is binary, we employ a logit-link function. In line with standard practice (Hastie et al., 2009; Tibshirani, 1996), λ was chosen by minimizing the deviance through three-fold cross validation. As there are only 31 observed formations, we modify the standard Lasso and stratify cross-validation datasets so that every fold contains approximately the same number of secret police formations. This ensures a balanced distribution across folds, and makes the Lasso model applicable to binary outcomes where one value is rare. The stratified Lasso is applied to each of the five imputed datasets. We keep only those variables that appear in at least three of the five models fitted on the different imputed datasets.

[3] Alternatively, ideological legitimization claims may trigger increased necessity to enforce ideological tenets among citizens, thus increasing regime willingness to form secret police.

[4] For imputation, missing values must be missing at random, meaning that the probability of missingness depends only on observed data and not the missing values themselves. Here, this is a plausible assumption.

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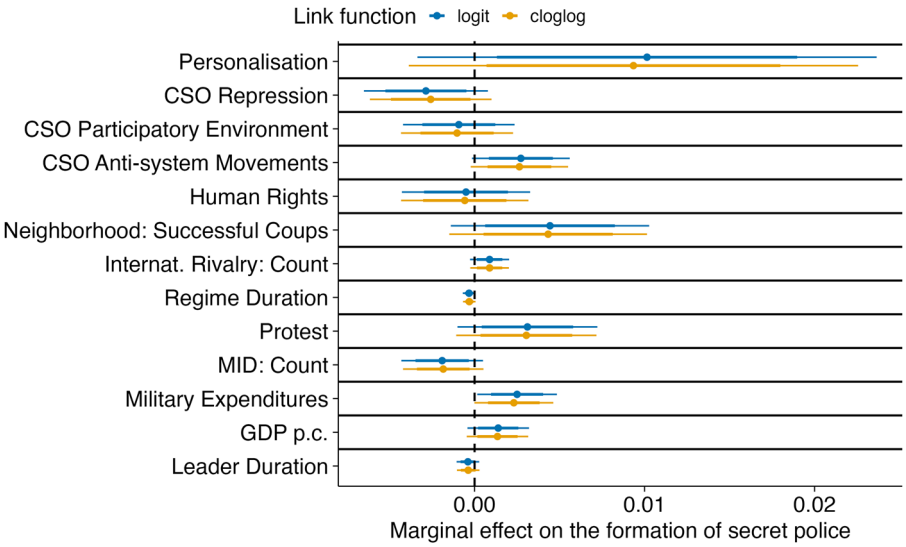

Figure 1 Identified Predictors of Secret Police Formation: Marginal effect estimates with 90% and 95% confidence intervals (thick and thin whiskers, respectively). Each variable is associated with two coefficient estimates, corresponding to the logit- and cloglog-link. Coefficients for unselected variables plotted as zero.

Finally, we fit an unconstrained logistic model with the selected variables for each dataset, pooling their results via Rubin's (1987) rule.

To validate our findings, we replace the logit-link with a complementary log-log (cloglog) link and document additional sensitivity analyses in the supplementary materials.

Empirical results

The first set of results, which variables were selected, is provided in Table 2. Several of the potential predictor variables remain unselected. None of the state capacity measures was selected, suggesting that this institutional dimension is not associated with autocrats' formation of secret police. There is also no evidence that domestic coup attempts or civil wars influence secret police establishment. Further, alternative approaches to managing threats to the regime, such as counterbalancing or clientelism, were not selected, as were demographic variables. Finally, intrastate conflict and protests in the neighbourhood appear to play no role for creating secret police. Table 2 also indicates that results do not depend on link function.

Figure 1 displays marginal effects on the probability of secret police formation for all selected variables,[5] as indicated in Table 2. Figure 1 suggests that none of the detected effect sizes is large; this is unsurprising given how rare secret police formations are.

