# The Shield & Sword of the State? The Effect of Conscription and Secret Police on Civil-Military Relations

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A thesis submitted for the degree of Doctor of Philosophy

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November, 2021

**Abstract**

From Nigeria (2010) to Turkey (2016), and Mali (2020), coups continue to threaten government stability. In 2021, even the US democratic process was endangered when a mob stormed the capitol in a sui generis coup. The following thesis draws attention to the previously unrecognized effect of compulsory military service and secret police on civil-military relations and coup risk. In the first chapter, co-authored with Pr. Tobias Böhmelt and Dr. Zorzeta Bakaki, we examine how conscription increases public trust for the armed forces in European democracies. We argue that conscription, more so than voluntary-recruitment systems, can reach out to and socialize larger segments of the society in line with the military's values either directly - through personal involvement, or indirectly – from individuals directly exposed to the military to third persons. The second chapter explores how conscription increases the likelihood of a coup attempt in anocracies. The chapter advances the argument that conscription improves the ties of the armed forces with society and enables interest groups to collaborate with the armed forces against the anocratic government which is unable to overcome the political instability innate to those regimes. Third chapter investigates how secret police in autocracies decrease the willingness and opportunity of military officers to stage a coup. Specifically, secret police weaken societal-military ties by identifying and sanctioning dissidents through sophisticated espionage operations. Therefore, while conscription increases societal-military ties, secret police produce the opposite effect. The study concludes that conscription increases public trust to the armed forces in European democracies, however, the institution also produces an undesirable side-effect in anocracies, namely increased coup risk. To the contrary, secret police in autocracies is found to decrease the probability of a coup attempt against the government. Consequently, the thesis contributes to the literature on civil-military relations by bringing attention to previously unappreciated aspects of civil-military relations. Likewise, the thesis demonstrates that the study of essential societal-military

institutions, like conscription, through new lens may enrich our understanding of civil-military relations.

**Acknowledgements**

I want to express my most sincere gratitude to Professors Zorzeta Bakaki, Tobias Böhmelt, and Alexandra Hennessy for their unfaltering support, invaluable guidance, unwavering patience, and overall decisive contribution to the thesis and my professional development. I am more than grateful to Professor Daina Chiba for his constructive comments and unique insight throughout the process. I would also like to thank my dear friend and colleague Dr. Marius Mehlr for his considerable input in many parts of the thesis. Importantly, I am much obliged to the University of Essex and the Department of Government specifically for supporting my studies and creating an outstanding research environment where junior scholars like myself can flourish. I will always cherish my time in Essex and, especially, the people that make the University such an excellent academic institution. Finally, I wish to extend my deep appreciation to my family who had the courtesy to suffer in silence as I explained them time and time again my research ideas and core arguments.

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# 1 Introduction

On the 15th of November 2017, an army spokesman appeared on the Zimbabwean national TV reassuring the nation that there was definitely not a coup happening. Notwithstanding the military's insistence that its actions were not aimed against President Mugabe, the intervention ended Mugabe's 37-year rule and the army installed a transitional government. According to Luttwak's classic definition on coup d'état, 'A coup consists of the infiltration of a small but critical segment of the state apparatus, which is then used to displace the government from its control of the remainder' (1979, p. 27). Subsequently, the Zimbabwe case was beyond doubt a coup since a group within the state apparatus, that is the armed forces, displaced the government from power by force. Despite the ambiguity and mystic that surround coup attempts, they are hardly a unique phenomenon, even in the post-Cold War era. From Nigeria in 2010, to Mali in 2020, coups regularly make headlines as governments around the globe still fall prey to military praetorianism. Coups are not limited to absolute regimes or failed states, as even politically dominant leaders with strong popular support may lose power to a military coup. To illustrate this point, Evo Morales was the most popular politician in Bolivia when he was forced to resign from office by the military shortly after the disputed elections of 2019. Democracy in the USA was also threatened in 2021 when the capitol was stormed by a pro-Trump mob in a sui generis coup[1]. The guardianship dilemma is thus a timeless, indispensable aspect of civil-military relations when "the very institution created to protect the polity is given sufficient power to become a threat to the polity" (Feaver 1999, p. 214). Hence, coups still pose a significant threat to civilian governments worldwide as the academic literature on coup

[1] I use the term sui generis coup to describe the invasion of the US capitol since the mob did not have a concrete end goal or the means to effectively enforce a regime change, but it was still an attack encouraged by the executive against another government body and the overall democratic process. Many media outlets and politicians in the US refer to the attack as a coup (see Coleman, 2021; Graham, 2021) and I am eager to see how the academic literature will classify the event.

risk continues to grow to accommodate the need to understand the factors that drive the probability of a coup attempt. This thesis draws attention to previously unrecognized factors that influence the likelihood of a coup attempt and civil-military relations in general, namely secret police organizations and compulsory military service.

According to Powell and Thyne (2011), between 1961 and 2000 fifty coups surpassed the 25 battle-related deaths threshold of the Uppsala/Peace Research Institute Oslo (PRIO) armed conflict data set. Furthermore, nine of these cases resulted in more than 1,000 deaths and could thus be classified as a civil war based on the Correlates of War data set. Not only that, but the factors that influence coup risk, like civil-military relations and force structure, differ heavily from case to case. The Zimbabwe military is a strictly professional force whereas the Turkish and Bolivian armed forces rely heavily on conscription to fulfil their operational needs. On the other hand, authoritarian regimes in the former USSR, Asia, and the Middle East have established secret police units to keep in check political adversaries and the armed forces. To that end, Hugo Chavez formed a secret police organization in Venezuela to shield the regime from internal threats due to his adversarial relationship with the political establishment. Furthermore, military coups have different targets and priorities. While the Thai army displaced an interim government to impede democratization and solidify its grip over the political system, the military's decision to move against Presidents Evo Morales, Hugo Chavez, and Recep Tayyip Erdoğan was driven by their attempts to expand the powers of the executive and remake the status quo. Subsequently, coup risk is a timely affair since the factors that influence the military's propensity to move against the government are enduring and governments around the world still fall prey to praetorianism. Coup attempts act like seismic events that affect not only an individual political system, but when they occur in geopolitically important states, their destabilizing effect echoes throughout the increasingly inter-connected international system.

From my perspective, I decided to study this important topic because my own country, Greece, has had a violent history of military coups and still experiences the consequences of the 2016 coup in neighboring Turkey, namely in the form of political refugees and military officers seeking asylum in the country. What's more, I approach the issues of coup risk and civil-military relations in general from two institutions that (in)directly affect me as a Greek citizen: compulsory military service and the secret police. All male Greek citizens are obligated to serve in the armed forces and I was raised up with terrifying stories about the Junta's Military Police. As such, this study innovates by emphasizing on how underappreciated, yet essential features of civil-military relations, like compulsory military service, contribute to the probability of a coup attempt and civil-military relations. Specifically, the study examines a factor that enhances the links between society and its armed forces in the form of conscription as well as secret police organizations that disrupt those links in an effort to eradicate political dissent. In the first chapter I examine how conscription increases public support for the armed forces in democracies because of the increased ties between society and the military. Then in the second chapter I explore how conscription increases the likelihood of a coup in anocracies because of improved relations between society and its armed forces. Finally, in the third chapter I investigate how an autocrat may use the secret police to dismantle these ties with the identification and sanctioning of dissidents thus decreasing the willingness and opportunity of military officers to stage a coup. Hence, while conscription increases the ties between society and the armed forces, secret police have the opposite effect. Consequently, studying the two institutions and their effect on civil-military relations across different regime types is expected to produce meaningful results that will expand our overall understanding of civil-military relations. Therefore, the study contributes to the literature on civil-military relations by examining how conscription and the secret police affect public support for the armed forces and the probability of a coup attempt.

## *1.1 Literature Review*

Governments find themselves with the Sword of Damocles hanging over their heads since military might is necessary to preserve the state, but the military may also its capabilities to threaten government survival via a coup. To this end, the academic literature has explored in great length the socioeconomic and military factors that influence the likelihood of a coup attempt by the armed forces (Belkin and Schofer, 2003; Powell, 2012; Pilster and Böhmelt, 2011, 2012; Londregan and Poole, 1990; McMahon and Slantchev, 2015; Albrecht and Eibl, 2018; Johnson and Thyne, 2018; Koehler and Albrecht, 2019; De Bruin, 2018, 2020; Leon, 2014; Casper, 2017; Houle, 2016; Bell and Sudduth, 2017). The literature can be divided into two distinct categories; the factors that influence the willingness of the armed forces to topple the government and those that determine their opportunity to do so, like a government's coup proofing policies. Socioeconomic factors such as high poverty rates, levels of economic development, welfare state, or political instability affect coup risk since the armed forces are sensitive to social conditions and threats to the status quo (Londregan and Poole, 1990; Belkin and Schofer, 2003; Powell, 2012; Houle, 2016, Albrecht and Eibl, 2018). Regarding military interests, both high military spending and a high degree of force mechanization mitigate the prospects of military intervention in politics (Huntington, 1991; Powell, 2012; Leon, 2014; Albrecht and Eibl, 2018; Choulis, et al., working paper). Higher force mechanization may increase "the cost estimations of potential inter-unit, fratricidal conflict resulting from failed coordination, which might deter officers and soldiers from attempting and joining an intervention in the first place", and hence decrease coup risk due to increased opportunity costs for the military (Choulis et al., working paper, p. 3).

However, while the literature has examined thoroughly the sociopolitical factors that drive military intervention against the government, the effect of different military enlistment systems on praetorianism has eschewed academic scrutiny. Böhmelt, Pilster, and Tago (2017) assert

that states with a larger navy in relation to the army are more likely to experience a coup d'état since navy cadres originate from the middle class and naval bases are situated near the capital. Similarly, military academies are found to increase coup risk because they provide ample opportunities for officer networking (Böhmelt, Escribà-Folch, and Pilster, 2019). However, none of the existing studies has examined the effect of compulsory military service, also known as conscription, on coup risk. Von Bredow argues that conscription is used "as an organizational device to counteract anti-democratic political ambitions of the officer corps" (Von Bredow, 1992, p. 291, see also Adam 2012). Nevertheless, Ingesson et al. (2018) find no evidence in support of the position that conscription reduces coup risk in democracies. Hence, there is no clear link between regime type, conscription, and praetorian tendencies within the armed forces in the existing literature. Having said that, conscription in principle goes against certain essential features of coup proofing. Whereas governments exploit socioreligious cleavages and sectarian recruitment processes to isolate the armed forces from the rest of society (Brooks, 2019, p. 389), conscription has the opposite effect since it increases the military's overall visibility and improves its relations with other social groups (Gandhi, 2008; Khuri and Obermeyer, 1974; Vasquez and Powell, 2019). On that account, the study contributes to the literature on civil-military relations by shedding light to previously unrecognized positive and negative side effects of conscription. Particularly, along with Pr. Böhmelt and Dr. Bakaki we find that European countries with a conscription-based recruitment system tend to be characterized by higher levels of support for the military. Additionally, the study examines the effect of conscription on coup risk but, unlike Ingesson et al. (2018), its scope is not limited to democracies since autocracies and anocracies are also included in the analysis. Most pertinently, I find robust evidence that conscription increases the probability of a coup attempt in anocratic regimes.

Continuing, in a detailed examination of Baathist regimes, Makara concludes that neither Hafez al-Assad or Saddam Hussein experienced a coup, even after decisive military defeats, because both dictators had implemented meticulous coup proofing policies that had rendered coup attempts from the military impossible (2013, p. 335). Coup proofing involves the exploitation of ethnic, religious, and tribalist ties to fill the military ranks with loyal subordinates, a promotion system based on loyalty towards the political leadership instead of merit, the imposition of absolute and direct control from the political leadership over the military, the formation of paramilitaries to counterbalance the army, and the fragmentation of the military apparatus into rival organizations (O'Donnell, 1973; Nordlinger, 1977; Janowitz, 1977; Horowitz, 1985; Quinlivan, 1999; Belkin and Schofer, 2003; Pilster and Böhmelt, 2011, 2012; Goldstone, 2011; Feaver, 1992; Nassif, 2015; Singh, 2014; Brown, Fariss, and McMahon, 2016; Albrecht and Eibl, 2018; Brooks, 2019; Dragu and Przeworski, 2019; Escribà-Folch, Böhmelt, and Pilster, 2019, De Bruin, 2018, 2020).

Accordingly, structural coup proofing captures the fractionation of the military apparatus in rival organizations and the establishment of pro-government paramilitary units to counterbalance the regular army (Böhmelt and Pilster, 2015, p. 160-161; Belkin and Schofer, 2003:598; Powell, 2012; Driscoll, 2015; Albrecht and Eibl, 2018). Hence, if army officers attempt a coup against the government, they would have to overcome the pro-government paramilitaries. As a consequence, when paramilitary units are present in a state, the costs of fighting in a potential coup attempt are significantly increased. Importantly, in many instances the pro-government paramilitaries receive better training and have access to more advanced equipment than the regular army thus further decreasing the chances of a successful coup attempt by military officers. To give an example, Saddam Hussein's Republican Guard was better equipped than the conventional Iraqi military (Quinlivan 1999, p. 145). However, coup proofing produces a series of pivotal negative externalities, like decreased military

effectiveness due to disruptions in military training, command hierarchy, and equipment supply of the regular armed forces (Pilster and Böhmelt, 2011). Additionally, the extensive fragmentation of the security apparatus or even changes in an army's ethnic composition may result in a reactionary coup by military officers (Böhmelt and Pilster, 2015; Harkness, 2016). For instance, Idi Amin successfully expelled Milton Obote's government in Uganda as the security apparatus was incapable of effectively responding to the coup attempt due to extreme fragmentation of military authority and the absence of a commanding paramilitary force loyal to the government (Decalo, 1989, p. 10-11). Similarly, Ghanaian President Kwame Nkruma was deposed by a preemptive Ewe-led military coup in 1966 because of his attempts to establish co-ethnic units and pro-government paramilitary organizations (Harkness, 2018, p. 147; Austin, 1985; Hettne, 1980). The presence of paramilitaries may also incentivize extensive fighting among the warring factions and thus escalate coups into full-scale civil wars (De Bruin, 2020).

Nevertheless, while the literature stresses the importance of counterbalancing for regime survival, the role of intelligence agencies on coup proofing, in particular the secret police, has not received similar attention despite operating differently than conventional paramilitaries. For Barros, authoritarian leaders supervise the entire state apparatus "by placing intelligence agents within the state hierarchy to monitor subordinates" (2016, p. 962-67). While paramilitaries, like presidential guards, imitate the organization, training, and operations of the regular army, secret police are intelligence services that utilize violent police tactics and surveillance operations to neutralize an autocrat's political rivals. The operational repertoire of the secret police comprises of "searches, arrests, interrogation, torture, and indefinite detention" to extract information (Plate and Darvi, 1982, p. 11), as well as intelligence gathering operations to monitor dissidents (Plate and Darvi, 1982, Greitens, 2016, p. 45). Therefore, secret police forces rely on espionage to intervene in a coup's planning and

coordination phase, whereas standard paramilitary units use conventional military means to increase the costs of a coup during its execution phase. Consequently, it is imperative to disaggregate the effect of secret police on the probability of a coup attempt from other paramilitary units.

With that in mind, the study contributes to the literature of civil-military relations by highlighting the previously overlooked influence of conscription and secret police on coup risk and public support for the armed forces. Specifically, conscription is found to increase public support for the armed forces in European democracies as well as the probability of a coup attempt in anocracies. On the other hand, secret police are found to decrease the likelihood of a coup attempt in autocratic regimes. However, the thesis' overall contribution is not limited to its findings. The study further advances the civil-military relations literature by expanding existing, widely used data sets. To be precise, I expanded Toronto's conscription variable (2017) based on information from the CIA Factbook data on conscription (2021) to include information from 2001 up to 2018. What's more, you can find in the study the first large-n variable on secret police organizations with information from 1950 to 2018 in authoritarian regimes across the world which was constructed based on information from qualitative or small-n quantitative studies. Therefore, the study contributes to the civil-military relations literature through its findings but also by expanding existing data or introducing new data on secret police organizations that may further facilitate the study of autocratic survival.

Correspondingly, the thesis' findings bring forth significant policy implications. While all-volunteer forces may be more effective than conscription-based ones, the increased public support for the armed forces due to conscription may clear the way for the government to increase defense spending or initiate military alliances and military interventions without strong public opposition. Additionally, while conscription supplies the armed forces with cheap manpower and weakens parochial loyalties (Meyerle et al., 2011, p. 3), anocratic governments

must carefully design its application and monitor its implementation to avoid risks associated with an increased probability of a coup d'état. Moreover, the study highlights the fact that secret police improve the survival prospects of an autocratic leader by decreasing the probability of a government turn over via a coup. Not only secret police units decrease coup risk, but secret police agents are found to employ intelligence-oriented coup proofing operations, like informant networks, that set them apart from other paramilitary organizations and are intertwined with political repression and human rights abuse. Therefore, the study produces notable policy implications that profoundly affect how we consider the cost-benefit analysis of a conscription-based army compared to an all-volunteer army in addition to exploring the role of secret police in an autocratic regime.

## *1.2 Chapter Summary*

Following a holistic overview of the literature on civil-military relations, with emphasis on coup d'état, I present a summary of each of the thesis' three chapters as well as their contribution to the literature and potential policy implications arising from the findings.

The first chapter[2] examines how conscription increases public support for the armed forces in European democracies. We argue that conscription, more so than voluntary-recruitment systems, can reach out to and socialize larger segments of the society in line with the military's values. This is done along a direct and an indirect path: first, personal involvement with the armed forces tends to be linked to more support for the military. As conscription reaches more segments of the society than all-volunteer forces, support in the wider public should be more strongly pronounced. Second, there is a spill-over effect from individuals directly exposed to the military to third persons, an indirect effect. The increased interaction and interconnection

[2] The chapter is co-authored with Pr. Zorzeta Bakaki and Pr. Tobias Böhmelt and it is published at the Defence and Peace Economics journal.

of the armed forces and the society is expected to facilitate the ideational identification between the two and, in the end, to lead to more positive views of the armed forces. Using a unique data set comprising information for 34 European states in 1997–2017, we find robust evidence that countries with conscription-based recruitment tend to be characterized by higher levels of support for the military. This result greatly adds to the debate about the type of military-recruitment system countries should implement: abolishing compulsory military service is usually seen as increasing efficiency and performance; yet, a positive – and previously unknown – externality of conscription that we identify is a higher degree of support by the public, which is pivotal for, inter alia, defence-policy implementation, military interventions abroad, budget considerations, or the participation in military alliances.

In the second chapter, I investigate how conscription affects the probability of a coup attempt. This chapter suggests that conscription produces an unappreciated side-effect in domestic politics as it increases the likelihood of coup d'état in anocratic regimes. Utilizing data from 1950 to 2018, the study measures the impact of conscription on coup risk in anocracies and non-anocracies and provides significant evidence that conscription increases the probability of a coup attempt in anocracies. It is worth noting that I do not argue that conscripts stage military coups. Instead, I advance the argument that conscription as an institution increases coup risk in anocracies because it improves the ties of the armed forces with society and enables the general public or interest groups to collaborate with the armed forces against the regime. This chapter furthers our understanding on the prospects of military intervention in politics and demonstrates how interest groups may use conscription to overcome collective action restrictions present in anocracies.

In the third chapter, I bring attention to the coup proofing capabilities of the secret police. Secret police are a key institution of the authoritarian security apparatus, but we know little about how they affect civil-military relations. I argue in this chapter that autocracies with secret

police are less coup prone versus other autocracies. Secret police disrupt a coup's planning and coordination phase. Specifically, secret police agents employ surveillance operations and spy networks to decrease the willingness and opportunity of military officers to organize a coup attempt. To measure the effect of secret police on coup risk I introduce a novel variable on secret police organizations in autocracies for years 1950 to 2018. I find significant evidence that autocracies with secret police are less likely to experience a coup d'état compared to other autocratic regimes. The results highlight the prominent role of intelligence services on autocratic survival.

# 2 Public Support for the Armed Forces: The Role of Conscription

## *2.1 Introduction*

Since the "levée en masse" that originated during the French Revolutionary Wars, modern conscription, i.e., the compulsory enlistment of people in the military, has been employed by countries across the globe as the basis of large and powerful military organizations (Woloch, 1986; Krebs, 2004). For a long time, conscription was the primary approach for many countries to meet the demands of their armed forces for active – and rather cheap – personnel, to create a sufficiently large reserve pool, and to deter foreign adversaries (Poutvaara and Wagener, 2007a,b; Horowitz et al., 2017). Over the last few decades, however, to a large degree since the end of the Cold War, more and more states abolished conscription and, instead, implemented professional militaries with all-volunteer forces, which derive their manpower from volunteers. Among other factors, domestic and international ones, a higher degree of

inefficiency[3] and ineffectiveness of conscript-based armed forces are reasons frequently brought forward for such a change (see, e.g., Warner and Asch, 2001; Jehn and Selden, 2008; Horowitz, Simpson, and Stam, 2011; MacLean, 2008; Bove and Cavatorta, 2012; Bauer et al., 2014; Asal et al., 2017; Cohn and Toronto, 2017; Toronto, 2017; Ingesson et al., 2018; Kestnbaum, 2002; Torun, 2019).