Figure 1 supports several of the intuitions about secret police formation developed above. The autocrat's external threat environment appears to be important: secret police are more likely to be established where anti-system civil society organizations are more prominent, protests are more rife, and if the country is operating within more international rivalries. Interestingly, this positive association between threat and secret police formation appears limited to more latent, structural threats which have not yet fully escalated. This interpretation is supported by the finding that variables capturing more shock-like events, such as intrastate conflict, coup attempts, and interstate dispute, remain unselected, while the count of interstate disputes exhibits a negative association with secret police establishment. The exception to this pattern is the positive coefficient estimate recovered for successful coups in the neighbourhood, which, though shock-like, may suggest that autocrats observe such events, update their beliefs about their own threat environment, and adjust their security apparatus accordingly (Ben Hammou & Powell, 2025). In this sense, shock-like events elsewhere may be interpreted to change the dictator's belief about their own structural sources of danger. That successful coups in the neighbourhood are found to increase the probability of secret police establishment, while domestic indicators of coup risk remain unselected, may further imply that dictators form secret police to stop military threats to their rule from emerging, rather than to tackle them once such threats are realized in the form of, for instance, politicized officer cliques within the military or rumours of coup plans. More broadly, these results align with the idea that secret police are formed to preempt and prepare for escalation when the structural threat environment makes it appear likely, not when escalation actually occurs. In other words, secret police may be created to delay or even stop an endgame from arising, not help autocrats survive the endgame when it is already occurring.

Indeed, when faced with a potential endgame, creating new coercive institutions may further weaken the ruler's position vis-a-vis the ruling elite (Svolik, 2012), or be unattractive as the ruler enjoys increased elite loyalty for the time being (McMahon & Slantchev, 2015). This first set of results thus highlights the importance of the regime-external structural threat environment, which alters autocrats' willingness *and* opportunity for policy changes, in predicting secret police formation. However, these threats appear to have to be realized to some extent, such as in the form of anti-system organizations or protests, as our results indicate structural predictors of threats, including recent intrastate conflict, civil society strength, or excluded ethnic populations, to be of negligible importance.

[5] Results tables in Online Supplementary Materials.

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Regarding regime-internal structural characteristics, we find that secret police formation is less likely where levels of civil society repression are already high, and when the regime is in place for longer. As discussed above, both of these characteristics should reduce rulers' perceived need, and hence their willingness, to invest in additional regime survival policies. In such cases, a secret police will thus either already exist or is unnecessary as the regime is protected via other means. There is thus support for several regime-internal structural features, which we theorized to reduce the need for and thus willingness to invest in secret police, being associated with a lower probability of secret police formation. Interestingly, however, this finding does not extend to alternative security actors, such as paramilitaries, or sources of information and control, including clientelism, which remain unselected across models.

While no state capacity indicators were selected, the correlational results in Figure 1 align with the idea that the regime's material resources are a structural predictor of its ability to fund, maintain, and hence establish, secret police: Military expenditures are positively associated with secret police formation, suggesting that as autocracies spend more on their security apparatus, they have more opportunity to form a secret police. GDP per capita equally exhibits a positive effect estimate, suggesting a similar interpretation. Interestingly, oil and gas production remained unselected, suggesting that general material resources, rather than disposable income, matter for secret police establishment. Finally, personalism, another structural regime characteristic, is found to be associated with secret police formation, aligning with arguments about elite marginalization.

In the supplementary materials, we present expanded models and models with the alternative dependent variable counterweight paramilitaries.

These results provide correlational support for a reading that autocrats establish secret police when facing structural external threats, indicating opposition from their own citizens or international rivals. In contrast, other domestic threats, including coups and civil war, appear not to matter, suggesting that secret police are formed to preempt, rather than tackle actualized threats, and to mainly target threats from outside the regime rather than elites. Additionally, our results highlight that secret police are more likely to appear when autocrats' structural resource and power-base are greater, while the probability of secret police formation decreases if regime-internal structures suggest a lesser need for this additional security organization.

Conclusion

Secret police, such as the Soviet Cheka and NKVD, or Saddam's Mukhabarat, play a key role in ensuring autocrats' survival. But despite this and the prominence of many such organizations, secret police appear to exist in less than a third of observed nondemocratic country-years. Motivated by this disconnect between their usefulness and commonness, we investigate secret police formation in autocracies. We develop a theoretical framework to identify and interpret predictors in a structured fashion, extend existing statistical variable selection techniques to handle rare binary outcomes such as secret police formation, and apply these methods to assess which of several potential predictors are meaningfully associated with secret police establishment.

Our results suggest that secret police are most likely to emerge where rulers face particular, structural rather than shock-like threats external to their regime, but also have the opportunity to do so. They thus point to why secret police might be so rare in autocracies: Rulers may have to face a fairly specific combination of threats and their own resources to be both able and willing to establish secret police. Therefore, secret police formation would depend not only on rulers' access to sufficient material resources for funding, but also their exposure to threats which are regime-external and sufficiently important, but also not too acute. Otherwise, rulers appear to opt against creating secret police, potentially due to the costs these institutions can impose on rulers (Egorov & Sonin, 2011).

For future research, we offer both tools and directions to further advance our understanding of secret police, state security force structure, and autocrats' strategies of survival. We provide a flexible theoretical framework to systematise and interpret potential predictor variables, which allows future work to straightforwardly integrate new covariates. The stratified Lasso method developed here offers a directly applicable approach to variable selection for predicting secret police formation, but also other rare outcomes. Together with the data and code for this paper, these contributions serve as a starting point for future studies to expand the range of considered predictors, investigate alternative dependent variables, or more theoretically focus on specific predictors with the aim of establishing causal relationships. Given the scarcity and endurance of secret police, we highlight their internal dynamics as a subject for future study. The recent wave of studies focusing on particular secret police cases in, for instance, Poland (Hager & Krakowski, 2022; Thomson, 2024), Taiwan (Liu et al., 2026), and Argentina (Scharpf & Gläßel, 2020) is helpful in this regard. Future work should supplement this with a greater focus on comparison and, eventually, extend global data on secret police to capture their activities, size, and surveillance methods.

Acknowledgments

We thank Janina Beiser-McGrath, Olga Vlasova, the audience at the 2025 Political Studies Association Conference, Birmingham, the editor, and the anonymous reviewers for their comments.

Author contributions

M.M. and C.F. conceptualized and supervised this research. C.F., M.P., and T.W. curated and analysed the data. M.M., M.P., T.W., and C.F. wrote the original draft, reviewed, and edited it.

Conflicts of interest

The authors declare that they have no competing interests.

Funding

The authors declare that they received no funding supporting this work.

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Data availability

The dataset, codebook, and do-files for the empirical analysis in this article, along with the Online Appendix, are available at https://www.prio.org/journals/jpr/replicationdata. All analyses were conducted using R, version 4.5.2.

Declaration of AI usage

We declare the use of AI tools to improve language, grammar and sentence structure, as well as Github Copilot to assist with writing code. We take full responsibility of the text and research findings presented.

References

Akins, H. (2021). Violence on the home front: Interstate rivalry and pro-government militias. *Terrorism and Political Violence*, *33*, 466–488. https://doi.org/10.1080/09546553.2018.1548353

Ash, K. (2016). Threats to leaders' political survival and pro-government militia formation. *International Interactions*, *42*, 703–728. https://doi.org/10.1080/03050629.2016.1138108

Belkin, A., & Schofer, E. (2003). Toward a structural understanding of coup risk. *Journal of Conflict Resolution*, *47*, 594–620. https://doi.org/10.1177/0022002703258197

Ben Hammou, S., & Powell, J. (2025). Following the free officers: Explaining the politics of coup contagion and containment. *International Studies Review*, *27*, viaf033. https://doi.org/10.1093/isr/viaf033

Bermeo, N. (2016). On democratic backsliding. *Journal of Democracy*, *27*, 5–19. https://doi.org/10.1353/jod.2016.0012

Böhmelt, T., & Clayton, G. (2018). Auxiliary force structure: Paramilitary forces and progovernment militias. *Comparative Political Studies*, *51*, 197–237. https://doi.org/10.1177/0010414017699204

Böhmelt, T., Ruggeri, A., & Pilster, U. (2017). Counterbalancing, spatial dependence, and peer group effects. *Political Science Research and Methods*, *5*, 221–239. https://doi.org/10.1017/psrm.2015.55

Bueno de Mesquita, B., Smith, A., Siverson, R. M., & Morrow, J. D. (2003). *The logic of political survival*. MIT Press.