While not necessarily questioning these arguments about efficiency and performance in favor of professional militaries, we argue that conscription might be linked to a positive – and previously unknown – externality: a higher degree of support for the armed forces among the general public. Eventually, our theory suggests that conscription is more likely than voluntary-recruitment systems to reach out to and socialize larger segments of the society in line with the military's values. Conscription deepens social and professional interaction, which reduces institutional, professional, and ideological cleavages between society and the military (Gandhi, 2008, p. 50; Moskos, 1970). This is done along a direct and an indirect path: first, personal involvement with the armed forces tends to be linked to more support for the military. As conscription reaches more segments of the society than all-volunteer forces, support in the wider public should be more strongly pronounced. Second, there is a spill-over effect from individuals directly exposed to the military to third persons, an indirect effect. The increased interaction and interconnection of the armed forces and the society is expected to facilitate the ideational identification between the two and, in the end, to lead to more positive views of the armed forces. Conscription is thus likely to have a substantial impact on how society interacts with and views the armed forces, with implications for how policymakers implement defense policies.

[3] Compulsory service distorts the allocation of resources inside the military due to the oversupply of cheap unskilled labor (Hansen and Weisbrod, 1967). In addition, conscription is supposed to lead to an economic output loss due to misallocation of resources (Poutvaara and Wagener, 2007a,b; Warner and Asch, 2001, pp. 172-173). However, there are also counterarguments. Consider, for example, minority groups such as the Druze population in Israel. Conscription has a positive effect on future earnings of Druze men as a result of networking that conscription allows for (Asali, 2019).

Previous studies have examined public support for the military, but have done so less systematically, partly too descriptively, and mostly focused on a limited set of countries, which may have limited the generalizability of their findings. Hines et al. (2015), for instance, point to the importance of public opinion in supporting the military and their missions, but merely describe the public's view of the British military and for deployments abroad as part of the War on Terror. This study lacks an explanation for why this might be the case, though. Horowitz and Levendusky (2011) show that conscription can be linked to lower support for war, but they do not examine the more general attitude toward the armed forces as such.

We discuss more studies mirroring these in the next section, but by presenting robust evidence that countries with conscription-based recruitment systems tend to be characterized by a higher level of support for the military, we add to the academic and policy debates about the consequences of conscription. En route, we also contribute to discussions about whether to implement – or reinstate – conscription in the first place. Citizens', and voters', views set important constraints on policymakers in democratic forms of government and successful competition for office remains to be driven by what the larger public wants (e.g., Downs, 1957; Soroka and Wlezien, 2010). Therefore, democratic leaders have an incentive to take into account the public's views about policy issues. Without public support, the chances to retain office may decrease. On one hand, public support for the armed forces is a key determinant for policymakers' office-seeking. On the other hand, and arguably even more so, it is pivotal for defense-policy implementation, military interventions abroad, budget considerations, or the participation in military alliances. Our research then offers direct and relevant guidance for policy considerations in countries like Germany, where reinstating military conscription after having scrapped conscription in the past is openly discussed[4].

[4] See online at: https://www.dw.com/en/germans-debate-return-of-military-conscription-and-service-for-men-and-women/a-44962067.

## *2.2 The Direct and Indirect Effects of Conscription on Public Opinion*

Our central claim is that conscription-based recruitment systems induce that larger parts of the society are directly and indirectly involved in contributing to the staffing and functioning of the armed forces (Feaver and Kohn, 2001; Bacevich 2013). Wider societal segments can thus be reached and socialized[5] along military values, and this leads to the outcome that conscription is plausibly more strongly linked to high levels of public support for the military.

This argument is based on the idea that the end of compulsory military service may be linked to lower engagement between the armed forces and society, subsequently contributing to the emergence of a so-called "civil-military gap" (e.g., Rahbek-Clemmensen et al., 2012). Specifically, for example, Brooks (2019) suggests that ending conscription in 1973 and the following lower number of citizens who directly served or were indirectly exposed to the military explains the increasing civil-military gap in the US. Forster (2006) observes that abolishing conscription in large parts of Europe has not only lowered the interaction between the armed forces and society, but, has also generated a "without me" attitude toward the military (Forster, 2006, p. 97). Deverell et al. (2015, p. 389) point into the same direction, i.e., a strong socialization impact of conscript-based militaries and a higher degree of reaching out to society, when stating that the Swedish armed forces were "anchored in society by ways of public education, according to the motto "public anchorage." […] This was largely achieved through conscription." Strachan (2010) argues that compulsory military service, although historically the exception in the UK, softened the divide between the armed forces and the British society. Finally, Vennesson (2003) reports that younger and urban individuals somewhat distanced themselves from the military and its values since conscription ended in

[5] Socialization is defined as the "process of inducting actors into the norms and rules of a given community" (Checkel, 2005, p. 804). The "community" in our case is the military. Norms or values are defined as "standard[s] of appropriate behavior for actors with a given identity" (Finnemore and Sikkink, 1998, p. 891).

France in 1996. This civil-military gap and the need of citizens to "experience military life" motivated President Macron's efforts to gradually re-establish compulsory national service in 2018 (Zaretsky 2018). Even outside Europe, the United Arab Emirates and Qatar established conscription for the first time in 2014 and 2015, respectively, to encourage patriotic sentiments and raise the prestige of the armed forces (Barany 2018, p. 133): conscription in the Gulf successfully inculcated patriotism among the youth and is "one of the key instruments of forging" a cohesive nation.

In what follows, we take these arguments one step further by suggesting that conscription has a positive – and previously unknown – externality in that it is associated with a higher level of support by the public for the armed forces. In shedding light on how this type of military recruitment shapes people's understanding, beliefs, and preferences toward the military, we identify two main channels of influence from conscription to public military support: a direct and an indirect one.

In terms of the direct effect, conscription recruits large parts of the society for the armed forces who then acquire first-hand experience on the functioning of the military apparatus, its corporate identity, and the overall culture and ethos. The segments of the society that compulsory services reach out to and, in turn, socialize are likely to be larger than in the case of all-volunteer forces. Familiarity with the military apparatus makes individuals believe in the need and importance of the armed forces, which plausibly raises their own level of support for the military. Citizens are transformed into soldiers primarily through military training and socialization (see also Checkel, 2005; Finnemore and Sikkink, 1998)[6]. Soldiers then become accustomed with the core principles of the institution and are exposed to the corporate interests and ideology of the institution (Finer, 1988, p. 41; Geddes, 1999, p. 126; Eagleton, 1991).

[6] Discussing conscription in the Soviet Union, Eichler (2012, p. 21) denotes that the primary function of military service was "that of educator and socializer [...] a key tool in the proper ideological socialization of Soviet men."

Extensive training shapes the civic identity of recruits along military norms such as social responsibility and the professional identity of the armed forces (Huntington, 1957; Janowitz, 1960; Nordlinger, 1977, pp. 14-16; Moore, 2009, p. 75). This facilitates the development of a group mentality and a sense of comradeship (Janowitz, 1960; Wong et al., 2003, pp. 9-11; Varin, 2015, p. 44). The exposure to new role models in the military prompts the draftees to reconfigure their identity (Elder, 1986, p. 236); conscripts develop a sense of belonging as they socialize within and with the military environment. This shared "education" in the military likely enhances the view toward the institution as more legitimate (Adams and Charrad, 2011, p. 7). Johnston (2001, p. 493) refers to this process more generally as "persuasion," i.e., one socialization mechanism where interactions among actors lead to a real change of individual opinions and attitudes (see also Gilardi and Wasserfallen, 2016, p. 51).

In addition, social influence is a second mechanism of socialization, which does not require a change of preferences, but induces norm-conforming behavior through "the distribution of social rewards and punishments" (Johnston, 2001, p. 499). Regarding the latter, i.e., punishments, draft evasion frequently constitutes a direct threat to the political status quo and the legitimacy of conscription as a civic institution (Conway, 2012, p. 19). It may be accompanied by a social stigma and could be prosecuted by military and civilian courts (Varin, 2015, p. 15). Conversely, individuals who have fulfilled their compulsory military service obtain a certain degree of social prestige[7]. In this context, Eichler (2012, p. 2) reports that public opposition against conscription by males is perceived as "unmanly" behavior by large parts of the Russian society. As a result, there is a significant ethical acceptance attached to military service as a civic obligation, while ex-conscripts support the institution that awarded them with social prestige (see also Johnston, 2001).

[7] For instance, in pre-1967 Greece, service in the armed forces was dominated by the "pallikari-leventis-philotimo self-image syndrome" of social and cultural origin, which declared the high levels of moral virtue and code of honor surrounding service men (Kourvetaris, 1971, p. 1046).

The crucial point of this direct avenue for how compulsory military service influences public support is then that conscription, in comparison to volunteer-recruitment systems, is able to reach out, draft, and eventually influence and socialize more elements and segments of the society, thus enabling the propagation of military norms and values more strongly into the rest of the social web through "citizens in uniform."[8] Conscription in the Turkish Armed Forces illustrates this as well: 53.1% of a recent survey's respondents claim they expected to re-enlist in the army with "liking" the military being the most prominent reason (38%) (Yildirim and Erdinç, 2007, pp. 17-18). Poutvaara and Wagener (2009, p. 15) emphasize consistently that as conscription potentially reaches large parts of the society, it provides the armed forces with "the means to convey the importance of national defense and security to the minds of young draftees."

Next to the direct influence of conscription on public support for the armed forces, primarily via individuals' experience, we also contend that there is an indirect mechanism. Conscription draws recruits from virtually all social and parochial groups into the military. This, in turn, enables the proliferation of the military ethos and culture to the entire social web (Khuri and Obermeyer, 1974, p. 62). That being said, it is also likely that the families, other relatives, and friends of recruits are exposed to military values during and after the service of conscripts and become familiar with the role and purpose of the armed forces. In turn, conscripts operate as a conduit that propagates military principles, mindset, and ethos to the rest of society by interacting with their social circles. For instance, by sharing their experience in the armed forces or by talking about the military identity, they function as "brokers" (e.g., Hafner-Burton et al., 2009) between the military and other segments in the society, which may increase the

[8] Or "Staatsbürger in Uniform" as the guiding principle of the German Armed Forces as developed during the time of conscription.

degree of identification – and support – of the latter with and for the armed forces (see also Goodpaster and Huntington, 1977, p. 23).

Clearly, the indirect channel via influencing family members, other relatives, or friends is given in all-volunteer forces as well, but, similar to our argument above, the potential to reach out to more segments of the society is more strongly given for conscription as more people from virtually all segments of the population are drafted with a compulsory military service. With conscription, every part of society contributes to the armed forces rather than a specific social crowd and groups across the entire social spectrum are incorporated into the military (Posen, 1993, p. 88). Military organizations that are based on conscription then likely have links with a wider social spectrum, and more social groups develop an "in-group mentality" toward the armed forces. The wider public may more strongly identify with the goals and activities of the military than in the case of all-volunteer forces, thus, increasing popular support towards the military.

In sum, we claim that conscription leads to a higher level of public support for the armed forces via a direct and an indirect mechanism. The former pertains to the socialization of conscripts as such, while the latter refers to recruits functioning as brokers who influence then wider parts of the society. These two avenues may apply to professional and all-voluntary organizations as well[9], but are potentially more strongly pronounced in the case of conscription where more personnel, across more diverse societal segments, is exposed to, influenced by, and socialized according to the armed forces. Along these, lines hypothesize that *if states have conscription, the level of public support for the armed forces is likely to be higher.*

[9] Finally, there is a likely self-selection effect given only for all-voluntary forces: individuals choose to enrol, potentially as they already identify with the military, its values, and ethos. Self-selection is not a theoretical or an empirical issue in the case of conscription, however, where individuals are drafted by the state authorities.

## *2.3 Empirics*

### 2.3.1 Data and Method

We have compiled a unique data set comprising information on public opinion on the armed forces, conscription, and a series of control variables for 34 European states between 1997 and 2017. The sample's country-time coverage is driven by data availability of the core variables of interest, most crucially public support for the military, which we operationalize via trust toward the armed forces. The country-year is the unit of analysis in this time-series cross-section data set (*N*=542 observations).

Our dependent variable, the public's trust in the armed forces, is based on the Eurobarometer survey[10]. As of Eurobarometer 48 (completed fieldwork in 1997), the Eurobarometer has consistently, and for a sufficiently large set of countries, included "the army" as an option for the following item: "I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it." Trust is an indicator that is directly tied to people's agreement with and, thus, support for an institution, its functioning, ideology, ethos, and culture (see also Devos et al., 2002). After dropping the "don't know" answers and missing values, we use this item to code the share of individuals in the population who mentioned they trust the army as an institution.

[10] Available online at: https://zacat.gesis.org/webview/index.jsp. Note that Iceland is part of our sample, but does not maintain a standing army. Omitting this country from our analysis does not alter the substance of our findings, however.

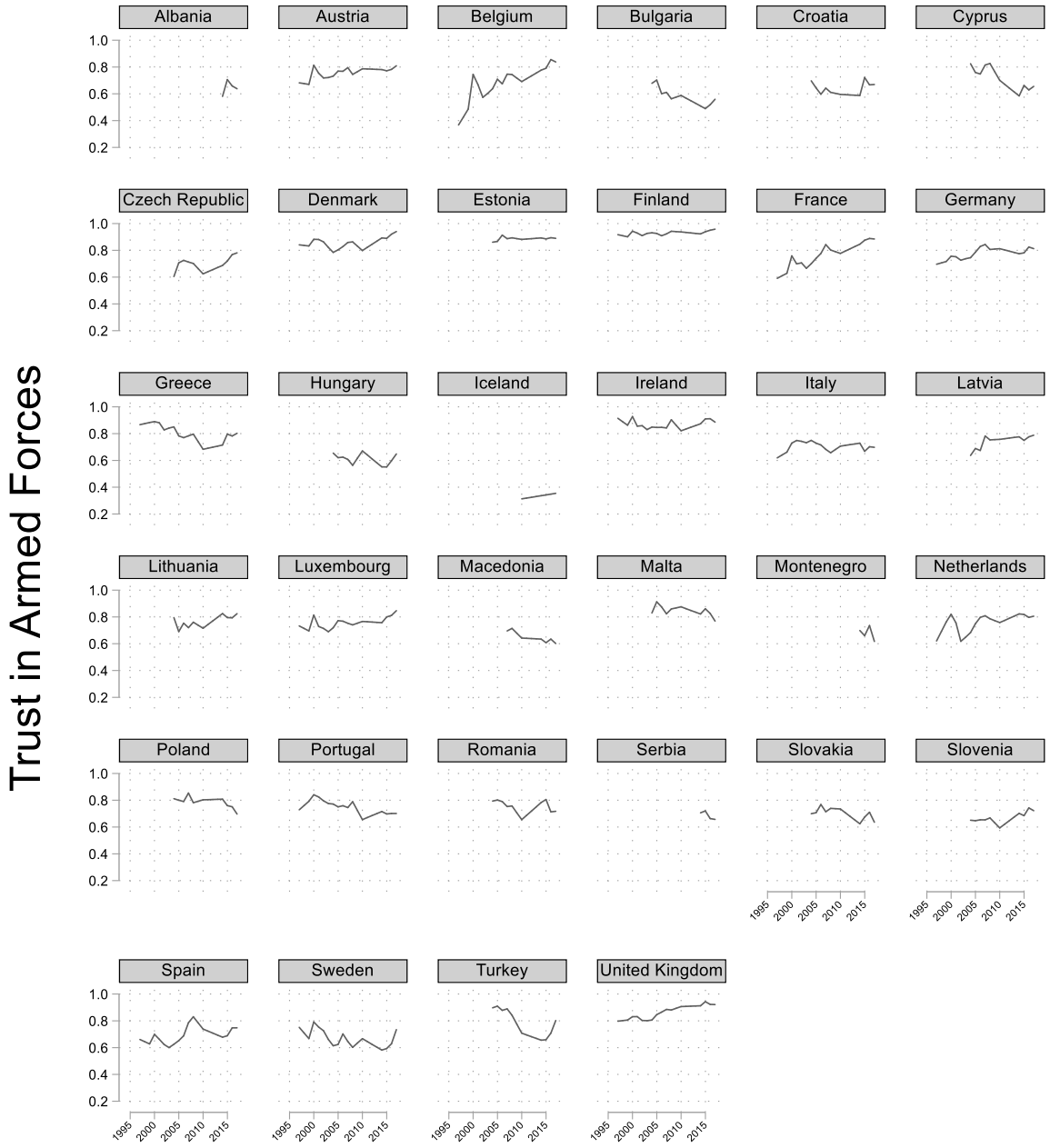



**Figure 1.** Trust in the Armed Forces in Europe over Time
*Note:* The variable *Trust in Armed Forces* captures the percent of the population that stated they trust the army as an institution.

To this end, we aggregated the individual-level information to the country level by averaging across respondents. We employ the average value per country-year in case more than one

Eurobarometer survey existed in a given year and linearly interpolate missing years between countries. The final variable theoretically ranges in [0; 1], with higher values pertaining to a larger share of respondents who trust and, thus, support the military. For example, in the Eurobarometer 88.3 (2017), 71.5 percent of the Spanish respondents or 93.4 percent of the Danish respondents mentioned that they trust the army as an institution. The final item's mean value is 0.744 (standard deviation of 0.111) with a minimum of 0.313 and a maximum of 0.958. Figure 1 plots the public trust toward the armed forces for all states included in our analysis across the years for which data are available.

Given the scale of our dependent variable, we estimate OLS regression models with panel-level heteroskedastic errors to address country-specific idiosyncrasies[11]. To address temporal autocorrelation in our time-series cross-section data, we incorporate a log-transformed year variable as public opinion may follow a linear trend over time. Adding this variable further ensures that we can rule out a mere trend in the data as opposed to a systematic effect of conscription on trust toward the armed forces. We also specify for the model estimations that, within panels, there is first-order autocorrelation and that the coefficient of this process is common to all panels. Finally, the appendix presents models that are based on random and country-fixed effects to further control systematically for countries' common exposure to similar exogenous (unit-level) factors and time-invariant, but idiosyncratic factors affecting people's trust in the military.

For our main explanatory factor, conscription, we employ a binary and a count variable in separate models. First, based on Toronto (2017; see also Asal et al., 2017), there is a binary variable coding whether a country's military recruitment system is based on conscription (1)

[11] For instance, the military is more embedded in some states, while others could have an *ex-ante* lower level of support for the armed forces due to, e.g., historical reasons. To illustrate this, consider the trust in the armed forces, which is at around 86 percent in the UK on average, but only at around 77.5 percent in Germany (the difference is statistically significant with $t$=5.0428, $p$=0.000).

or volunteer (0). As described in the codebook of Toronto (2017), "the method of recruitment is how a state satisfies its military manpower requirements. It is considered to be 'conscription' if the principal means of induction into the [active (not reserve)] military is the use of force, be it through legal means (e.g., conscription) or extralegal means (e.g., impressment), or where individuals cannot realistically say 'no' to military service. The method of recruitment is 'volunteer' if individuals enter the military as a matter of choice."[12] In our sample, 40 percent of all country-years are characterized by conscription (standard deviation of 0.491). Second, Toronto (2017; see also Asal et al., 2017) also provide information on the duration of an enlistment system in use or when it was changed. We re-coded this to create a variable counting the years since the last conscription-year, i.e., we capture the period of time in which all-volunteer forces exist in a country."[13] This second core explanatory variable has a mean value of 2.78 years (standard deviation of 4.09) and ranges between 0 and 16 years.

We also control for a series of other influences that may well be correlated with trust in the military at the domestic level. Specifically, we consider variables such as demographics, left-right self-placement, and country-level economic characteristics that enjoy near-consensus support in the literature as main drivers of public opinion. First, we control for the position of the median voter using Eurobarometer data on respondents' left-right self-placement on a scale

[12] Moreover, according to the codebook of Toronto (2017), "[s]tates that allow for conscientious objection can still be considered to use conscription as the method of recruitment, as long as conscription is the principal means of satisfying the military manpower requirement. States that use a selective service system (e.g., a non-universal draft that distinguishes inductees from non-inductees based on economic necessity) are considered to use conscription as the method of recruitment as long as the military manpower requirement is still typically satisfied via the draft. Conscription is considered the principal means for satisfying the military manpower requirement as long as a nontrivial number of recruits are enlisted through force."

[13] We only consider this variable when constraining the sample to countries that actually changed their recruitment system at some point in Toronto (2017). States that always had a volunteer system in place during the sample period are omitted from analyses that rely on our second core explanatory variable. This approach helps us to exploit more thoroughly variation in conscription as we not only examine changes between states, but also within. The descriptive statistics provided are based on the constrained sample.

of 1 (left) to 10 (right) (Schmitt and Schotz, 2005), using Tukey's method (1977) to calculate the median from the individual-level data. In our sample, this variable has a mean value of 5.325 (standard deviation of 0.508).

Second, we include two variables i.e., unemployment and population size, which are log-transformed to account for their skewed distributions, from the World Bank Development Indicators. First, public opinion may be linked to states' economic development. We use unemployment, which is defined as the logged total number of unemployed people as a share of the total labor force[14]. Second, population size is likely to be linked to the degree of preference heterogeneity in a society, which in turn could affect the public's trust in the military. We rely on a country's midyear total population, which counts all residents regardless of legal status or citizenship (except for refugees not permanently settled).

Before discussing our empirical findings, note that there might be an endogeneity issue to the extent that causality not only flows from conscription to public opinion, but also the other way round. For example, it may be plausible that public opinion has influenced whether states have conscription systems in the first place and whether they abolished them or not. However, theoretically, the study of conscription has taught us that whether a country has conscription or a different recruitment system is most often a result of socio-historical and geo-political reasons – public opinion is – if at all – a negligible factor (Poutvaara and Wagener, 2009; Mjoset and Van Holde, 2002; Asal et al., 2017; Moskos et al., 2000). Empirically, we estimated models with fixed and random effects that help addressing states' self-selection into conscription based on (unobservable) unit-level or idiosyncratic influences, e.g., by capturing a country's individual threat level that may shape which military recruitment system is in place, and the results are presented in the appendix.

[14] Employing the level of GDP or GDP per capita instead produces virtually identical results. We prefer to focus on unemployment, though, as this information seems more visible and understandable to the general public.

### 2.3.2 Empirical Analysis

Table 1 summarizes our main models. Models 1-2 are "naive" estimations that merely comprise the year trend and the respective core explanatory variable but omit the controls. The latter are added in Models 3-4. We omit the controls in the first two estimations to demonstrate that our main findings are not affected by their inclusion or exclusion. Interpreting the results in Table 1 is straightforward as the entries are marginal effects. The corresponding substantive-effects plots are presented in Figure 2.

*Conscription* is positively signed and statistically significant in Models 1 and 3 of Table 1. Adding or dropping control variables does not affect the robustness of this finding. Similarly, and as expected, *Volunteer Years* is associated with a negatively signed coefficient, highlighting that more years passed since conscription are systematically associated with lower levels of trust in the military. Thus, we obtain robust evidence for our theoretical arguments: conscription does influence public opinion on the armed forces. Direct and indirect mechanisms surrounding compulsory military service seem to induce that conscription indeed heightens support for the armed forces, which is in line with our theoretical expectations.

Substantively, consider Figure 2 that depicts the marginal effect of *Conscription* and the predicted values of *Trust in Armed Forces*, our dependent variable, for values of *Volunteer Years* while holding all other variables constant at their means. On one hand, the left panel in Figure 2 emphasizes that conscription positively influences trust in the military. On average, the trust in the army as an institution is about 2 percentage points higher in countries with conscription-based recruitment systems. On the other hand, the point estimate of the predicted values decreases from about 76 percent to less than 70 percent when raising *Volunteer Years* to 16 years. That is, for 16 years with a volunteer system, the trust in the armed forces falls on average by about 7 percentage points.

Linking these findings to our theory, we find strong support for our expectations. Although conscription-based recruitment systems may seem less efficient and effective than volunteer-recruitment processes (see, e.g., Warner and Asch, 2001; Jehn and Selden, 2008; Horowitz, Simpson, and Stam, 2011; MacLean, 2008; Bove and Cavatorta, 2012; Bauer et al., 2014; Asal et al., 2017; Cohn and Toronto, 2017; Toronto, 2017; Ingesson et al., 2018; Kestnbaum, 2002; Torun, 2019), conscription reaches – directly and indirectly – broader aspects of the society, more deeply influences its members, and more strongly socializes the public than all-volunteer forces.

**Table 1.** Conscription and Public Support for the Armed Forces

| | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Conscription | 0.0198** | | 0.0191** | |
| | (0.0095) | | (0.0097) | |
| Volunteer Years | | -0.0044** | | -0.0037* |
| | | (0.0020) | | (0.0021) |
| Population (ln) | | | 0.0077 | -0.0031 |
| | | | (0.0084) | (0.0069) |
| Unemployment (ln) | | | -0.0406*** | -0.0321*** |
| | | | (0.0095) | (0.0112) |
| Median Voter | | | -0.0005 | -0.0019 |
| | | | (0.0055) | (0.0055) |
| Temporal Trend | 2.0117 | 4.3869 | 4.3585** | 3.7471 |
| | (2.1794) | (2.7849) | (2.1001) | (2.8500) |
| Constant | -14.5691 | -32.6026 | -32.4440** | -27.6075 |
| | (16.5752) | (21.1755) | (15.9716) | (21.6941) |
| Observations | 542 | 378 | 527 | 378 |
| RMSE | 0.0435 | 0.0391 | 0.0426 | 0.03891 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

The "citizen in uniform" as a guiding principle of the German Armed Forces thus does have its validity, and our research shows that the intentions originally behind the use and development of this term have apparently been fruitful not only in Germany, but also other,

conscript-based countries. These findings provide important lessons. Public opinion on the armed forces is, therefore, likely shaped by conscription – a recruitment approach that has been deemed inefficient and ineffective in the past (see, e.g., Warner and Asch, 2001; Jehn and Selden, 2008; Horowitz, Simpson, and Stam, 2011; MacLean, 2008; Bauer et al., 2014; Asal et al., 2017; Cohn and Toronto, 2017; Toronto, 2017; Ingesson et al., 2018; Kestnbaum, 2002; Torun, 2019). Our work does not necessarily question that more professional-style, all-volunteer armed forces lower costs and enhance effectiveness, but we do show that conscription has a positive side-effect, which has been previously overlooked but is one that is crucial – especially for democratic policymakers.

Finally, the results concerning the control covariates are mixed. On one hand, the temporal-trend variable is positively signed throughout the models in Table 2, but only reaches conventional levels of statistical significance in one estimation. Thus, there seems to be at least some support for temporal trend in our data. On the other hand, *Unemployment (ln)* is the only substantive predictor that exerts a consistently significant impact on our outcome variable. Substantively, for a 10-percent increase in unemployment, the trust in the armed forces is lower by about 0.0031. All other control variables are statistically insignificant.

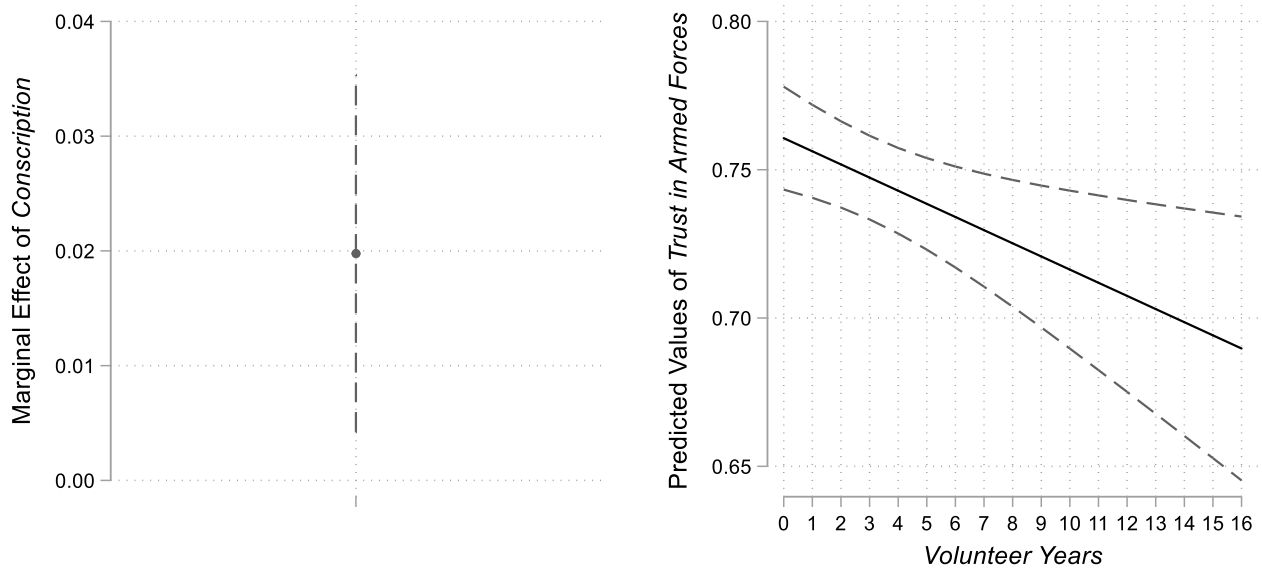



**Figure 2.** Substantive Quantities of Interest
*Note:* Dashed lines pertain to the 90 percent confidence intervals; estimates are based on Models 1-2.

We probe the robustness of our findings with several additional analyses, which are presented and discussed in the supporting information. First, next to statistical significance, we assess the out-of-sample heuristics of our core predictors to demonstrate that *Conscription* and *Volunteer Years* have predictive power as well. Second, we estimate a series of random-effects and fixed-effects models to control more thoroughly for unobserved country-specific characteristics. Second, as the public's view toward the military may have fundamentally changed with the 9/11 events and the subsequent War on Terror, we re-estimate our core models while incorporating a binary variable distinguishing the period before and after the 2001 terrorist attacks. Finally, some values of *Trust in Armed Forces* are linearly interpolated. We omit these interpolated values for a robustness check and only employ actually observed values of our dependent variable.

## *2.4 Conclusion*

Many states moved away from conscription and implemented all-volunteer forces over the past few decades, especially after the end of the Cold War. The primary motivation behind such policy changes is frequently to achieve more efficiency and a higher level of performance of the armed forces. We largely subscribe to these arguments but sought to shed light on a previously unknown consequence of conscription that may spark a new debate about the type of recruitment system countries should rely on. Specifically, we theoretically argued and presented robust empirical evidence that countries with compulsory military-recruitment systems tend to be characterized by a higher level of public support for the armed forces. According to our theory, there are direct and indirect mechanisms at play that make it likely that conscription and more support for the military are positively related to each other. The empirical findings, based on data from the Eurobarometer surveys since 1997, crucially support these claims. A series of robustness checks presented in the appendix further increases the confidence in the validity of our results.

The policy implications of our work are both straightforward and important. The decision to implement a more professional, all-volunteer force may certainly be driven by considerations of efficiency and effectiveness, but conscription does have other, and previously overlooked, advantages as well. Clearly, the access to a large pool of cheap labor is one of the benefits of a compulsory service, but an effect we identify with our research is a higher level of public support for the armed forces. In particular democratic leaders will be interested in this finding: not only are their fate in office and electoral success driven by the views of the general audience, but also the successful implementation of policies as such. All else equal, the likelihood of military interventions abroad, budget implementations, or the participation in military alliances crucially hinge on whether the public approves of this or not. Democratic decision-makers may refrain from implementing unpopular policies as this might affect their

chances for re-election. But if a sufficient amount of public support for the armed forces is present, increasing the defense budget or selling the participation in alliances or interventions abroad to the domestic audience could be facilitated – and conscription seemingly does raise public support for the armed forces.

Several avenues for research do exist. We outline three of them. First, future works may focus on and examine more thoroughly the conditions under which conscription leads to more support in the public. By the same token, our quantitative research design cannot distinguish among the two mechanisms we outlined. It thus seems an effort worth making to dig deeper and, arguably with more qualitative designs, unpack the avenues under which compulsory military service leads to more popular support. Second, our empirical focus lies on Europe, which is primarily driven by data availability. Our theory has, in principle, a much broader geographical scope and may apply to other, particularly democratic countries as well. Data limitations prevent us from analyzing more data here, but additional data collection efforts outside of Europe could overcome this issue. Third, due to the lack of data, we cannot disaggregate conscription systems. Some aspects may vary significantly among conscription systems. For example, states could design conscription systems not to be broadly representative to keep opportunity costs and political opposition from key groups low. While this particular problem may not be an issue for our sample of well-established European democracies, conscription could be coupled with alternative service in such a way that military service is nearly self-selecting – and this has likely applied to countries like Germany (see Haltiner, 1998). While the fixed-effects estimation in the appendix deals with this issue to some extent, it may be an effort worth making and disaggregate conscription systems along various criteria. The lack of coding in existing data prevent us from doing this, but future data-collection efforts could help in this regard.

We conclude by summarizing that conscription is significantly and systematically linked to a higher degree of public support for the armed forces. This result greatly adds to the debate about the type of military-recruitment system countries should implement. A positive – and previously unknown – externality of conscription that we identify is a higher degree of support by the public, which is pivotal for defense-policy implementation, military interventions abroad, budget considerations, or the participation in military alliances, among others.

## *2.5 Chapter One Appendix*

In this appendix, we provide a series of additional analyses that complement and further support the main article's findings. These include:

A.1. We examine the **out-of-sample prediction power** of our main specification.

A.2. **Random-effects** and **fixed-effects models**.

A.3. We control for the **9/11 terrorist attacks** and corresponding, system-wide influences.

A.4. We focus on **non-interpolated data** and only employ actually observed country-years.

A.5. We added a series of **controls for military engagement and threats**.

A.6. A regression model based on **three-stage least-squares**.

A.7. Using the **World Values Survey**, we extend our analysis to non-European and non-democratic countries.

A.8. We **disaggregate** the binary **conscription** variable.

**Out-of-Sample Prediction: 4-Fold Cross-Validation**

We assess the predictive power of the core explanatory variables. A model may fit well within a given sample, but could perform worse when confronted with new data. This can potentially undermine making correct and useful predictions (see Ward et al. 2010). To explicitly consider out-of-sample heuristics, we conducted a 4-fold cross-validation quasi-experimental exercise, which we repeated 10 times for the full model (Model 3 and Model 4) and the same model while omitting *Conscription* and *Volunteer Years*. First, we randomly divide our sample into four segments of about the same size. We then used three random segments to estimate the parameters, while the fourth segment was retained for assessing the predictive power of Model 3-4 in the main text or the constrained model on the pooled subsets. Therefore, there were three data segments to build the model and create predictions, while a last (randomly chosen) part was not considered for estimating the model in the first place, but is merely employed for assessing the predictive power. To do so, we provide the mean squared prediction error (MSPE) that pertains to the expected value of the squared difference between the observed values of the outcome variable and the predicted ones.

We calculated this measure for Models 3 and 4 from the main text and a constrained model that omits our core explanatory variables. As indicated above, we repeated the cross-validation 10 times and, thus, obtained 10 different values for the MSPE. We calculated the average values to arrive at global values. The results are summarized in Table A.1. For the fully specified model based on *Conscription*, the average MSPE across all 10 iterations of the cross-validation is 0.0092, while Model 4's MSPE stands at 0.455; for the constrained model, the average MSPE is at around 0.0097. Thus, the predictive power of our core variables of interest is established as the prediction error tends to increase when omitting *Conscription* and *Volunteer Years*.

**Appendix Table 1**. Out-of-Sample Prediction: 4-Fold Cross-Validation

| | **Full Model - Conscription** | **Full Model – Volunteer Years** | **Constrained Model** |
|---|---|---|---|
| Estimation 1 | 0.0091 | 0.0091 | 0.0097 |
| Estimation 2 | 0.0092 | 0.0091 | 0.0097 |
| Estimation 3 | 0.0092 | 0.0090 | 0.0097 |
| Estimation 4 | 0.0092 | 0.0091 | 0.0097 |
| Estimation 5 | 0.0092 | 0.0091 | 0.0097 |
| Estimation 6 | 0.0092 | 0.0090 | 0.0097 |
| Estimation 7 | 0.0093 | 0.0090 | 0.0096 |
| Estimation 8 | 0.0093 | 0.0091 | 0.0097 |
| Estimation 9 | 0.0092 | 0.0090 | 0.0097 |
| Estimation10 | 0.0093 | 0.0091 | 0.0096 |
| Mean | 0.0092 | 0.0091 | 0.0097 |

*Note*: Table entries are mean squared prediction errors (MPSE).

**Random-Effects and Fixed Effects Models**

Our main models are parsimonious in that we rely on a limited number of controls only. To further control for influences that may affect the public's views on the military, which may be unobserved and thus difficult to control for, we also specified random-effects and fixed-effects variants of our main model based on *Conscription*. These estimations also address the endogeneity issue outlined in the main text. Moreover, an assumption we make is that draft evasion is generally looked down upon. In some countries (e.g., Finland, Turkey), draft evasion is difficult and socially stigmatized. In others, draft evasion may be the norm and those who do their service in the military are generally regarded as lower-status than those who do alternative services. That is, our theorizing would make sense only for countries such as Greece, Turkey, Finland, and the Baltic states, where conscription was/is large-scale, comprehensive, and associated with a perceived security threat; but it may apply less so to countries like Denmark, Germany, Austria, or Spain. Fixed and random effects address this issue. Table A.2 presents our findings and shows that the results for *Conscription* are virtually unchanged.

**Appendix Table 2**. Random-Effects and Fixed-Effects Models

| | Model A1 | Model A2 |
|---|---|---|
| Conscription | 0.0224** | 0.0168* |
| | (0.0093) | (0.0099) |
| Population (ln) | 0.0160 | 0.0864 |
| | (0.0108) | (0.0767) |
| Unemployment (ln) | -0.0404*** | -0.0403*** |
| | (0.0084) | (0.0086) |
| Median Voter | -0.0037 | -0.0042 |
| | (0.0061) | (0.0062) |
| Temporal Trend | 5.8594*** | 5.0479*** |
| | (1.0718) | (1.3292) |
| Constant | -43.9831*** | -38.9200*** |
| | (8.1280) | (9.4210) |
| Observations | 527 | 527 |
| Random Effects | Yes | No |
| Fixed Effects | No | Yes |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Controlling for the 9/11 Terrorist Attacks**

The events surrounding the 2001 terrorism in the US are frequently seen as a watershed moment, which may have critically influenced, and changed, how security is perceived worldwide. It is plausible that the public mood towards the armed forces may have equally altered and we assess this possibility with a dummy variable receiving a value of 1 for the years 2001 and onwards in our data set (0 otherwise). As before, we re-estimate our core model on *Conscription* when adding this new item. According to Table A.3, the years after the 2001 attacks are, on average, characterized by a significantly lower level of trust in the army, but our result for *Conscription* does hold.

**Appendix Table 3**. Controlling for 9/11 Terrorism

| | Model A3 |
|---|---|
| Conscription | 0.0171* |
| | (0.0097) |
| Population (ln) | 0.0072 |
| | (0.0085) |
| Unemployment (ln) | -0.0384*** |
| | (0.0094) |
| Median Voter | -0.0007 |
| | (0.0056) |
| Temporal Trend | 6.4523*** |
| | (2.2397) |
| 9/11 Terrorism | -0.0286*** |
| | (0.0110) |
| Constant | -48.3393*** |
| | (17.0304) |
| Observations | 527 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Employing Non-Interpolated Data Only**

We interpolated missing values for *Trust in Armed Forces* for the main article's models. It is plausible that public opinion shifts in such linear ways, but there is no guarantee that our underlying assumption for this approach is indeed valid. Hence, we re-estimated our models while using non-interpolated data only, i.e., country-years that are not covered by the Eurobarometer in the first place are now omitted. Table A.4 summarizes these revised models: our core finding is indeed robust to this change although the number of observations clearly decreases.

**Appendix Table 4**. Non-Interpolated Data Only

| | Model A4 | Model A5 |
|---|---|---|
| Conscription | 0.0344*** | |
| | (0.0113) | |
| Volunteer Years | | -0.0049** |
| | | (0.0020) |
| Population (ln) | 0.0039 | -0.0030 |
| | (0.0059) | (0.0058) |
| Unemployment (ln) | -0.0466*** | -0.0322** |
| | (0.0107) | (0.0145) |
| Median Voter | 0.0025 | 0.0012 |
| | (0.0074) | (0.0075) |
| Temporal Trend | 4.9703** | 3.6925 |
| | (2.1916) | (2.8427) |
| Constant | -37.0446** | -27.2102 |
| | (16.6584) | (21.6290) |
| Observations | 392 | 280 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Additional Control Variables**

Originally, we opted for a more parsimonious set of controls due to the relatively small sample size. However, public opinion towards the armed forces may be linked to the military's engagement abroad and at home and the threat potential a country faces. We thus estimated an additional model, which controls for engagements in military operations at home or abroad (based on the Uppsala Conflict Data Program's (UCDP) armed conflict data)[15], internal unrest (based on the Center for Systemic Peace's State Fragility Index), and battle-related deaths per country (based on the UCDP's battle-related deaths data). More specifically, the conflict-involvement item captures whether a country was involved in an armed conflict at home or abroad (e.g., the War on Terror) as defined by the Uppsala Conflict Data Program (1) or not

[15] Available online at: https://ucdp.uu.se/downloads/.

(0) in a given year. The State Fragility Index[16] captures domestic instability along four dimensions: security, political, economic, and social. Higher values pertain to a more fragile society. Finally, the UCDP also provides data on a country's battle-related deaths in a given conflict. We employ this information as a count variable of casualties per country-year.

Table A.5 summarizes our findings. The main result is robust and while some of the additional controls may have the expected sign in terms of their impact, none of them is statistically significant at conventional levels.

**Appendix Table 5**. Additional Controls

| | Model A6 |
|---|---|
| Conscription | 0.0185* |
| | (0.0097) |
| Population (ln) | 0.0065 |
| | (0.0088) |
| Unemployment (ln) | -0.0388*** |
| | (0.0096) |
| Median Voter | -0.0004 |
| | (0.0056) |
| Conflict Involvement | -0.0257 |
| | (0.0345) |
| Battle-Related Deaths | 0.0095 |
| | (0.0070) |
| Domestic Instability | -0.0033 |
| | (0.0092) |
| Temporal Trend | 4.4813** |
| | (2.0835) |
| Constant | -33.3607** |
| | (15.8434) |
| Observations | 378 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

[16] Available online at: http://www.systemicpeace.org/inscr/SFImatrix2017c.pdf.