Carey, S. C., Colaresi, M. P., & Mitchell, N. J. (2015). Governments, informal links to militias, and accountability. *Journal of Conflict Resolution*, *59*, 850–876. https://doi.org/10.1177/0022002715576747

Carey, S. C., Colaresi, M. P., & Mitchell, N. J. (2016). Risk mitigation, regime security, and militias: Beyond coup-proofing. *International Studies Quarterly*, *60*, 59–72. https://doi.org/10.1111/isqu.12210

Chenoweth, E., & Ulfelder, J. (2017). Can structural conditions explain the onset of nonviolent uprisings? *Journal of Conflict Resolution*, *61*, 298–324. https://doi.org/10.1177/0022002715576574

Choulis, I., Escribà-Folch, A., & Mehrl, M. (2024). Preventing dissent: Secret police and protests in dictatorships. *Journal of Politics*, *86*, 1104–1109. https://doi.org/10.1086/729953

Dragu, T., & Przeworski, A. (2019). Preventive repression: Two types of moral hazard. *American Political Science Review*, *113*, 77–87. https://doi.org/10.1017/S0003055418000552

Egorov, G., & Sonin, K. (2011). Dictators and their viziers: Endogenizing the loyalty–competence trade-off. *Journal of the European Economic Association*, *9*, 903–930. https://doi.org/10.1111/j.1542-4774.2011.01033.x

Escribà-Folch, A., Böhmelt, T., & Pilster, U. (2020). Authoritarian regimes and civil–military relations: Explaining counterbalancing in autocracies. *Conflict Management and Peace Science*, *37*, 559–579. https://doi.org/10.1177/0738894219836285

Fails, M. D. (2020). Oil income and the personalization of autocratic politics. *Political Science Research and Methods*, *8*, 772–779. https://doi.org/10.1017/psrm.2019.14

Finer, S. (1962). *The man on horseback: The role of the military in politics*. Praeger.

Geddes, B., Wright, J., & Frantz, E. (2018). *How dictatorships work: Power, personalization, and collapse*. Cambridge University Press.

Gentil-Fernandes, L., Morrison, K., & Otto, J. (2024). Buying survival: Why do leaders hire mercenaries? *Security Studies*, *33*, 165–193. https://doi.org/10.1080/09636412.2023.2268521

Grasmeder, E. M. (2021). Leaning on legionnaires: Why modern states recruit foreign soldiers. *International Security*, *46*, 147–195. https://doi.org/10.1162/isec_a_00411

Hager, A., & Krakowski, K. (2022). Does state repression spark protests? Evidence from secret police surveillance in communist Poland. *American Political Science Review*, *116*, 564–579. https://doi.org/10.1017/S0003055421000770

Hastie, T., Tibshirani, R., & Friedman, J. (2009). *The elements of statistical learning*. Springer.

Honaker, J., King, G., & Blackwell, M. (2011). Amelia II: A program for missing data. *Journal of Statistical Software*, *45*, 1–47. https://doi.org/10.18637/jss.v045.i07

Keele, L., Stevenson, R. T., & Elwert, F. (2020). The causal interpretation of estimated associations in regression models. *Political Science Research and Methods*, *8*, 1–13. https://doi.org/10.1017/psrm.2019.31

Klosek, K. C., & Souleimanov, E. A. (2025). One or many? Disentangling the puzzle of pro-government militia deployment. *Studies in Conflict and Terrorism*, *48*, 67–91. https://doi.org/10.1080/1057610X.2022.2111990

Liu, H., Su, C.-H., & Wang, Y.-T. (2026). Keeping it secret: Surveillance, informant networks, and the protection of informants in authoritarian regimes. *Journal of Peace Research*, *63*, 261–268. https://doi.org/10.1093/jopres/xjaf015