**Assessing Reverse Causality Using Three-Stage Least-Squares Regression (3SLS)**

We estimated a model using 3SLS to determine whether there is a problem due to simultaneity. We explored possible specifications by running multiple models similar to that in the main article. In 3SLS, instruments for endogenous variables are generated by regressing each such variable on all exogenous variables in the system. Here, the endogenous variables are conscription and public support for the armed forces. The regression model summarized in Table A.6 is then a re-estimate of our main specification in the paper using 3SLS. Note that the variables included in the equations must differ in some aspects for the model to be identified. Those items included in one, but not the other equation then influence the other equation's outcome indirectly through their dependent variable. We use country and year fixed effects here.

Model A7 summarizes the results from the 3SLS equation on public opinion – the results are virtually identical to those discussed in the main text. Interestingly, the public opinion item is negatively signed in the conscription equation, implying that less support for the military makes it less likely that conscription is being implemented. That said, the coefficient is statistically insignificant, which suggests that causality flows from conscription to public opinion – but not the other way round.

**Appendix Table 6**. 3SLS Model

| | Model A7 |
|---|---|
| Conscription | 0.0585*** |
| | (0.0104) |
| Population (ln) | 0.0024 |
| | (0.0030) |
| Unemployment (ln) | -0.0540*** |
| | (0.0091) |
| Median Voter | 0.0088 |
| | (0.0090) |
| Temporal Trend | 4.9477*** |
| | (1.7188) |
| Constant | -36.8740*** |
| | (13.0563) |
| Observations | 378 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Additional Analysis based on the World Values Survey**

Our main analyses are based on a sample of established European democracies as we employ the Eurobarometer to capture public views of the armed forces. Although perhaps at the expense of being able to generalize our findings to apply to all countries across the globe, our sample comprises European states that are rather similar in several aspects at the macro level, which may affect individuals' attitudes, e.g., economic development, geographic proximity, or regime type. To this end, homogeneity among cases should be given, which makes it less difficult to tease out the impact of conscription.

However, we also considered using data from the World Values Survey (WVS),[17] which consists of nationally representative surveys conducted in almost 100 countries which contain almost 90 percent of the world's population, using a common questionnaire. In some of the

[17] Available online at: http://www.worldvaluessurvey.org/wvs.jsp.

WVS rounds, an item is included that asks about respondents' confidence in the armed forces ("a great deal," "quite a lot," "not very much," and "none at all"). We first deleted all missing values and "don't know" answers of this item before merging the "a great deal" and "quite a lot" replies to one single value (the same with "not very much" and "none at all"). Afterwards, we aggregated this information to the country level by calculating the average for each country-year. The final variable captures the percentage of the survey population that expressed confidence in the military per country-year. Although the sample based on the WVS does comprise non-European states and non-democratic countries (see Table A.7), the overall sample size is significantly lower than the one for our main estimations as, as indicated, this question is not included in all WVS rounds: eventually, we have data for 227 country-years. Due to the more heterogeneous nature of this sample, we control for regime type by including the polity2 score from the Polity IV data[18] and additionally incorporate fixed effects for countries and years next to the statistically significant predictors from our main article's core model. Table A.8 shows that our core finding remains robust, and that controlling for states' regime type does not affect this result's substance. In fact, the polity2 variable is statistically insignificant.

[18] Available online at: http://www.systemicpeace.org/inscrdata.html.

**Appendix Table 7**. Countries Included in the WVS Analysis

| | | |
|---|---|---|
| Albania | Haiti | Puerto Rico |
| Algeria | Hungary | Qatar |
| Argentina | India | Romania |
| Armenia | Indonesia | Russia |
| Australia | Iran | Rwanda |
| Azerbaijan | Iraq | Serbia |
| Bangladesh | Italy | Singapore |
| Belarus | Japan | Slovakia |
| Bosnia | Jordan | Slovenia |
| Brazil | Kazakhstan | South Africa |
| Bulgaria | Kuwait | South Korea |
| Burkina Faso | Kyrgyzstan | Spain |
| Canada | Latvia | Sweden |
| Chile | Lebanon | Switzerland |
| China | Libya | Taiwan |
| Colombia | Lithuania | Tanzania |
| Croatia | Macedonia | Thailand |
| Cyprus | Malaysia | Trinidad and To |
| Czech Rep. | Mali | Tunisia |
| Dominican Rep. | Mexico | Turkey |
| Ecuador | Moldova | Uganda |
| Egypt | Montenegro | Ukraine |
| El Salvador | Morocco | United Kingdom |
| Estonia | Netherlands | United States |
| Ethiopia | New Zealand | Uruguay |
| Finland | Nigeria | Uzbekistan |
| France | Norway | Venezuela |
| Georgia | Pakistan | Vietnam |
| Germany | Peru | Yemen |
| Ghana | Philippines | Zambia |
| Guatemala | Poland | Zimbabwe |

*Note:* Not all countries are included in each round of the WVS, but they have rather varying years of coverage.

**Appendix Table 8**. World Values Survey Analysis

| | Model A8 |
|---|---|
| Conscription | 0.0468* |
| | (0.0256) |
| Polity2 | -0.0008 |
| | (0.0049) |
| Temporal Trend | 6.1729 |
| | (5.2142) |
| Constant | -46.3483 |
| | (39.6066) |
| Observations | 209 |
| Country Fixed Effects | Yes |
| Year Fixed Effects | Yes |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Disaggregating Conscription**

The analyses in the main paper are based on a binary conscription data, which we updated until 2017 in light of Toronto (2017). However, not all conscription or volunteer systems are created equal. For example, many European countries, e.g., Germany and Belgium, were only conscripting fractions of the draft class in the years prior to moving to volunteer recruitment, making these conscription systems anything but universal, much less random or evenly distributed across society. We sought to address parts of this issue with additional analyses in the main text on the time elapsed since conscription (if any), and the findings from these models are generally in line with our expectations. However, we also collected data on some of the characteristics of states' conscription systems to unpack the "black box" of militaries' recruitment systems.

To this end, we first compiled data (in months) on the actual length of a country's conscription. The duration of the non-voluntary service varies, at times drastically across,

countries. Given our argument, longer service durations of conscripts should be linked to a stronger socialization process and, ultimately, be linked to a higher level of support for the armed forces in the public. We used secondary sources to code these data, including the Military Balance of the International Institute for Strategic Studies.[19]

In our sample, non-voluntary service durations vary from 0 (all-voluntary forces) to 24 months (e.g., Cyprus in 2012). According to Model A9, we then do obtain a positive and significant effect for Conscription Duration, much in line with our theoretical expectations. For each additional month of conscription service, public support for the armed forces increases by 0.0018 units, all else equal.

**Appendix Table 9**. Disaggregating Conscription

| | Model A9 (Conscription Duration) | Model A10 (Share of Conscripts) |
|---|---|---|
| Conscription Duration | 0.0018* | |
| | (0.0010) | |
| Share of Conscripts | | 0.0706*** |
| | | (0.0250) |
| Population (ln) | 0.0084 | 0.0084 |
| | (0.0085) | (0.0087) |
| Unemployment (ln) | -0.0408*** | -0.0426*** |
| | (0.0095) | (0.0099) |
| Median Voter | -0.0000 | -0.0017 |
| | (0.0056) | (0.0058) |
| Temporal Trend | 4.3388** | 5.0861** |
| | (2.1063) | (2.2258) |
| Constant | -32.3072** | -37.9838** |
| | (16.0227) | (16.9277) |
| Observations | 527 | 504 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

[19] Available online at: https://www.iiss.org/publications/the-military-balance.

Second, using again the Military Balance of the International Institute for Strategic Studies,[20] we compiled data on the share of conscripts of the total armed forces. All-voluntary forces do obviously not have any conscripts, but among those with conscription systems, the share of conscripted soldiers of all military personnel varies greatly. For example, only 2.3 percent of Spain's military personnel in 2000 stemmed from conscripts, while about a quarter of Germany's armed forces came directly out of conscription before the country moved to an all-volunteer force. When re-estimating our core model with this item, *Share of Conscripts*, the main finding remains robust, which further increases the confidence in the argument and the validity of our empirical results (Model A10).

[20] Available online at: https://www.iiss.org/publications/the-military-balance.

# 3 The Effect of Conscription on Coup Risk in Anocracies Compared to non-Anocracies

## *3.1 Introduction*

In 2014, the Boonsongpaisan government in Thailand was removed from office by a coup d'état orchestrated by the Thai army. Political parties in Thailand had been calling for years for the abolishment of conscription in an effort to curb the military's influence over Thai society (Sripokangkul et al., 2019). The Thai case is not unique. During the last decade several coups occurred in anocracies with conscription, like Egypt (2013) and Sudan (2019). These coups raise an interesting question: does the recruitment system of the armed forces influence coup risk? If yes, does regime type play a role? In fact, many Latin American countries share Thailand's extensive history of military coups and a conscription-based army. Like Thailand, their political systems oscillated between democratic pluralism and autocratic coercion, ending up with anocratic forms of government. To illustrate this point, Peru experienced two coups between 1992 and 2000 while having an anocratic government, before finally abolishing conscription in 2003. Similarly, the abolishment of conscription in Guatemala, Argentina, and Honduras corresponded with less military involvement in politics.

I aspire with this study to shed light to a previously unrecognized side-effect of conscription. More specifically, I argue that conscription is expected to increase coup risk in anocracies. However, the study's sample is not limited to anocracies since I also assess the effect of conscription across other regime types. Specifically, I claim that conscription is expected to increase the probability of a coup attempt in anocracies compared to democracies or autocracies with conscription (hereafter non-anocracies) because the factors that drive the increased coup risk in the unconsolidated, anocratic regimes are not present in democracies and autocracies.

Anocracies are semi-democracies with repressive institutions that restrict collective action

and render them less inclusive than established democracies (Hegre et al., 2001, p. 33; Vreeland, 2008, p. 401; Regan and Bell, 2010, p. 748). However, as conscription draws the general public into the armed forces, interest groups may use compulsory service to improve their ties with the officer corps and collaborate with military officers to influence government policy. Consequently, conscription may produce an undesirable side-effect in anocratic regimes and weaken the grip of the government over the armed forces. The January coup in Gabon and the recent disposition of Evo Morales by the Bolivian army serve as a reminder that civilians cannot underestimate the threat of a military intervention. It must be noted that I do not argue that conscripts organize the coup attempts and conscription still produces a series of military benefits that justify its implementation in anocracies despite this negative externality. Approximately a quarter of contemporary states have anocratic political systems and conscription is important for national security. I argue instead that politicians need to be wary of the increased coup risk associated with conscription in anocracies to neutralize its effect.

Research on coup d'état has profoundly enriched our understanding on the effect of civil-military relations and socioeconomic factors on regime survival (Belkin and Schofer, 2003; Powell, 2012; Pilster and Böhmelt, 2011, 2012; Londregan and Poole, 1990; McMahon and Slantchev, 2015). Coups constituted two out of the three unconstitutional exits of dictators between 1945 and 2002 (Svolik, 2009, p. 477-478). Taking this into account, civilian leaders coup proof their regimes by ethnically stacking the officer corps, fragmentating military authority, and establishing loyal paramilitary organizations (Brown, Fariss, and McMahon, 2016; Quinlivan, 1999; Horowitz, 1985; Nordlinger, 1977; Pilster and Böhmelt, 2011, 2012; Escribà-Folch, Böhmelt, and Pilster, 2019; Belkin and Schofer, 2003; Janowitz, 1977; O'Donnell, 1973; Goldstone, 2011; Feaver, 1992; Nassif, 2015). So, while governments exploit socioreligious cleavages and sectarian recruitment processes to isolate the armed forces from the rest of society (Brooks, 2019, p. 389), conscription has the opposite effect as it

improves the ties between the two groups (Gandhi, 2008; Khuri and Obermeyer, 1974; Vasquez and Powell, 2019).

Conscription is viewed in the academic literature as a proponent of democratization. Conscription can be employed "as an organizational device to counteract anti-democratic political ambitions of the officer corps" (Von Bredow, 1992, p. 291). It is also linked with expanded voting rights during wartime and can act as a social melting pot to form a national identity (Ingesson et al., 2018; Woloch, 1986; Krebs, 2004; Galston, 2004; Peled, 1998; Kestnbaum in Mjøset and Van Holde (ed.), 2002; Meyerle et al., 2011; Safrai, 2019). On a similar note, coups carried out by conscript-based armies are more likely to democratize a political system than those carried out by voluntary armies (Vasquez and Powell, 2019). Having said that, conscription imposes an implicit income tax on draftees and the army must constantly accommodate new temporary recruits (Warner and Asch, 2001; Hansen and Weisbrod, 1967), although conscript-based armies are less financially taxing than all-voluntary ones (Ross, 1994). States of French legal origin are also more likely to conscript than common law countries because they have lower fixed and administrative costs (Mulligan and Shleifer, 2005). Similarly, conscription is more likely to be present in states with strong unions because the institution "protects union-members from low-skilled, younger competitors" (Anderson, Halcoussis, and Tollison, 1996). Recent studies also find that democracies are less likely to conscript (Asal, Conrad, and Toronto, 2017), contrary to past findings (see Ross, 1994).

Continuing, Adam argues that conscripts are more attached to civilian interests than military corporate interests (2012). Under this notion, in the event of a coup conscripts will experience a welfare loss like other civilians (Adam, 2012, p. 717). Therefore, conscripts are expected to support the civilian government instead of the army. However, this calculation does not take into consideration unconsolidated regimes. The expected relationship between civilian and military identity should hold true only for institutionally developed democracies in which the

civilian government truly represents the citizenship[21]. Adam (2012) himself states that countries with democratically elected governments and active conscription have experienced military coups. However, in cases like pre-1967 Greece, the regime was anocratic instead of democratic. Consequently, the impact of conscription on praetorianism in anocracies has escaped so far, the attention of the academic community.

### 3.1.1 Conscription and the Socialization of Citizen-Soldiers in the Armed Forces

Samuel Huntington (1957) first argued that highly professionalized militaries specialize on military affairs and acknowledge civilian pre-eminence. Conscription inevitably strays away from the Huntingtonian paradigm as civilians serve alongside the professionals. Conscription funnels the military with people from the entire social spectrum, especially those from the more diverse middle and lower classes. These civilians are alien to the military discourse and must socialize in this new institutional environment.

Three factors innate to conscription transform civilians to soldiers: draconian training, societal norms, and military or civilian courts (Varin, 2015, p. 37). Military training facilitates "the socialization and indoctrination of the recruit by breaking down a man's civic identity and rebuilding a soldier in the image of the army" (Moore, 2009, p. 75). Harsh physical and mental training formulate the military identity of conscripts and cement their obedience to the military's strict hierarchical culture. Military officers acquire expertise in warfare with training and through this process they also develop their group identity and behavioral code (Janowitz, 1960, p. 55). This identity embodies military corporate interests such as hierarchy, discipline, high quality recruits and access to state-of-the-art technology (Geddes, 1999, p. 126).

[21] It should be noted that Ingesson et al. (2018) found no support for the position that conscription reduces coup risk in democracies.

Institutional autonomy is also among the most essential traits of military identity (Finer, 1988, p. 41).

Conscription provides the military with its rank-and-file soldiers and junior officers and conscripts serving under the command of combat-officers are trained to follow the strict hierarchical structure of the military. Due to extensive training and isolation from the civilian world, conscripts adopt a cohesive group mentality in which their individual actions are important to the unit's success (Varin, 2015, p. 44; Wong et al., 2003, p. 9-11). Moreover, as conscripts are under the tutelage of army officers, they are expected to develop a culture of obedience and loyalty towards their superiors. Additionally, societal norms targeting draft-avoiders and the judicial punishment of dissidents emphasize the importance of conscript obedience to the military.[22] The disciplinarian nature of the military formulates a cohesive group identity for new recruits, like conscripts (Janowitz, 1960, p. 13). Subsequently, through vigorous training and discipline conscripts obtain elements of the military corporate identity.

Accordingly, conscript armies generate higher levels of congruence between the military and society as civilians serve alongside professionals. Since civilians coexist with military officers, professional and social barriers are distorted, and the military is more likely to get involved in sociopolitical disputes (Goodpaster and Huntington, 1977, p. 23). To this end, conscription in Europe is found to increase public trust towards the armed forces (Choulis, Bakaki, and Böhmelt, 2019). The authors argue that conscription increases public support for the armed forces directly - via socialization and training of conscripts in the army - and indirectly – via the conscripts' families. Although the authors focus primarily on European democracies, they provide evidence in the study's appendix that this relationship extends beyond Europe and to

[22] During the latter half of the 19th century, the market-based, exemptions system was abandoned in favor of universal military service. In France, the military replacement system was abolished after the defeat against Prussia in 1870 (Rouanet and Piano, 2019).

some extent it also applies in anocracies. Therefore, it is necessary to address the impact of conscription in anocratic civil-military relations as it may differ from other regime types.

### 3.1.2 Anocratic Governments and the Military

The literature has not produced an unequivocal definition of anocracies. Anocracies can be described as "semi-democracies…partly open yet somewhat repressive" (Hegre et al., 2001, p. 33) and most have "politically weak central governments" (Fearon and Laitin 2003, p. 75-81). Hence, anocracies have some democratic institutions that differentiate them from autocracies, but those institutions are not inclusive enough as those in democracies (Regan and Bell, 2010, p. 748). Additionally, in anocracies dissidents have the capacity to organize, but, unlike democracies, nonviolent collective action is "too restricted to be effective" (Vreeland, 2008, p. 401). The non-inclusive nature of anocratic political institutions therefore inhibits the creation of popular movements which shield democratic governments from military interventions (David, 1985, p. 5). Subsequently, anocracies are in the cusp between democracies and autocracies and correspond to values between +5 and -5 in the Polity Index.

State repression is present in anocracies, but, unlike the impregnable nature of an autocratic state, elites can still assert their demands and exert pressure to the government. The governing coalition is not restricted to an ethnic or religious group since governing elites are capable of recruiting members to the ruling coalition beyond a small circle (Regan and Bell, 2010, p. 748). Also, unlike autocracies, anocracies lack a powerful central authority which can exclude actors from the decision making (Gates et al., 2006, p. 895). The competition within the ruling coalition means that the state is not centralized enough to efficiently deliver social welfare to please popular demands (Regan and Bell, 2010, p. 748). Accordingly, centrifugal political forces enable the accumulation of grievances and the government cannot completely oppress social dissidence or deter challengers (Benson and Kugler, 1998, p. 199; Fearon and Laitin, 2003, p. 85-86; David, 1985, p. 5). Therefore, anocracies share both democratic and autocratic

institutional traits. They have elected governments, but the electoral process may be rigged and the authority of the elected representatives may be circumscribed by extra-parliamentary actors. As a result, anocracies lack the centripetal force of democratic parliaments or autocratic elites as multiple political actors compete for power. Therefore, in anocracies opportunities for political participation coexist with authoritarian institutions and this mix may induce to the regime a degree of sociopolitical instability (Choi and Raleigh, 2015, p. 161).

In a very clear way, anocracies are unconsolidated regimes since they do have open elections and parliamentary institutions, but the powers of elected representatives are circumscribed by extra-parliamentary actors in a non-democratic manner. For instance, the Turkish political system is registered as an anocracy post-2014 due to the increased state repression, the conflict between AKP and the secular state, and a considerable executive aggrandizement under president Erdoğan (Ozbudum, 2012, p. 71-72; Sakallioğlu, 1997, p. 154). In a similar manner, the pre-1967 parliamentary system of neighboring Greece was afflicted by the intrusive role of the palace and the army in politics as well as profound accusations of electoral fraud (Veremis, 1997, p. 9). Despite open elections, the Greek Communist party was banned, and the population was deeply polarized between the Right and Left (Veremis, 1997, p. 9). In simple terms, even though Greece had an established parliamentary system, the parliament shared decision-making powers with the palace, the military, the deep state, and foreign actors (Xydis, 1974; Kassimeris, 2006, p. 62-65). Similarly, Thailand up until 2014 had open elections and a separation of powers, but the political system was still commanded by small elite groups and the armed forces (Thabchumpon et al., 2014). Political repression and social unrest were also widespread phenomena (Merieau, 2019). Subsequently, all three cases had anocratic political systems because the authority of the elected representative bodies was restrained by extra-parliamentary actors in a manner incompatible with the democratic norms found in developed democracies.

Finally, it is worth reminding that the military is crucial for regime survival in non-democracies even if it military officers do not directly occupy government offices (Geddes, Frantz, and Wright, 2014, p. 149; Wintrobe, 2012). Anocratic governments need the military to control phenomena of social unrest since the regime is unable to please popular welfare demands. However, conscription weakens the military's repressive capability, since conscripts are less likely to repress other civilians since their military identity is not permanent (Posen, 1993, p. 88). Therefore, a conscript-based military in an anocracy may renege on its commitments to the ruling class and side with the people in the event of popular uprising. Subsequently, anocratic governments find themselves with the Sword of Damocles hanging over their heads. They need the armed forces to repress civil unrest, but at the same time the military constitutes a real threat to the regime.

## *3.2 Conscription in Anocracies*

Anocracies experience higher coup risk when conscription is present because conscription enables the armed forces to dissipate pro military ideology to large parts of society[23] and is one of the few organizations that can collaborate with interest groups to influence government policy[24].

Conscription is essential to civil-military relations since it allows the military to abandon its professional isolation contrary to other security agencies, like paramilitary forces. As Samuel Finer denotes, the armed forces suffer from lack of legitimacy, "that is to say, their lack of a

[23] Ideology is interpreted as a set of ideas attached to a specific social group or class (Eagleton,1991).

[24] There are cases of anocracies with powerful leaders, like Erdoğan's Turkey or Putin's Russia, that do effectively control the armed forces due a strong executive. Such cases demonstrate that anocratic rulers are capable of the assertive rule, like autocrats. However, recent coups (Turkey 2016, Zimbabwe 2017) highlight that rival elites, like the Gulenists, cannot be excluded in an anocratic political system, unlike autocratic regimes. Similarly, the strong concentration of power to the executive further alienates the population from the government, thus limiting an anocratic governments representativeness and legitimacy to rule.

moral title to rule" (1988, p. 12). The military profession functions independently from the rest of society and has few ties to other social groups. Conscription reverses this trend as it "increases society's ties with the armed forces" (Vasquez and Powell, 2019, p. 16). For instance, the Turkish Armed Forces (hereafter TAF) developed a cohesive image as the guardian of the Turkish nation since every male Turk served in them (Sakallioğlu, 1997, p. 154). Then, the increased legitimacy allowed them to operate as the final arbiter of the Turkish political system (Heper, 2002, p. 142). Conscription was also successfully used by the Japanese army during the Meiji-Showa era to indoctrinate the population into the military way and promote militarist values in the Japanese society (Huntington, 1957, p. 128). Likewise, conscription sustains the considerable militarization of the Thai society and cultivates "blind acceptance of military culture" (Sripokangkul et al., 2019, p. 40). Only the abolition of conscription will neuter "the belief that the military is the most important Thai institution, and thus, untouchable" (Sripokangkul et al., 2019, p. 58).

Choulis, Bakaki, and Böhmelt (2019) find substantial evidence that conscription increases public trust towards the armed forces in European democracies, and to some extent anocracies[25]. With conscription, the military apparatus and its ideology can reach all social groups (Khuri and Obermeyer in MacArdle Kelleher(ed.), 1974, p. 62). It increases the "visibility" of the armed forces as coexistence of civilians and professionals in the army brings more attention to issues of national security (Gandhi, 2008, p. 50; Poutvaara and Wagener, 2009, p. 15). Zordan Barany succinctly summarizes this position when he claims that "Draft-based militaries tend to attract more active societal scrutiny, given that a large proportion of citizens will have served or had a relative who served in the armed forces" (2017, p. 16). Then,

[25] In the study's appendix, the authors examine the effect of conscription on public support for the military globally based on information from the World Values Survey. Contrary to the main text, many of the states that are included in this appendix model are anocracies.

the circulation element innate to conscription[26] disseminates the military line to all the parts of society (Khuri and Obermeyer, 1974, p. 62). The Japanese male population became increasingly obedient to the military and its ideology due to indoctrination during conscription (Huntington, 1957, p. 128). Evidence from Turkey also suggest that ex-conscripts are tied to the armed forces since military service grants them high social prestige (Varoglu and Bicaksiz, 2005, p. 594-95; Caya, 2015, p. 188). For this reason, the transition of TAF to an all-volunteer model is highly unlikely since that would result in the "severance of the link between ordinary Turkish folk and the defense organization" (Varoglu and Bicaksiz, 2005, p. 595). Similarly, in a survey by Yildirim and Erdinc (2007), 53.1% of conscripts in the Turkish army wished to re-enlist after completing their service. Liking the military and enjoying military life was the most popular justification at 38% (Yildirim and Erdinc, 2007, p. 17). Hence, conscription is found to increase the ties between society and the armed forces.

Continuing, the conscription-based military is one of the few organizations in anocracies through which members of interest groups can collaborate with military officers to influence government policy. Common service in the army may enable members of interest groups to organize and establish networks with the officer corps since conscripts constitute the military's rank and file and combat officers. Therefore, conscription increases the ties of the general public to the officer corps and civilian groups may thus collaborate with the armed forces to advance or protect their interests against the government. From this position, interest groups can prob the military to influence government policy. As a result, conscription increases the ties between the armed forces and different interest groups within the general public that would benefit from changing or retaining the status quo. In the event of a coup, those interest groups are more likely to support the military than the government since they have converging interests

[26] I use the term "circulation" with regards to the perpetual replacement of conscripted soldiers with new recruits as they complete their compulsory military service.

and serve to the army as conscripts. For instance, during the 1909 military movement in Greece, middle ranking officers cooperated with trade unions and the bourgeois to force the parliament to adopt a set of economic and political reforms for their benefit. Hence, Greek middle ranking officers intervened "to favor given civilian party-personality configurations" (Couloumbis, 1974, p. 353). Since the parliament was unable to implement the necessary liberal reforms and the government was paralyzed, interest groups threw their support behind the military in which they served as conscripts to force a change in the status quo[27].

For its part, the civilian government does not abolish conscription because it supplies the armed forces with cheap labor and reservists to repel foreign threats (Poutvaara and Wagener, 2007, p. 8). What's more, countries that adopt conscription are more likely to participate in military alliances (Horowitz, Poast, and Stam, 2017). Moreover, conscription satisfies key military corporate interests since it increases the size of the armed forces and the occupancy rate of military units. As such, civilian governments may establish conscription or extend the duration of compulsory service to appease the army. Additionally, even if the government is in favor of abolishing conscription, it may confront significant military opposition since the institution increases the military's visibility and public trust to the organization. Not only that, but the abolishment of the institution or even reductions to the duration of service would create issues for the occupancy rate and overall sustainability of military units. A reduction in the number of military units would also decrease the number of available high-ranking officer positions and thus generate intra-military competition. It is therefore highly likely that the military leadership would oppose efforts to abolish conscription and would apply significant

[27] In the event of a coup d'état conscripts are expected to follow orders since they make up the rank-and-file and lower officership of a military. This relationship of obedience is evident in the 2016 Turkish coup. At least a thousand conscripts were arrest in the coup's aftermath (Arango and Yeginsu, 2016). Most claimed that they thought they were participating in a military exercise and they were following orders from their superior officers (Arango and Yeginsu, 2016). Therefore, the coup itself is staged by senior or middle ranking officers and not the conscripts.

pressure to the government to preserve the institution. Consequently, anocratic governments are not expected to abolish conscription because of moderate benefits to national security and strong military opposition.

To summarize, the coexistence of electoral competitiveness with executive assertiveness in anocracies generates political instability as the state cannot satisfy or repress popular demands (Benson and Kugler, 1998; Choi and Raleigh, 2015; Fearon and Laitin, 2001; Regan and Bell, 2010). Hence, citizens in anocracies do not have the same attachment to the government as democratic citizens. As more parts of society are conscripted, they become familiar with the politicized military identity and common service may enable members of the general public, especially interest groups, to reinforce their ties with military officers and thus collaborate to influence government policy. The military's increased ties with society and its attachment to interest groups means that the officer corps will be more willing to intervene against the government to promote popular demands while fewer groups will be willing to defend the government against the army. Hence, conscription in anocracies increases the willingness of the army to intervene in politics as well as its opportunity to do so since less groups will support the government in the event of a coup. It is also worth clarifying that conscripts do not directly stage the coup, but conscription creates circumstances that increase the probability of a coup d'état by middle and senior ranking military officers. Subsequently, coup risk is higher in anocracies when conscription is present because it reduces the potential costs of a coup. We can thus hypothesize that *anocracies with conscription are more likely to experience a coup attempt compared to anocracies without conscription. Additionally, conscription is expected to increase the probability of a coup attempt in anocracies compared to non-anocracies.*

## *3.3 Empirics*

### 3.3.1 Data and Method

*Data and Dependent Variable*

For the empirical section of the paper, I employ a logistic regression model and a compilation of variables from the coup d'état academic literature to examine the period from 1950 to 2018. I use a binary coup attempt variable as the dependent variable, and I assign a value of 1 if at least one coup attempt took place in a country in a given year. This variable is based on Powell's and Thyne's 2011 coup attempt variable and includes coups by the military or other elites within the state apparatus. Of the 10,609 country-years observations in the data set, 411 take a value of 1, which corresponds to 3.9% of the observations.

*Independent Variable*

The main explanatory variable is the Draft* Anocracy interaction term. Firstly, I use Toronto's military draft variable. The original variable contained observations up to 2000. I have expanded the variable to incorporate the years 2000-2018 based on information from the CIA Factbook data (2021) on conscription. The draft variable is a binary variable and receives a value of 1 if a country had conscription in effect in a given year. Out of the 10,154 country-years observations in the variable 4,915 observations (48.4%) are assigned a value of 1. Out of the 200 countries in the data set, 73 (36.5%) have never established a conscription system[28] and 45 (22.5%) have conscription for the entire period. Finally, 80 (40%) of the countries have abolished or instituted conscription at least once in the data.

[28] Mostly small island states in the Caribbean Sea and Pacific Ocean. In addition, I include in the Appendix a model only with countries that display a variation in the draft variable.

I employ the Polity IV Project index covering years 1946-2018 to formulate the anocracy binary variable. Countries with a +6 score are registered as democracies and countries with a -6 score are registered as autocracies. As such, countries with scores between +5 and -5 are registered as anocracies. The Anocracy binary variable has 9,380 country-years observations and 2,252 cases (24%) receive a value of 1 whereas 7,128 cases (76%) take a value of 0. I also employ Vreeland's xpolity index (2008) which is an updated version of the polity index and its values range between 7 and -6 covering years 1970-2008. According to Vreeland's regime specification, countries with a +5 or higher score are registered as democracies and countries with a -3 or lower score are registered as autocracies (Vreeland, 2008, p. 416-418). As such, countries with scores between +4 and -2 are registered as anocracies. This regime specification captures the degree of competitiveness or openness of executive recruitment and the number of restrictions to the executive (Vreeland, 2008, p. 405). For this reason, traits like selection in the executive recruitment (-2 points) or executive parity (+4 points) almost guarantee that a regime will be autocratic and democratic respectively. Under this specification, hereditary regimes with few caveats to the executive are registered as autocracies, whereas politically competitive regimes with check and balances are registered as democracies. Non-hereditary yet non-entirely competitive regimes with moderate limitations to the executive are categorized as anocracies since they share both autocratic and democratic institutional traits. I include the main models based on the xpolity in Table 3a since it's the more detailed index of the two and I also include polity-based sample models in Table 3b to account for decades 1950s, 1960s, and 2010s. To summarize, the relationship between coup attempt and draft*anocracy is specified as:

$$\text{Coup Attempt}_t = \alpha + \beta\text{Draft*Anocracy}_t + \gamma X_{t-1} + \varepsilon,$$

where *t* captures the year, $\alpha,\beta,\gamma$ are the parameters, X encapsulates the control variables and is at *t-1* because most controls are lagged by a year, and finally ε acts as the error term.

*Control Variables*

The military's decision to overthrow the government is influenced by a range of socioeconomic factors that might drive a potential increase in coup risk in anocracies instead of conscription. The cooperation of the bourgeois, trade unions, and middle ranking officers in the 1909 military movement in Greece highlights the important of economic prosperity for government survival in anocratic regimes. If the economy is underperforming, then it is highly possible that interest groups will collaborate with the armed forces to change the government to improve economic prospects. I use two GDP variables with information from Gleditsch (2002) and the World Bank to measure the effect of wealth on coup risk. The Change in GDP per capita variable captures the percent year-to-year change in GDP. The GDP per capita variable captures income per citizen and is logged and lagged by a year. Both are based on real income data in 2005 prices (Böhmelt, Escribà-Folch, and Pilster, 2018). Additionally, since the literature expects anocracies to suffer from political instability due to the mix of democratic and autocratic institutional traits it is imperative to control for the effect of instability on coup risk. I capture political unrest with Banks' Instability Index (2011). The instability variable captures "assassinations, purging of governmental officials, guerrilla activity, protests, riots, and strikes" (Böhmelt et al., 2018, p. 1125). The size of the armed forces also influences coup risk (Powell, 2012). I measure its effect with the Military Personnel variable found in the National Military Capabilities v5.0 data set of the Correlates of War project. Lastly, both variables are logged and lagged by a year.

Moving on, defense spending is a fundamental military corporate interest and budget reductions incentivize military intervention in politics (Ezrow and Frantz, 2011, p. 103). Hence, budget concerns may better explain military willingness to intervene in anocratic politics than conscription. Therefore, I use Powell's (2012) operationalization for the Change in Military Expenditure and Soldier Quality variables to control for this effect. For the variables, I use the

information from the National Military Capabilities v5.0 data set which covers the period between 1816 and 2012. Both variables are logged and lagged by a year. In addition, the presence of pro-government paramilitary units affects the military's ability to overthrow the government since the opportunity costs associated with a coup attempt are increased (Böhmelt and Pilster, 2015). Taking this information into account, I employ the coup-proofing variables from Pilster and Böhmelt (2011) to examine whether the presence of paramilitary forces in anocracies neutralizes the effect of conscription on coup risk. The Counterbalancing variable contains the number of effective ground-combat forces and is lagged by one year (Pilster and Böhmelt, 2011). The variable "incorporates information on both the number of rivaling military organizations and their respective strengths to capture the degree which a state divides its military manpower into rivaling organization" (Pilster and Böhmelt 2011, p. 339-40). Counterbalancing$^2$ is the squared term of this variable and is used to capture a potential curvilinear effect of coup proofing on coup risk (Böhmelt and Pilster, 2015). Finally, I include the Years Since Last Coup spell variable along with its square and cubic terms to control for the pacifying effect of time on coup risk and temporal dependence.

**Table 2**. Descriptive Statistics

| | Observations | Mean | SD | Minimum | Maximum | VIF |
|---|---|---|---|---|---|---|
| Coup Attempt | 10609 | 0.038 | 0.192 | 0 | 1 | - |
| Draft | 10154 | 0.484 | 0.499 | 0 | 1 | 1.11 |
| Anocracy | 9380 | 0.240 | 0.427 | 0 | 1 | 1.1 |
| Change Mil Expenditure | 8066 | 0.428 | 22.07 | -1 | 1965 | 1 |
| Military Personnel | 9303 | 3.346 | 1.945 | 0 | 8.666 | 1.31 |
| Soldier Quality | 8077 | 8.792 | 1.64 | 0 | 14.69 | 2.44 |
| Instability | 8598 | 3.144 | 3.577 | 0 | 10.85 | 1.19 |
| Change GDP per capita | 9033 | 0.023 | 0.25 | -0.796 | 20.79 | 1 |
| GDP per capita | 9223 | 8.313 | 1.213 | 4.889 | 13.35 | 2.61 |
| Counterbalancing | 7040 | 1.66 | 0.643 | 1 | 5.936 | 1.1 |
| Counterbalancing2 | 7040 | 3.19 | 2.611 | 1 | 35.23 | - |

### 3.3.2 Empirical Analysis

Table 3a summarizes the regression results. The analysis comprises of four models to fully capture the impact of conscription on coup risk in anocracies across time and different socioeconomic conditions. Model 5 includes the main explanatory variable and the interaction term. Model 6 examines the effect of the control variables on coup risk independently of the main explanatory variable. Model 7 includes both the interaction term and the control variables. Finally, in model 8 I add the coup proofing variables. In Table 3b I replicate these models by replacing the xpolity with a polity index sample, and the number of observations is substantially increased as a result, however, no significant differences are observed between the two tables with respect to the regression results. The effect of draft*anocracy interaction term is positive and statistically significant at the 99% confidence level across all models, although the interaction term requires a visual representation to determine its actual impact on coup likelihood. However, the statistical significance of the term is a good first indicator. In contrast, the anocracy variable itself has a negative sign but does not have a consistently significant effect on coup attempt.

Due to the logit nature of the models, I employ a predictive probabilities graph to visually represent the effect of the interaction term on coup attempt. Figure 3 captures the change in predicted probabilities of the interaction term in models 7 and 8 of Table 3a as draft changes from 0 to 1 and anocracy changes from 0 to 1 as well. The predictive margins graph displays the positive effect of the draft*anocracy interaction term on coup risk. Specifically, the probability of a coup attempt is 2.5 percentage points higher in anocracies with conscription compared to non-anocracies with conscription. Additionally, the probability of a coup attempt is 3 percentage points higher in anocracies with conscription than anocracies without conscription and the confidence intervals of anocracies with and without conscription do not overlap. Therefore, conscription is found to significantly increase coup risk in anocratic

regimes. This effect is statistically significant and consistent across all examined models. What's more, the confidence intervals of anocracies with conscription are clearly separated from the confidence intervals of non-anocracies with conscription.

Furthermore, conscription appears to reduce coup risk in non-anocracies, but the results are rather inconclusive as confidence intervals do overlap in this case. In the Appendix, I also include a model with draft*democracy and draft*autocracy interaction terms with anocracies as the baseline category. The results of this disaggregated model mirror the main text model 7a results. On top of that, in Appendix tables 23 and 24 I disaggregate coup d'état in anocracies between those carried out by senior and junior officers[29]. Conscription has a positive and statistically significant effect in both cases. Subsequently, conscription in anocracies is found to increase the likelihood of a coup attempt across all officer ranks. All in all, the findings of the empirical analysis support the research hypothesis as conscription in anocracies significantly increases the likelihood of a coup attempt compared to anocracies without conscription. Its effect is also substantially different from the effect of conscription in non-anocracies since conscription is found to increase the likelihood of a coup attempt in anocracies compared to non-anocracies.

[29] Coups carried out by officers above the colonel rank are registered as senior officer coups and coups carried out by all other army ranks are registered as combat officer coups.

**Table 3a.** The Relationship between Coup Attempt and the Draft: Anocracy Interaction Term - X-Polity Sample

| | Model 5a | Model 6 | Model 7a | Model 8a |
|---|---|---|---|---|
| Draft | -0.293 | | -0.309 | -0.362 |
| | (0.194) | | (0.206) | (0.225) |
| Anocracy | -0.280 | | -0.488 | -0.559 |
| | (0.250) | | (0.247)** | (0.254)** |
| Draft*Anocracy | 0.873 | | 1.170 | 1.300 |
| | (0.328)*** | | (0.327)*** | (0.335)*** |
| Change Military Expenditure | | 0.000 | 0.000 | 0.000 |
| | | (0.000) | (0.000) | (0.000) |
| Soldier Quality | | -0.168 | -0.160 | -0.235 |
| | | (0.076)** | (0.075)** | (0.098)** |
| Military Personnel | | -0.090 | -0.068 | -0.091 |
| | | (0.052)* | (0.050) | (0.057) |
| Change GDP per capita | | -3.548 | -3.635 | -3.830 |
| | | (0.743)*** | (0.782)*** | (0.820)*** |
| GDP per capita | | -0.263 | -0.273 | -0.210 |
| | | (0.083)*** | (0.084)*** | (0.093)** |
| Instability | | 0.100 | 0.102 | 0.113 |
| | | (0.023)*** | (0.024)*** | (0.025)*** |
| Counterbalancing | | | | -0.821 |
| | | | | (0.682) |
| Counterbalancing$^2$ | | | | 0.190 |
| | | | | (0.169) |
| Years Since Coup | -0.261 | -0.212 | -0.202 | -0.203 |
| | (0.069)*** | (0.066)*** | (0.066)*** | (0.068)*** |
| Years Since Coup$^2$ | 0.014 | 0.011 | 0.011 | 0.011 |
| | (0.006)** | (0.005)** | (0.005)** | (0.005)** |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.000)* | (0.000)** | (0.000)* | (0.000)* |
| Obs. | 5,375 | 4,836 | 4,836 | 4,618 |
| Log Pseudo Likelihood | -700.036 | -606.051 | -601.230 | -556.814 |
| Wald $\|^2$ | 84.23 | 157.73 | 176.64 | 167.93 |
| Prob> $\|^2$ | 0.000 | 0.000 | 0.000 | 0.000 |
| Time Period | 1970-2008 | 1970-2008 | 1970-2008 | 1970-2008 |
| ROC Curve | 0.778 | 0.829 | 0.835 | 0.845 |
| AUC-PR Curve | 0.107 | 0.141 | 0.144 | 0.161 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Table 3b.** The Relationship between Coup Attempt and the Draft: Anocracy Interaction Term - Polity Sample

| | Model 5b | Model 7b | Model 8b |
|---|---|---|---|
| Draft | -0.303 | -0.211 | -0.504 |
| | (0.185) | (0.198) | (0.236)** |
| Anocracy | 0.125 | -0.188 | -0.389 |
| | (0.167) | (0.187) | (0.226)* |
| Draft*Anocracy | 0.869 | 0.970 | 1.247 |
| | (0.240)*** | (0.270)*** | (0.329)*** |
| Change Military Expenditure | | -0.000 | -0.000 |
| | | (0.000) | (0.000) |
| Soldier Quality | | -0.181 | -0.313 |
| | | (0.055)*** | (0.099)*** |
| Military Personnel | | -0.097 | -0.101 |
| | | (0.048)** | (0.060)* |
| Change GDP per capita | | -3.224 | -3.504 |
| | | (0.632)*** | (0.823)*** |
| GDP per capita | | -0.237 | -0.205 |
| | | (0.078)*** | (0.091)** |
| Instability | | 0.097 | 0.099 |
| | | (0.020)*** | (0.022)*** |
| Counterbalancing | | | -0.903 |
| | | | (0.754) |
| Counterbalancing$^2$ | | | 0.238 |
| | | | (0.194) |
| Years Since Coup | -0.173 | -0.152 | -0.096 |
| | (0.037)*** | (0.049)*** | (0.052)* |
| Years Since Coup$^2$ | 0.004 | 0.005 | 0.002 |
| | (0.002)** | (0.003) | (0.003) |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 |
| | (0.000) | (0.000) | (0.000) |
| Constant | -1.991 | 1.215 | 2.877 |
| | (0.171)*** | (0.599)** | (1.014)*** |
| Obs. | 9,011 | 6,752 | 5,138 |
| Log Pseudo Likelihood | -1319.386 | -1015.967 | -651.547 |
| Wald $\|^2$ | 221.26 | 330.71 | 220.32 |
| Prob> $\|^2$ | 0.000 | 0.000 | 0.000 |
| Time Period | 1950-2018 | 1951-2011 | 1970-2011 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