McGrath, L. F. (2015). Estimating onsets of binary events in panel data. *Political Analysis*, *23*, 534–549. https://doi.org/10.1093/pan/mpv019

McMahon, R. B., & Slantchev, B. L. (2015). The guardianship dilemma: Regime security through and from the armed forces. *American Political Science Review*, *109*, 297–313. https://doi.org/10.1017/S0003055415000131

Mehrl, M., & Choulis, I. (2024). Secret police organizations and state repression. *Journal of Conflict Resolution*, *68*, 993–1016. https://doi.org/10.1177/00220027231188895

Mehrl, M., & Escribà-Folch, A. (2024). The dictator's legionnaires: Foreign recruitment, coups, and uprisings. *Democratization*, *31*, 714–740. https://doi.org/10.1080/13510347.2023.2277283

Most, B. A., & Starr, H. (1984). International relations theory, foreign policy substitutability, and "nice" laws. *World Politics*, *36*, 383–406. https://doi.org/10.2307/2010380

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Pilster, U., & Böhmelt, T. (2012). Do democracies engage less in coup-proofing? On the relationship between regime type and civil-military relations. *Foreign Policy Analysis*, *8*, 355–372. https://doi.org/10.1111/j.1743-8594.2011.00160.x

Plate, T. G., & Darvi, A. (1982). *Secret police: The inside story of a network of terror*. R. Hale.

Powell, J. M. (2012). Determinants of the attempting and outcome of coups d'état. *Journal of Conflict Resolution*, *56*, 1017–1040. https://doi.org/10.1177/0022002712445732

Roessler, P. (2011). The enemy within: Personal rule, coups, and civil war in Africa. *World Politics*, *63*, 300–346. https://doi.org/10.1017/S0043887111000049

Rubin, D. B. (1987). *Multiple Imputation for Nonresponse in Surveys*. Wiley.

Scharpf, A., & Gläßel, C. (2020). Why underachievers dominate secret police organizations: Evidence from autocratic argentina. *American Journal of Political Science*, *64*, 791–806. https://doi.org/10.1111/ajps.12475

Scharpf, A., & Gläßel, C. (2022). Career pressures and organizational evil: A novel perspective on the study of organized violence. *International Studies Review*, *24*, viac009. https://doi.org/10.1093/isr/viac009

Steinert, C. V. (2023). The impact of domestic surveillance on political imprisonment: Evidence from the German democratic republic. *Journal of Conflict Resolution*, *67*, 38–65. https://doi.org/10.1177/00220027221109797

Svolik, M. W. (2012). *The politics of authoritarian rule*. Cambridge University Press.

Thomson, H. (2024). The bureaucratic politics of authoritarian repression: Intra-agency reform and surveillance capacity in communist Poland. *Political Science Research and Methods*, *12*, 767–782. https://doi.org/10.1017/psrm.2023.41

Tibshirani, R. (1996). Regression shrinkage and selection via the lasso. *Journal of the Royal Statistical Society: Series B*, *58*, 267–288. https://doi.org/10.1111/j.2517-6161.1996.tb02080.x

Timoneda, J. C., Escribà-Folch, A., & Chin, J. (2023). The rush to personalize: Power concentration after failed coups in dictatorships. *British Journal of Political Science*, *53*, 878–901. https://doi.org/10.1017/S0007123422000655

Zakharov, A. V. (2016). The loyalty-competence trade-off in dictatorships and outside options for subordinates. *Journal of Politics*, *78*, 457–466. https://doi.org/10.1086/684365

Biographical statement

Marius Mehrl, PhD in Government (University of Essex, 2020); Lecturer in Quantitative International Relations, University of Leeds (2022–present).

Mila Pfander, BA in Statistics (LMU Munich, 2024); MSc student in Statistics, École Polytechnique Fédérale de Lausanne (2024–present).

Theresa Winner, BA in Statistics (LMU Munich, 2023); MSc student in Statistics, LMU Munich (2023–present).

Cornelius Fritz, Dr. rer. nat. (LMU Munich, 2022); Assistant Professor in Statistics, Trinity College Dublin (2024–present).

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