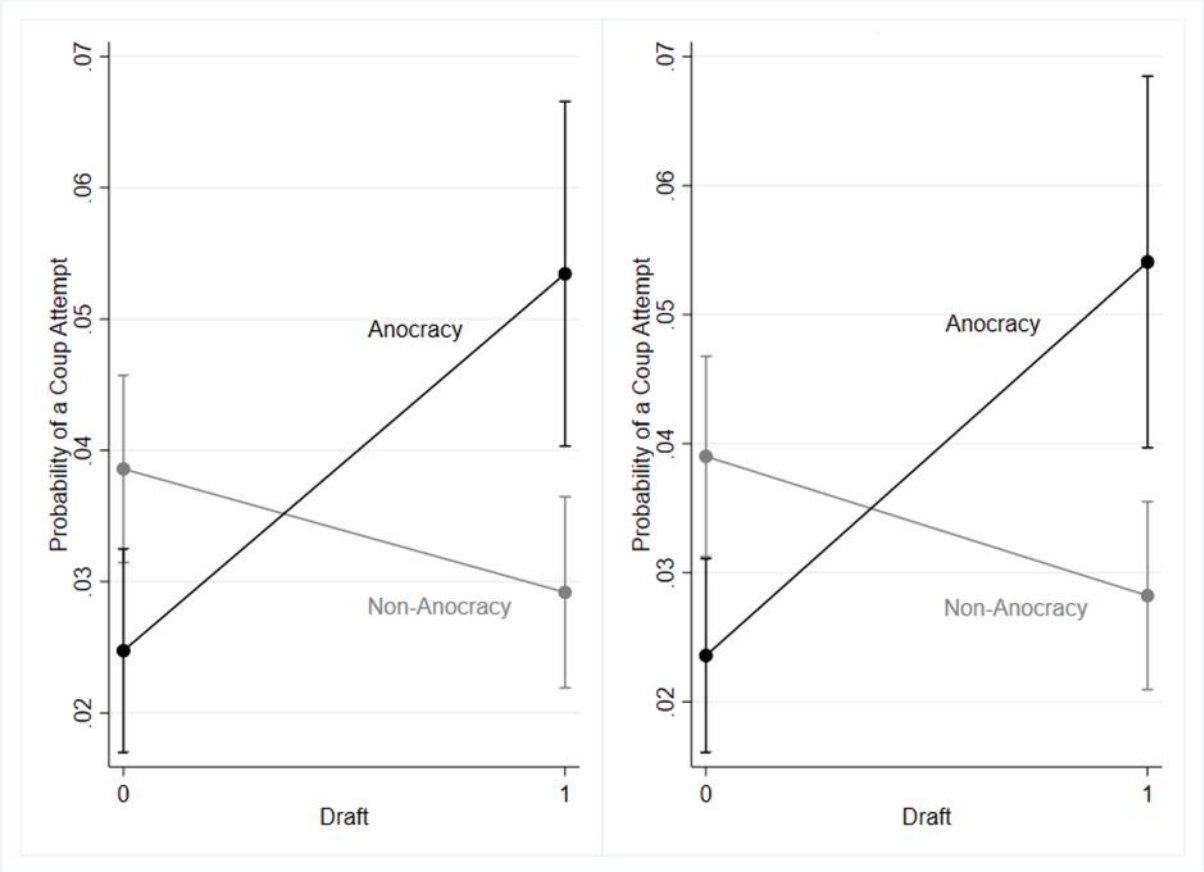



**Figure 3.** Interaction Term of Draft: Anocracy
Note: The graphs present the predicted probabilities of coup attempt given the values of Draft and Anocracy. The vertical bars pertain to 90 percent confidence intervals and estimates are based on Models 7a-8a.

When it comes to the control variables and their impact on coup risk, we observe some interesting findings. First and foremost, change in military expenditure produces no statistically significant effect across the models. The effect of military size on coup risk is negative yet insignificant in the xpolity models, with the exception of the controls only model, but becomes significant in the polity sample models in accordance with previous studies (Powell 2012). On the other hand, soldier quality has a statistically significant and negative effect on coup risk across all models. Moving on to the socioeconomic variables, both are statistically significant across all models. A positive change in the GDP per capita heavily reduces coup risk. Likewise,

wealthier countries are less likely to experience a coup attempt. Non-surprisingly, the political instability variable increases coup risk and is statistically significant across the board. Finally, the coup proofing variables are statistically insignificant, hence the presence of paramilitaries does not seem to affect military intervention in politics when we consider for conscription and anocratic governments.

## *3.4 Conclusion*

The famous William Lyon Mackenzie once said, "Conscription if necessary, but not necessarily conscription"[30]. Honoring this spirit, the purport of this study is not to discredit the benefits of conscription or to contest its democratizing effect. Instead, this academic endeavor sheds light to a previously unaccounted negative externality of conscription in anocracies. The outcome of the empirical analysis supports the hypothesis that conscription in anocracies increases the probability of a coup attempt compared to non-anocracies. In the Appendix, I also include a series of robustness checks to examine in depth the causal relationship between the variables and the available data. It is worth mentioning that this study as well as the conscription literature in general suffer from the unavailability of data with respect to the number of conscripts serving in military forces around the world. Toronto's binary operationalization of conscription is indeed very useful, but more information on the number of conscripts per country would strongly benefit the study's insights. Contemporary military force data sets, like Military Balance, have insufficient information on the number of conscripts serving in the armed forces of non-Western states. Future research on civil-military relations should emphasize on the need to produce a large-n data set on the manpower contribution of conscripts and roles they perform in armed forces around the world.

[30] Meaning that conscription is a very divisive issue that must be approached by the government with caution to avoid polarizing the population.

Finally, the findings of this study produce wider policy implications. The end of the Cold War saw an increasing number of countries abolishing conscription as threats to national security dwindled. However, the volatile first two decades of the twenty-first century have renewed the public debate on conscription. The ex-Afghani President Hamid Karzai contemplated possible benefits of reinstituting conscription in Afghanistan. This proposal aimed to enhance military strength, reduce dependence on foreign aid, and increase interaction between different parts of the fragmented Afghan society[31]. The Afghani case brings forward some aspects of re-establishing conscription in contemporary anocracies. Conscription fulfils manpower demands cheaply and weakens parochial loyalties (Meyerle et al., 2011, p. 3). However, despite its operational allures, conscription is found to increase coup risk in anocracies. I do not argue against the implementation of conscription. In contrast, the establishment of conscription may be of vital importance to national security and thus its implementation or extension may be necessary for regime stability or state survival. Instead, the study highlights the fact that unconsolidated regimes with anocratic governments should approach conscription as a strategic trade-off. Its introduction requires careful planning and significant premeasures to limit negative externalities, like increased coup risk, that may destabilize the regime and international support in the form of military advisors may assist to this direction.

[31] For more on this issue please advise *Afghanistan may institute conscription*, The Hindu, 2010, https://www.thehindu.com/news/international/Afghanistan-may-institute-conscription/article16813044.ece

## *3.5 Chapter Two Appendix*

The appendix contains robustness checks for the logit models presented in Table 3a. Below I list those robustness checks in the order they are positioned in the appendix.

- Appendix Table 10 presents a model **without the P5 countries**.
- Appendix Table 11 introduces a **Heckman-type probit two-stage selection model** on coup attempts and coup outcomes.
- Likewise, Appendix Table 12 contains the analysis of a **Bivariate Two-Stage model** on draft and coup attempts.
- Appendix Table 13 includes **internal and external threats variables**.
- I then employ a **three-stage least-squares regression model** to check for reserve causality between coups and conscription (Appendix Table 14).
- I also run a model where I **omit countries that show no variation in the draft variable**, never established or always had conscription for the duration of the data set (Appendix Table 15).
- Appendix Table 16 depicts the results of **region and year fixed-effects models**.
- I present the **separation plot** of the main text model 7 in Appendix Figure 6.
- Moreover, the results of an **out-of-sample 4-fold cross-validation** are located in Appendix Table 17.
- In Appendix Table 18, I disaggregate non-anocratic regimes into **autocracies and democracies with anocracies as the baseline**.
- Taking all into consideration, I include models of the **main explanatory variables without the interaction term** in Appendix Table 19.
- Appendix Table 20 contains the results of regime **sub-samples**.
- In Appendix Table 21 I include **country fixed-effects models**.
- I present a model with an **alternative conscription variable** in Appendix Table 22.
- I disaggregate coups into **senior and junior officer coups** in Appendix Tables 23 and 24.
- I run a series of models with **different values of time polynomials** in Appendix Table 25.
- Appendix table 26 introduces models with **additional control variables**.
- In Appendix Table 27, I include a **linear probability model with country and year Fixed Effects.**

**Non-P5 countries**

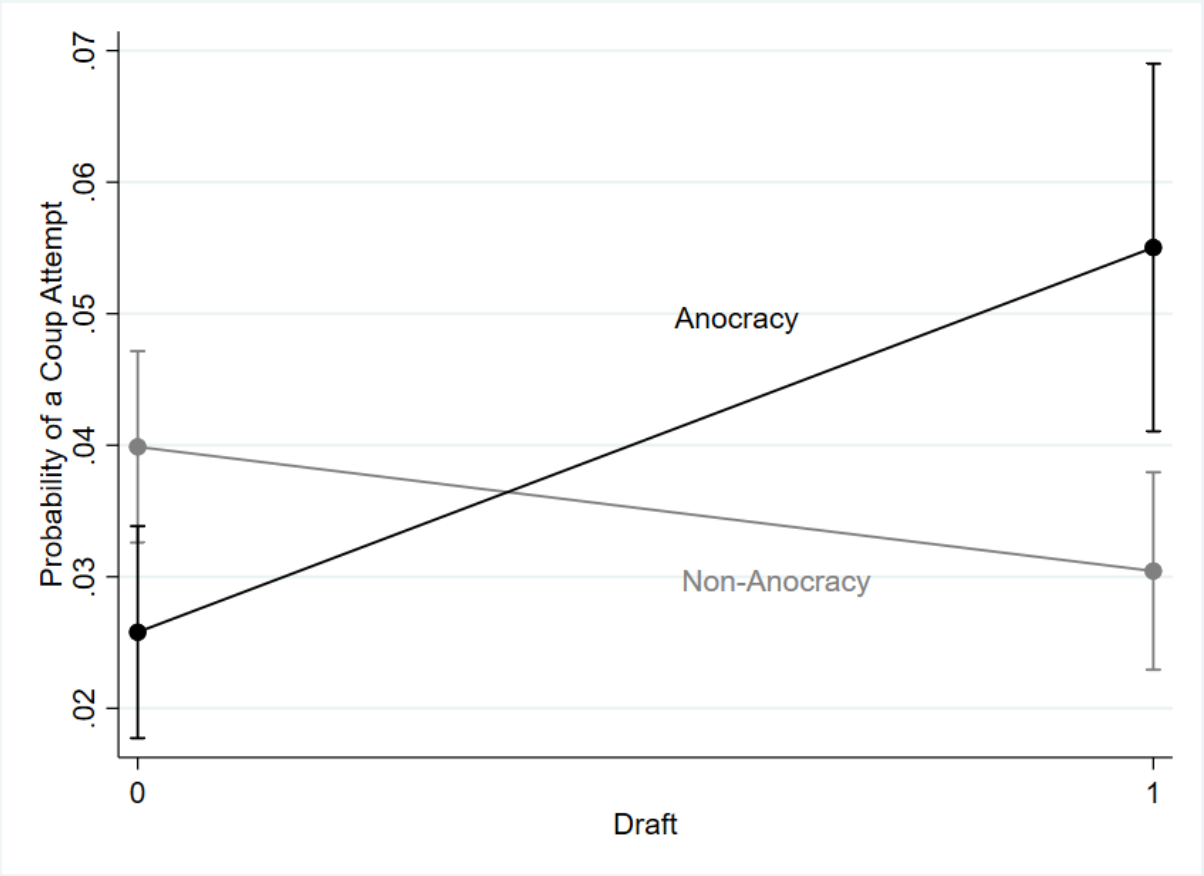
Major powers do not traditionally experience turbulent civil-military relations or inside challenges to their domestic political status quo. The armed forces of major powers are focused on the projection of power and the defence of national interests in the international system and a possible confrontation with the political leadership would have a significant impact on the position of the state as a major power in international politics. Therefore, the armed forces of major powers are expected to be less involved in politics and instead focus on their professional duties. For the purposes of this research, I treat the permanent five members of the UN Security Council as the major powers in the international system. The civil-military relations of the United States, the United Kingdom, and France resembles the model of the Huntingtonian objective control in civil-military relations (1959) while in case of USSR/Russia and China their civil-military relations correspond to the Marxist-Leninist dependent-coalitional and symbiotic models of civil-military relations respectively (Perlmutter and LeoGrande, 1982). All in all, major powers are not expected to experience a political intervention from the armed forces and are thus excluded from this iteration of main text model 7. Nonetheless, the Draft*Anocracy interaction term is still statistically significant at the 99.99% confidence level and has a positive impact on coup attempt probability.

**Appendix Table 10**. Non-P5 Countries

| | Model A11 |
|---|---|
| Draft | -0.300 |
| | (0.205) |
| Anocracy | -0.480 |
| | (0.246)* |
| Draft*Anocracy | 1.150 |
| | (0.331)*** |
| Change Military Expenditure | 0.000 |
| | (0.001) |
| Soldier Quality | -0.149 |
| | (0.075)** |
| Military Personnel | -0.054 |
| | (0.052) |
| Change GDP per capita | -3.630 |
| | (0.773)*** |
| GDP per capita | -0.278 |
| | (0.085)*** |
| Instability | 0.097 |
| | (0.024)*** |
| Years Since Coup | -0.259 |
| | (0.069)*** |
| Years Since Coup$^2$ | 0.017 |
| | (0.005)*** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000)*** |
| Obs. | 4,642 |
| Log Pseudo Likelihood | -591.311 |
| Wald $\chi^2$ | 162.25*** |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Figure 1**. Predicted probabilities graph of the impact of Draft*Anocracy on Coup Risk based on model A11




*Note: The interaction of draft with anocracy. Graph presents predicted probabilities for a coup attempt given the values of Draft and conditional on Anocracy. The vertical bars pertain to 90 percent confidence intervals.*

**Heckman-Type Probit Two-Stage Selection Model**

Mirroring Powell's 2012 model, I run a Heckman type two-stage selection model to examine the outcome of coup attempts. The dependent variable of the selection stage is the coup attempt binary variable. The dependent variable of the outcome stage is a binary coup success variable which takes a value of 1 in the event of a successful coup and 0 in all other cases. In the selection stage, out of 4,836 observations we identify 168 selected observations (3.47%), to be estimated in the outcome stage. Ultimately, the findings of the two-stage model demonstrate that there is no relationship between the interaction term and coup outcome. Additionally, based on the results of the model it seems that states that experience increases in military expenditure are more likely to experience a successful coup attempt. Lastly, the effect of the

Draft*Anocracy interaction term is positive and statistically significant in the selection stage of the model.

**Appendix Table 11**. Sample-Selection Model

| | Model A12 Selection Stage | Model A12 Outcome Stage |
|---|---|---|
| Draft | -0.159 | 0.202 |
| | (0.093)* | (0.279) |
| Anocracy | -0.232 | 0.039 |
| | (0.128)* | (0.455) |
| Draft*Anocracy | 0.585 | 0.036 |
| | (0.162)*** | (0.569) |
| Change Military Expenditure | -0.000 | 0.779 |
| | (0.000) | (0.224)*** |
| Soldier Quality | -0.081 | -0.159 |
| | (0.037)** | (0.125) |
| Military Personnel | -0.032 | -0.101 |
| | (0.024) | (0.097) |
| Change GDP per capita | -1.761 | 0.080 |
| | (0.366)*** | (1.085) |
| GDP per capita | -0.128 | -0.032 |
| | (0.042)*** | (0.169) |
| Instability | 0.048 | 0.023 |
| | (0.010)*** | (0.037) |
| Years Since Coup | -0.095 | |
| | (0.030)*** | |
| Years Since Coup$^2$ | 0.004 | |
| | (0.002)** | |
| Years Since Coup$^3$ | -0.000 | |
| | (0.000)* | |
| Obs. | | 4,836 |
| Log Pseudo Likelihood | | -708.841 |
| Athrho | | 0.125 |
| Rho | | 0.125 |
| Wald $\chi^2$ | | 17.36 |
| Prob> $\chi^2$ | | 0.043 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Bivariate Two-Stage Model**

The academic literature points out that conscription is not randomly assigned in states, but certain socioeconomic factors may influence the likelihood that a state will adopt a conscription recruitment system in the armed forces (Asal, Conrad, Toronto, 2017). States institute conscription to deter or counterbalance foreign adversaries. To this end, we may observe conscription being adopted in states whose internal political system is pressured by foreign threats and confront a case of selection bias. To control for sample selection bias, I employ a bivariate two stage probit model. The dependent variable of the selection stage is the draft binary variable, mainly whether conscription is present in a country. The second equation with coup attempt as the dependent variable is estimated simultaneously with the first equation while controlling for the correlation in the equations' error processes (Beardsley 2008:731). I use the temporal years since last coup variable only in the selection stage as an instrument variable (Beber, 2012). The time passed since the last coup in a state may influence the probability of a state adopting conscription and affect coup risk through the direct effect of the draft variable. Moreover, the results of the bivariate two stage model are identical to the results of the main text model and the Draft*Anocracy interaction term has a positive and statistically significant effect on coup attempt.

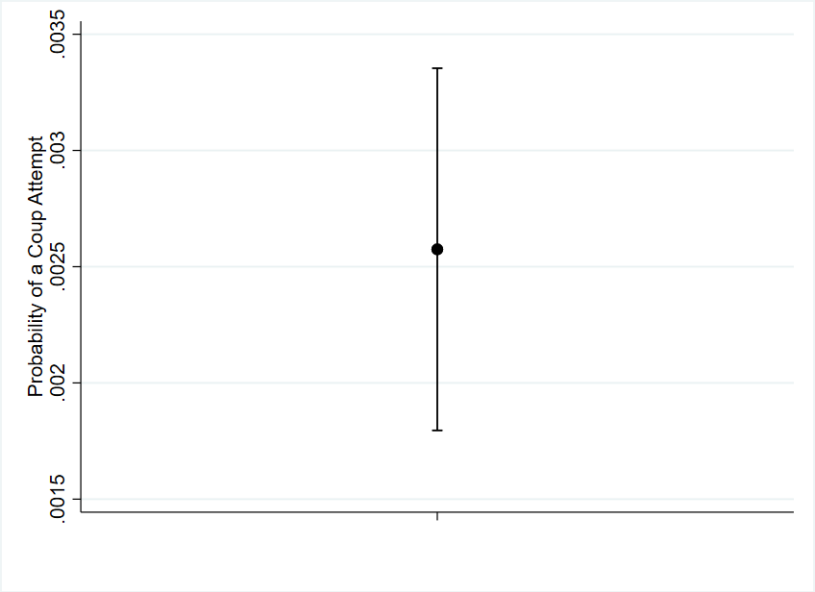
**Appendix Table 12**. Bivariate Two-Stage Model

| | Model A13 D*A | Model A13 Attempt |
|---|---|---|
| Draft*Anocracy | | 1.336 |
| | | (0.500)*** |
| Change Military Expenditure | -0.015 | -0.000 |
| | (0.057) | (0.002) |
| Soldier Quality | -0.058 | -0.115 |
| | (0.029)** | (0.037)*** |
| Military Personnel | 0.008 | -0.073 |
| | (0.019) | (0.027)*** |
| Change GDP per capita | 0.000 | -1.832 |
| | (0.086) | (0.384)*** |

| | | |
|---|---|---|
| GDP per capita | -0.062 | -0.165 |
| | (0.031)** | (0.043)*** |
| Instability | 0.005 | 0.065 |
| | (0.007) | (0.010)*** |
| Years Since Coup | -0.010 | |
| | (0.002)*** | |
| Obs. | | 4,836 |
| Log Likelihood | | -1945.317 |
| Wald $\chi^2$ | | 250.78 |
| Prob> $\chi^2$ | | 0.000 |
| Athrho | | -0.524* |
| Rho | | -0.480 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Figure 2** – Average Marginal Effects graph on the impact of Draft*Anocracy on Coup Attempt based on model A13




*Note: Graph presents the average marginal effects of the Draft*Anocracy variable on the probability of a coup attempt. The vertical bars pertain to 90 percent confidence intervals.*

**Assessing the Internal and External Threat Environment**

Research has demonstrated that civil conflicts increase the probability of a coup attempt (Quinlivan, 1999; Svolik, 2003; Böhmelt et al., 2018). Intra- and inter-state disputes increase the importance of the armed forces for the survival of the state apparatus and may provide the

sufficient incentives and resources for the armed forces to intervene into the political arena. Prior research has also shown that intra- and inter- state disputes increase the likelihood of the adoption of a draft system by a state (Asal, Conrad, and Toronto, 2017). When states confront severe internal and external threats, they are expected to be more likely to establish a conscription system in order to mobilize all the available human resources to combat those threats[32]. In the model below, I re-examine the effect of the Draft*Anocracy interaction with the inclusion of the Civil Conflict and Militarizes Interstate Dispute variables (Böhmelt, Escribà-Folch, and Pilster, 2018). The Draft*Anocracy interaction term still exerts a positive and significant effect on the probability of a coup attempt. Additionally, mirroring Böhmelt's, Escribà-Folch's, and Pilster's (2018) results, civil conflict significantly increases the probability of a coup attempt while militarized interstate disputes have no effect.

**Appendix Table 13**. Internal and External Threat Environment

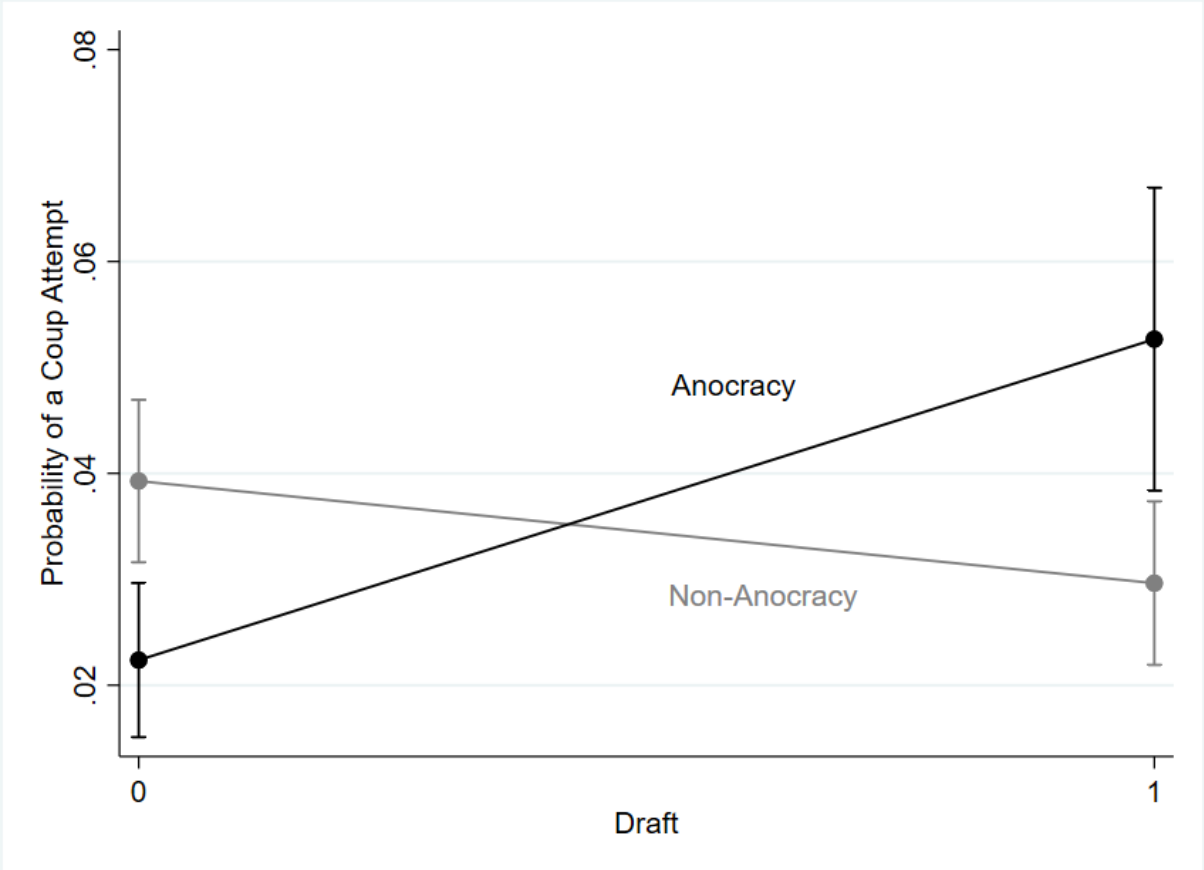
| | Model A14 |
|---|---|
| Draft | -0.315 |
| | (0.218) |
| Anocracy | -0.621 |
| | (0.258)** |
| Draft*Anocracy | 1.284 |
| | (0.345)*** |
| Change Military Expenditure | 0.000 |
| | (0.000) |
| Soldier Quality | -0.176 |
| | (0.074)** |
| Military Personnel | -0.129 |
| | (0.063)** |
| Change GDP per capita | -3.412 |
| | (0.721)*** |
| GDP per capita | -0.201 |
| | (0.088)** |
| Instability | 0.070 |
| | (0.027)*** |
| Civil Conflict | 0.881 |
| | (0.216)*** |

[32] Israel is a prime example of a country with a universal conscription system both for males and females due to high levels of internal and external threats.

| | |
|---|---|
| Militarized Interstate Dispute | -0.166 |
| | (0.156) |
| Years Since Coup | -0.225 |
| | (0.070)*** |
| Years Since Coup$^2$ | 0.012 |
| | (0.005)** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000)* |
| Obs. | 4,835 |
| Log Pseudo Likelihood | -591.692 |
| Wald $\chi^2$ | 214.46*** |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Figure 3**. Predicted probabilities graph of the impact of Draft*Anocracy on Coup Risk based on model A14




*Note: The interaction of draft with anocracy. Graph presents predicted probabilities for a coup attempt given the values of Draft and conditional on Anocracy. The vertical bars pertain to 90 percent confidence intervals.*

**Three-Stage Least-Squares Regression**

I employ a three-stage least-squares regression to examine the case of reverse causality between the Coup Attempt and the main independent variable. Since the research hypothesis is a conditional one and the main independent variable is an interaction term, I examine the effect of coup d'état on conscription in a sub-sample of anocratic regimes. The endogenous variables in this case are Coup Attempt and Draft and each of the two endogenous variables is regressed with the exogenous variables of the model. The exogenous variables of the first stage with Coup Attempt as the endogenous variable are excluded from the second stage and vice versa. Therefore, in the second stage I include, alongside the Coup Attempt variable, the Change in Military Expenditure and Military Personnel variables. Correspondingly, these two control variables are excluded from the first stage of the model. Below I present the 3SLS regression for years 1970-2008.

The results of the first stage of the 3SLS model are similar to the results of main text model 7. Conscription in anocracies has a positive and statistically significant effect on the likelihood of a coup attempt. Additionally, coup attempt in anocracies is found to have no effect on the establishment of a conscription recruitment system while countries with large armies are more likely to conscript. Consequently, I do not find evidence that the onset of a coup d'état in anocratic regimes has an impact on the establishment of conscription.

**Appendix Table 14**. Three-Stage Least-Squares Regression Model

| | Model A15<br>Coup Attempt | Model A15<br>Draft |
|---|---|---|
| Coup Attempt | | -0.173<br>(0.112) |
| Draft | 0.030<br>(0.017)* | |
| Change Military Expenditure | | -0.003<br>(0.010) |
| Soldier Quality | -0.012 | |

| | | |
|---|---|---|
| | (0.009) | |
| Military Personnel | | 0.049 |
| | | (0.023)** |
| Change GDP per capita | -0.174 | |
| | (0.089)* | |
| GDP per capita | -0.005 | |
| | (0.010) | |
| Instability | 0.003 | |
| | (0.002) | |
| Years Since Coup | -0.006 | |
| | (0.004) | |
| Years Since Coup$^2$ | 0.000 | |
| | (0.000) | |
| Years Since Coup$^3$ | -0.000 | |
| | (0.000) | |
| Obs. | | 761 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Omitting Countries Without Variation**

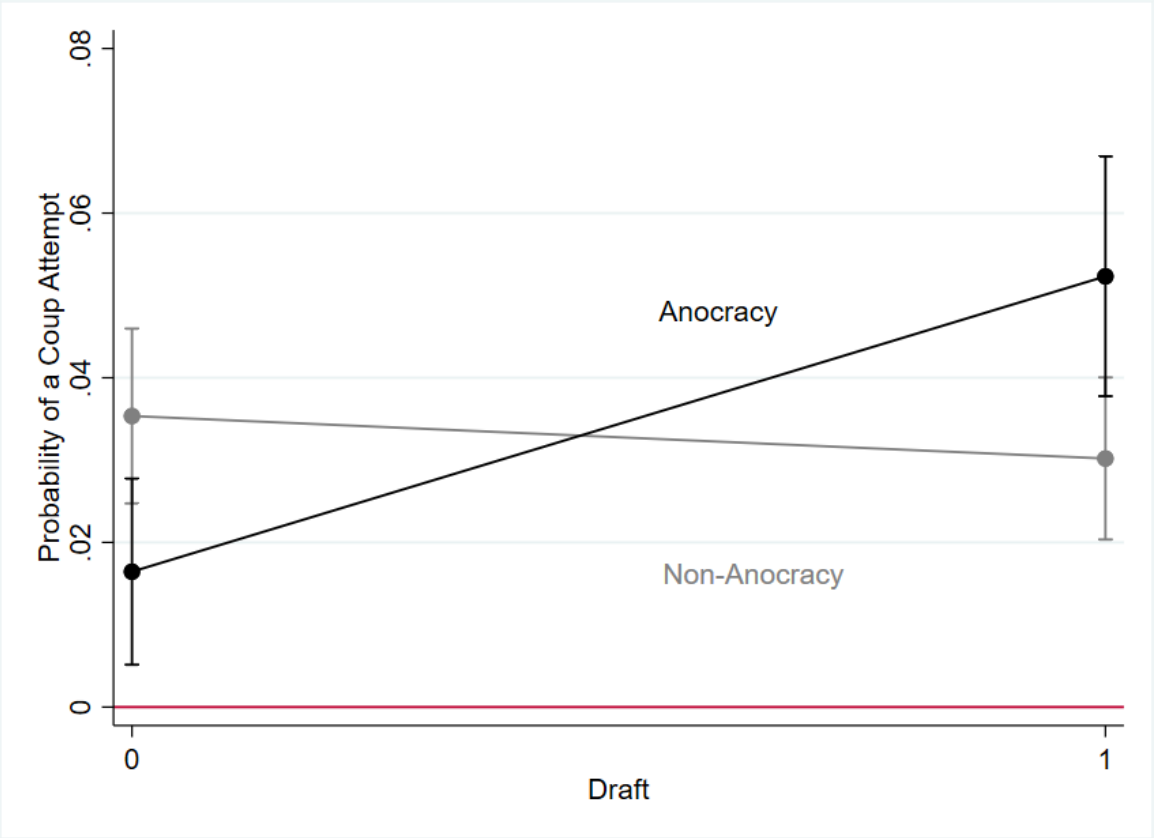
Out of the total 200 countries in the data set, 118 either did not a conscription recruitment system for the entirety of the period examined or they always had conscription. I re-estimate the main model and I include only the 80 countries that exhibit variation in the draft variable. Although the impact of the Draft*Anocracy interaction term on coup risk is less poignant in this model, it is still positive and statistically significant at the 95% confidence level. Nevertheless, the results of the predicted probabilities graph are similar to main text model 7. As a result, conscription is found to increase the probability of a coup attempt in anocratic regimes even in a draft variation-only sample.

**Appendix Table 15**. Variation Only

| | Model A16 |
|---|---|
| Draft | -0.174 |
| | (0.278) |
| Anocracy | -0.827 |
| | (0.550) |
| Draft*Anocracy | 1.448 |
| | (0.622)** |
| Change Military Expenditure | -0.138 |
| | (0.290) |
| Soldier Quality | -0.270 |
| | (0.120)** |
| Military Personnel | -0.028 |
| | (0.107) |
| Change GDP per capita | -2.967 |
| | (1.353)** |
| GDP per capita | -0.176 |
| | (0.130) |
| Instability | 0.078 |
| | (0.038)** |
| Years Since Coup | -0.366 |
| | (0.107)*** |
| Years Since Coup$^2$ | 0.029 |
| | (0.010)*** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000)** |
| Obs. | 2,259 |
| Log Pseudo Likelihood | -268.847 |
| Wald $\chi^2$ | 109.24*** |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Figure 4**. Predicted probabilities graph of the impact of Draft*Anocracy on Coup Risk based on model A16




*Note: The interaction of draft with anocracy. Graph presents predicted probabilities for a coup attempt given the values of Draft and conditional on Anocracy. The vertical bars pertain to 90 percent confidence intervals.*

**Region and Year Fixed-Effects**

The presence of a conscription recruitment system in a country is determined by regional factors such as regional instability, natural resources, a colonial past, or the instigation of intra- and inter-state conflict that might spill over to neighboring states. It is highly probable that the impact of conscription on coup likelihood in anocratic regimes is driven by these region-specific characteristics. To control for the degree that these region-level characteristics have an impact coup risk, I run a region-fixed effects variation of main text model 7 based on the region variable from Fearon and Laitin (2003). Similar to the main text model, the effect of conscription in anocracies on the probability of coup attempt is positive and statistically significant at the 99.99% confidence level. I also include an identical model with errors

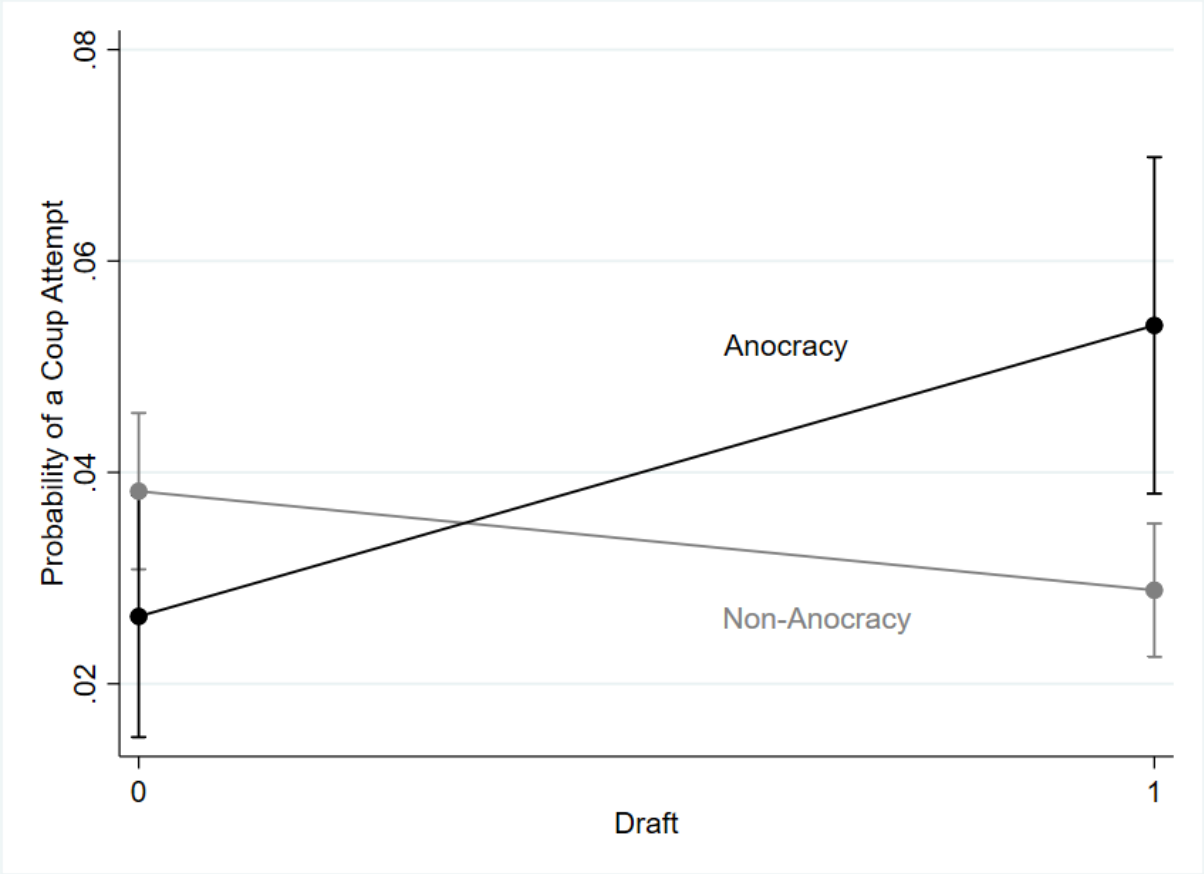
clustered at the regional level and the effect of draft*anocracy on coup attempt remains robust. Additionally, I control for year fixed effects to control for year specific effects on coup attempt and once again draft*anocracy has a positive and statistically significant effect on coup attempt.

**Appendix Table 16**. Region and Year Fixed-Effects

| | Model A17 | Model A18 | Model A19 |
|---|---|---|---|
| Draft | -0.257 | -0.257 | -0.268 |
| | (0.204) | (0.162) | (0.195) |
| Anocracy | -0.428 | -0.428 | -0.209 |
| | (0.311) | (0.145)*** | (0.322) |
| Draft*Anocracy | 1.151 | 1.151 | 1.090 |
| | (0.399)*** | (0.162)*** | (0.402)*** |
| Change Military Expenditure | -0.000 | -0.000 | -0.000 |
| | (0.007) | (0.001) | (0.008) |
| Soldier Quality | -0.129 | -0.129 | -0.087 |
| | (0.083) | (0.073)* | (0.090) |
| Military Personnel | -0.032 | -0.032 | -0.080 |
| | (0.071) | (0.023) | (0.062) |
| Change GDP per capita | -3.655 | -3.655 | -3.840 |
| | (0.794)*** | (0.563)*** | (0.799)*** |
| GDP per capita | -0.222 | -0.222 | -0.310 |
| | (0.120)* | (0.038)*** | (0.100)*** |
| Instability | 0.096 | 0.096 | 0.102 |
| | (0.026)*** | (0.027)*** | (0.025)*** |
| Years Since Coup | -0.195 | -0.195 | -0.186 |
| | (0.056)*** | (0.055)*** | (0.057)*** |
| Years Since Coup$^2$ | 0.010 | 0.010 | 0.010 |
| | (0.004)** | (0.004)** | (0.004)** |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 |
| | (0.000)** | (0.000)* | (0.000)** |
| Obs. | 4,836 | 4,836 | 4,424 |
| Log Likelihood | -580.027 | -580.027 | -580.027 |
| LR $\chi^2$ | 173.43*** | | 229.03*** |
| Region Fixed Effects | Yes | Yes | No |
| Year Fixed Effects | No | No | Yes |
| Region Clustered Errors | No | Yes | No |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

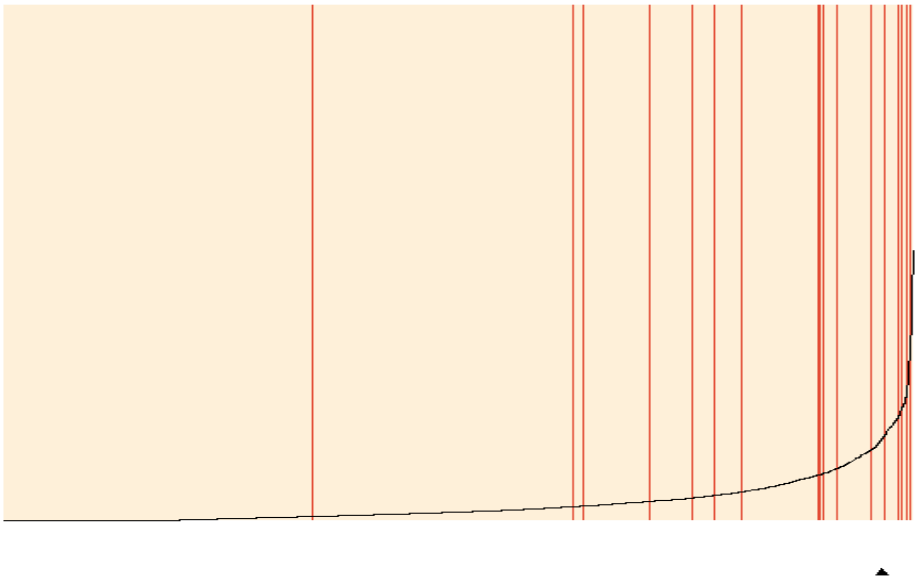
**Appendix Figure 5**. Predicted probabilities graph of the impact of Draft*Anocracy on Coup Risk based on model A17




**Separation Plot**

I include in the appendix a separation plot of main text model 7 to examine the predictive capacity of the regression models. More specifically, the separation plot compares the presence of events and non-events, in our case coup attempts and coup free years, with the predictive values of the model in an ascending order from left to right (Greenhill, Ward, and Sacks, 2011: 994). If the predictive capacity of the model is low, then the events (red vertical lines) and non-events would be spread evenly across the right column side (Greenhill, Ward, and Sacks, 2011: 994). In our case, we observe a concentration of coup attempts in the right side, despite the presence of a few outliers in the middle, further confirming the model's strong predictive capabilities.

**Appendix Figure 6**. Separation Plot Based on Main Text's Model 7



*Note: The red vertical lines depict the onset of coup d'état.*

**Out-of-Sample 4-Fold Cross-Validation**

Controlling for out-of-sample error I employ a four-fold cross-validation approach to avoid data overfitting. "*This approach involves randomly dividing the set of observations into k groups, or folds, of approximately equal size* (James et al., 2013)". To start with, I randomly divide the sample into four equal-in size parts. The first three parts work as training sets in order to calculate the model parameters, while the fourth part is utilized as the testing set to evaluate the performance of the main text model 7 and of a model only with control variables included as predictive tools. To determine the out-of-sample predictive capacity, we rely "*we rely on the area under the Receiver Operator Characteristic (ROC) curve, which ranges from a low value of 0.5 if there is no improvement in predictive power over a random guess to 1.0 for perfect classifications of outcomes*" (Böhmelt and Pilster, 2018, p. a2). To this end, I compare main text model 7 with a control only model, while also including the Draft and

Anocracy variables but not the interaction term. Both models have the same amount of observations. The average value of each column in the 4-Fold Cross Validation process shows that the Draft*Anocracy interaction term increases slightly the predictive capacity of the model.

**Appendix Table 17**. Out-of-Sample 4-Fold Cross Validation

| Cycle Run | Main Text Model 7 | Model without Draft*Anocracy interaction term |
|---|---|---|
| 1 | 0.835 | 0.830 |
| 2 | 0.819 | 0.816 |
| 3 | 0.835 | 0.830 |
| 4 | 0.819 | 0.822 |
| 5 | 0.835 | 0.830 |
| 6 | 0.825 | 0.813 |
| 7 | 0.835 | 0.830 |
| 8 | 0.817 | 0.816 |
| 9 | 0.835 | 0.830 |
| 10 | 0.827 | 0.816 |
| Average Value | 0.828 | 0.823 |

*Note*: Table entries are area under ROC curve statistics.

**Disaggregating Non-Anocracies**

For the purports of this paper, I have aggregated autocracies and democracies into the category of non-anocracies. I anticipate that conscription will have a negative effect on coup risk in both regime types. In the case of autocracies, the high concentration of authority in an assertive centralized government is expected to enable the civilian government to control the indoctrination practices in the armed forces and thus conscription leads to the diffusion of pro-government ideology and line of thought into the rest of society. For instance, in the People's Liberation Army, the proliferation of Marxist and Leninist thought within the military ranks is a crucial aspect of conscript training (Heaton Jr., 1980, p. 123), as new recruits are socialized through ideological studies and political indoctrination programs (Shambaugh, 1991, p. 562-565).More specifically, the ratio of military and political training for conscripts in the PLA is 6:4, meaning 24 and 16 days of military and political training respectively out of a total 40 days

in the induction period, including subjects such as military discipline and party ideology (Blasko in Kamphausen, Scobell, Tanner, 2008, p. 106-107). In the case of democracies, conscription is expected to decrease coup probability as citizen are represented in the political decision-making through their elected representatives, and a military intervention into politics would negatively impact their living conditions due to rent seeking by the junta (Adam, 2012).

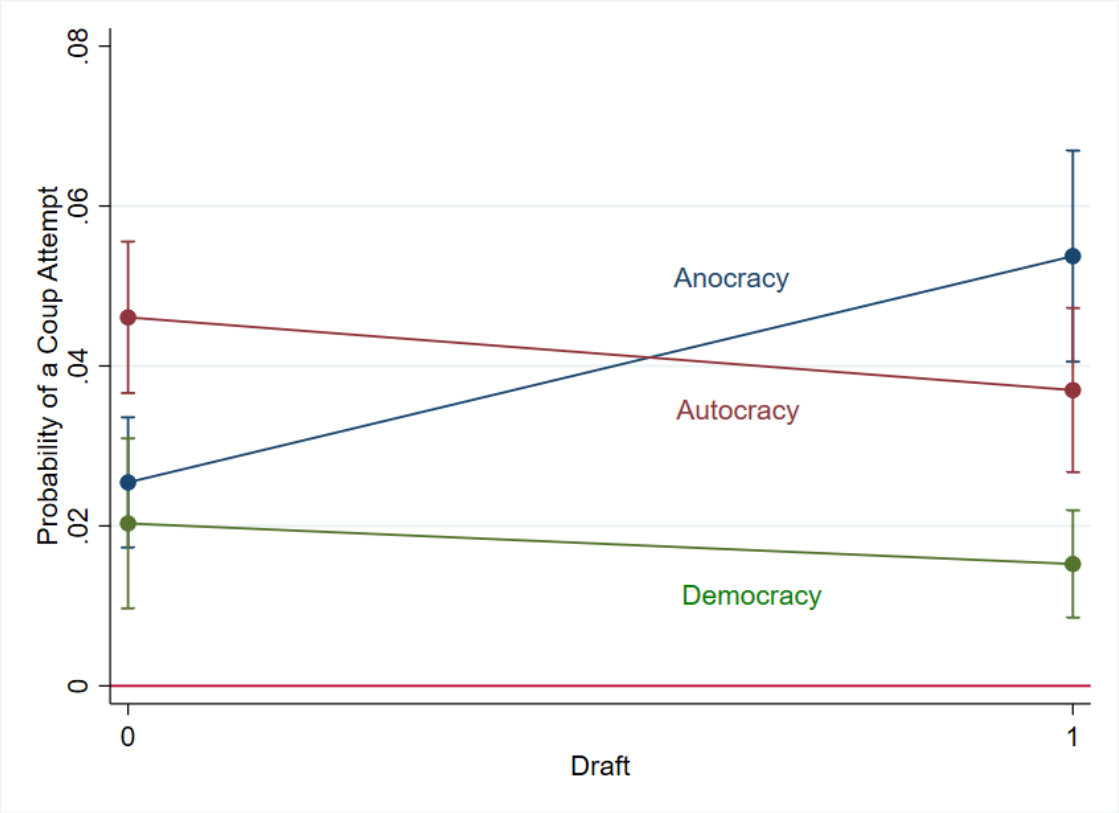
In accordance with the previous statement, conscription in democracies diffuses democratic elements into the armed forces and facilitates objective civilian control (Huntington, 1957). To examine these claims, I run a model with two interaction terms, Draft*Democracy and Draft*Autocracy, with anocracies as the baseline. Conscription in anocracies still has a positive effect on coup probability and the confidence intervals for anocracies with and without conscription are clearly separated. Conscription is found to have a statistically significant negative effect on coup probability in autocracies, but the two confidence intervals do overlap, so the relationship is rather ambiguous. In the case of democracies, while the effect is negative and statistically significant, the two confidence intervals are almost identical. As coup d'état in democratic regimes is an extremely rare phenomenon, it is plausible that conscription has no effect on coup probability in democracies as these regimes are already shielded from coups by other institutional and political means, like a strictly professional, democratic cohort and politically engaged citizens. Finally, while the probability of coup attempt is similar in anocracies and democracies without conscription, the probability of coup attempt in anocracies with conscription is significantly higher, around 4 percentage points, than democracies with conscription.

**Appendix Table 18**. Autocracy and Democracy with Anocracy as the baseline Model

| | Model A20 |
|---|---|
| Draft | 0.830 |
| | (0.270)*** |
| Democracy | -0.240 |
| | (0.430) |
| Autocracy | 0.654 |
| | (0.244)*** |
| Draft*Democracy | -1.133 |
| | (0.526)** |
| Draft*Autocracy | -1.077 |
| | (0.336)*** |
| Change Military Expenditure | -0.000 |
| | (0.000) |
| Soldier Quality | -0.142 |
| | (0.071)** |
| Military Personnel | -0.091 |
| | (0.053)* |
| Change GDP per capita | -3.267 |
| | (0.742)*** |
| GDP per capita | -0.195 |
| | (0.084)** |
| Instability | 0.113 |
| | (0.023)*** |
| Years Since Coup | -0.190 |
| | (0.066)*** |
| Years Since Coup$^2$ | 0.010 |
| | (0.005)** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000)* |
| Obs. | 4,836 |
| Log Pseudo Likelihood | -593.735 |
| Wald $\chi 2$ | 213.73*** |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Figure 7**. Predicted probabilities graph of the impact of Draft*Autocracy and Draft*Democracy on Coup Risk




*Note: The interaction of draft with anocracy. Graph presents predicted probabilities for a coup attempt given the values of Draft and conditional on Anocracy. The vertical bars pertain to 90 percent confidence intervals. The predicted probability of 0 marked with grey horizontal line.*

**The Explanatory Variables without the Interaction Term**

I also include models with the effect of the main explanatory variables on coup risk without the interaction term with coup attempt as the dependent variable. The effect of the draft variable on coup risk is statistically insignificant in the first model. This finding is in accordance with the theoretical argument as conscription is expected to increase coup risk only in anocracies. Likewise, the anocracy variable itself has no statistically significant effect on the probability of the coup risk as displayed in the second model. All in all, the results of both models suggest that the draft and anocracy variables do not have an impact on coup risk when they are separated. Only the interaction of the two variables is expected to have a positive and statistically significant effect on the likelihood of a coup attempt.

**Appendix Table 19**. Model with Draft and Anocracy as the Independent Variable

| | Model A21 | Model A22 |
|---|---|---|
| Draft | 0.003 | |
| | (0.170) | |
| Anocracy | | 0.136 |
| | | (0.177) |
| Change Military Expenditure | -0.000 | 0.000 |
| | (0.000) | (0.000) |
| Soldier Quality | -0.207 | -0.145 |
| | (0.074)*** | (0.072)** |
| Military Personnel | -0.085 | -0.071 |
| | (0.051)* | (0.050) |
| Change GDP per capita | -3.335 | -3.535 |
| | (0.716)*** | (0.729)*** |
| GDP per capita | -0.260 | -0.275 |
| | (0.078)*** | (0.085)*** |
| Instability | 0.091 | 0.090 |
| | (0.021)*** | (0.023)*** |
| Years Since Coup | -0.161 | -0.212 |
| | (0.047)*** | (0.066)*** |
| Years Since Coup$^2$ | 0.007 | 0.012 |
| | (0.003)** | (0.005)** |
| Years Since Coup$^3$ | -0.000 | -0.000 |
| | (0.000)** | (0.000)* |
| Obs. | 5,998 | 4,969 |
| Log Pseudo Likelihood | -686.077 | -640.688 |
| Wald $\chi^2$ | 176.36 | 164.43 |
| Prob> $\chi^2$ | 0.000 | 0.000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Regime Sub-Sample**

I divide the sample into three sub-samples based on regime type. Thereupon, the sample is divided into democracies, autocracies, and anocracies. I use these models to examine the effect of conscription in each regime separately. Once again, the results demonstrate the conscription increases the probability of a coup attempt in anocracies. Similar with the other models, conscription has a negative effect on coup risk in democracies and autocracies, but the effect

is statistically insignificant. Based on the sub-sample results, we can conclude that conscription increases the probability of a coup attempt in anocracies, but the effect is non-significant in democracies or autocracies, although there have been past cases of coups in democracies with conscription (Adam, 2012). Therefore, unlike popular belief, conscription does not seem to decrease coup risk in democracies, thus putting in doubt the democratizing effect of conscripts on the democratic armed forces.

**Appendix Table 20**. Regime Sub-Samples

| | Anocracy | Democracy | Autocracy |
|---|---|---|---|
| Draft | 0.831 | -0.329 | -0.192 |
| | (0.305)*** | (0.394) | (0.240) |
| Change Military Expenditure | 0.252 | 0.091 | 0.001 |
| | (0.347) | (0.515) | (0.001) |
| Soldier Quality | -0.268 | 0.085 | -0.149 |
| | (0.165) | (0.207) | (0.088)* |
| Military Personnel | -0.017 | -0.080 | -0.126 |
| | (0.120) | (0.118) | (0.080) |
| Change GDP per capita | -4.473 | -5.374 | -2.735 |
| | (2.067)** | (1.855)*** | (0.849)*** |
| GDP per capita | -0.205 | -0.367 | -0.144 |
| | (0.216) | (0.220)* | (0.104) |
| Instability | 0.079 | 0.249 | 0.104 |
| | (0.045)* | (0.099)** | (0.030)*** |
| Years Since Coup | -0.126 | -0.168 | -0.313 |
| | (0.102) | (0.176) | (0.091)*** |
| Years Since Coup$^2$ | 0.006 | 0.010 | 0.022 |
| | (0.006) | (0.011) | (0.008)*** |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 |
| | (0.000) | (0.000) | (0.000)** |
| Obs. | 761 | 2,064 | 2,011 |
| Log Pseudo Likelihood | -144.803 | -91.04 | -350.49 |
| Wald $\chi^2$ | 33.66 | 51.22 | 85.01 |
| Prob> $\chi^2$ | 0.000 | 0.000 | 0.000 |
| Time Period | 1970-2008 | 1970-2008 | 1970-2008 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Country Fixed-Effects**

Each country has a unique set of socioeconomic characteristics and historical experiences that might influence coup risk. To control for the event of this country-specific characteristics I run a set of country fixed-effects models. A potential issue with a country fixed-effects model is that states with a perfect classification of outcomes are omitted from the analysis (Escribà-Folch, Böhmelt, and Pilster, 2019). Therefore, states that have never experience a coup d'état are omitted and we thus observe a substantial loss of observations in the aforementioned models. In addition, country fixed effects are not the optimal way to estimate variables whose values do not change rapidly over time (Plümper and Troeger, 2011), such as the anocracy and draft variables. Therefore, I exclude all countries that do not present a variation in draft from this model. However, even with the inclusion of the country fixed effects and the significant reduction of the sample, the interaction term has a positive and statistically significant effect on coup attempt across the models. Nevertheless, in the marginal effects graph for model A24 we observe that the 90% confidence intervals of anocracies with and without conscription do slightly overlap. The confidence intervals do not overlap if we use the 84% CI. Payton, Greenstone, and Schenker (2003) argue that the 95% CI are too conservative for an error rate test of a=0.05, and instead the 84 % CI are the preferred choice. In more detail, "the 95% intervals are too wide, resulting in a procedure that declares differences at a proportion much less than the desired $\alpha = 0.05$ rate." (Payton, Greenstone, and Schenker, 2003). Therefore, in the 84% CI the confidence intervals of anocracies with and without conscription are clearly separated. In any case, in model A25 I also control for counterbalancing. Both counterbalancing variables are statistically significant and have a negative effect on coup attempt in accordance with the existing literature (Böhmelt and Pilster, 2015). Furthermore, the Draft*Anocracy interaction term has a positive effect on coup attempt and is statistically significant at the 99% confidence level. Most importantly, the 90% confidence intervals for

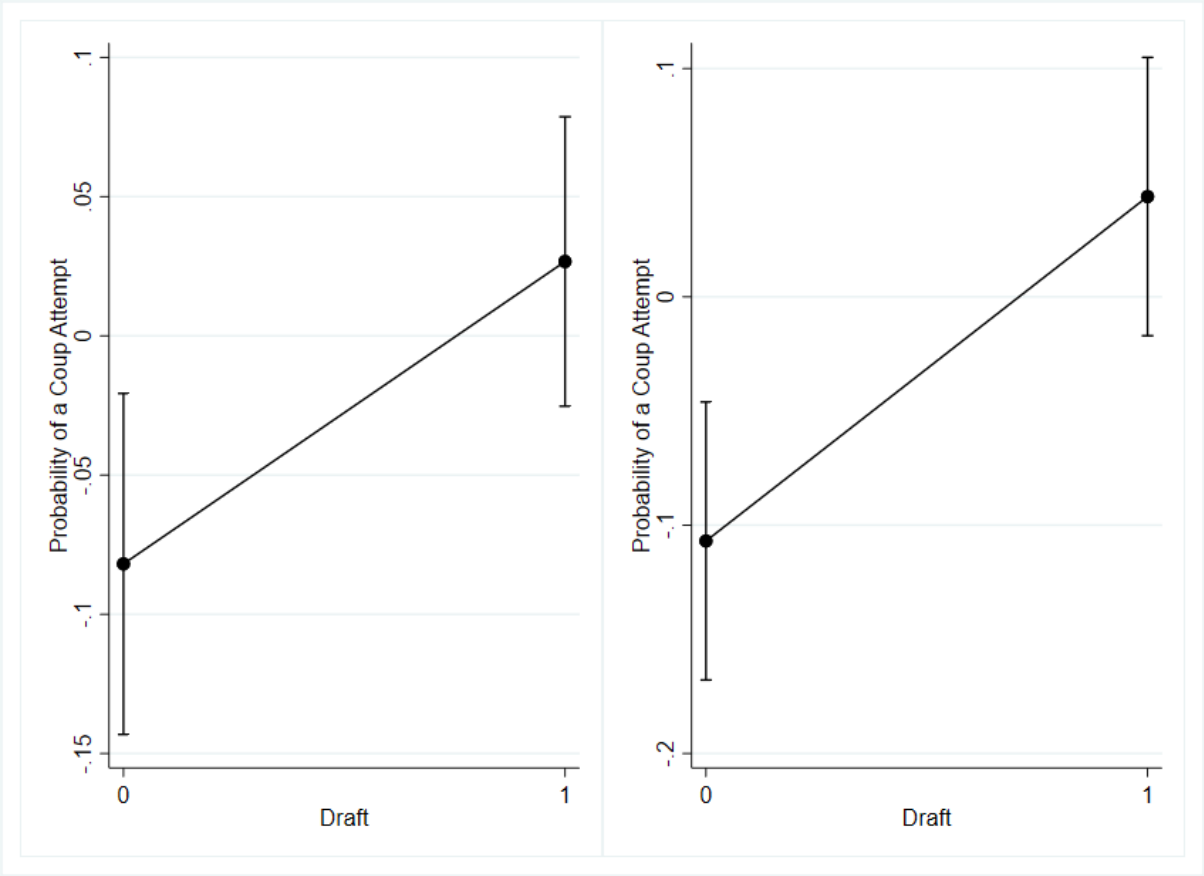
model A25 in Appendix Figure 8 are clearly separated thus re-affirming the position that conscription in anocracies increases coup risk. Finally, in A26 I include clustered errors at the country level and the results remain robust.

**Appendix Table 21**. Country Fixed-Effects

| | Model A23 | Model A24 | Model A25 | Model A26 |
|---|---|---|---|---|
| Draft | 0.054 | -0.579 | -0.711 | -0.579 |
| | (0.374) | (0.439) | (0.470) | (0.449) |
| Anocracy | -1.408 | -1.467 | -2.250 | -1.467 |
| | (0.725)* | (0.769)* | (0.914)** | (0.831)* |
| Draft*Anocracy | 1.703 | 1.852 | 2.857 | 1.852 |
| | (0.801)** | (0.867)** | (1.009)*** | (0.851)** |
| Change Military Expenditure | | 0.012 | -0.047 | 0.012 |
| | | (0.320) | (0.349) | (0.313) |
| Soldier Quality | | -0.396 | -0.275 | -0.396 |
| | | (0.221)* | (0.258) | (0.194)** |
| Military Personnel | | -0.299 | -0.416 | -0.299 |
| | | (0.320) | (0.367) | (0.332) |
| Change GDP per capita | | -3.349 | -4.588 | -3.349 |
| | | (1.326)** | (1.495)*** | (1.355)** |
| GDP per capita | | -1.240 | -2.018 | -1.240 |
| | | (0.568)** | (0.664)*** | (0.604)** |
| Instability | | 0.025 | 0.015 | 0.025 |
| | | (0.044) | (0.048) | (0.048) |
| Counterbalancing | | | -2.451 | |
| | | | (1.325)* | |
| Counterbalancing2 | | | 0.703 | |
| | | | (0.306)** | |
| Years Since Coup | | -0.364 | -0.407 | -0.364 |
| | | (0.107)*** | (0.119)*** | (0.095)*** |
| Years Since Coup$^2$ | | 0.034 | 0.040 | 0.034 |
| | | (0.009)*** | (0.011)*** | (0.008)*** |
| Years Since Coup$^3$ | | -0.000 | -0.000 | -0.000 |
| | | (0.000)*** | (0.000)*** | (0.000)*** |
| Obs. | 1,079 | 938 | 849 | 938 |
| Log Pseudo Likelihood | -280.956 | -225.630 | -197.376 | -225.630 |
| LR $\|^2$ | 38.11 | 76.39 | 88.69 | |
| Prob> $\|^2$ | 0.287 | 0.000 | 0.000 | |
| Country Clustered Errors | No | No | No | Yes |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Figure 8**. Average Marginal Effects of the impact of Draft*Anocracy on Coup Risk based on Country Fixed-Effects, Models A24 and A25




*Note: The interaction of draft with anocracy. Graph presents average marginal effects for a coup attempt given the values of Draft and a value of Anocracy = 1. The vertical bars pertain to 90 percent confidence intervals.*

**Alternative Conscription Variable**

In this robustness check I use an alternative conscription variable to further examine the effect of conscription on coup risk in anocracies. For this reason, I generate a duration of compulsory military service variable for the anocratic sub-sample with information from the Military Balance data set (2019). The variable captures the duration of compulsory military service in months and its maximum value is 36 months. In contrast, anocracies that do not conscript receive a value of 0. I then re-run main text model 7 with the duration variable instead of the binary draft variable in an anocratic sub-sample. With regards to the model's findings, the longer the duration of compulsory military service the higher is the probability of a coup attempt in anocracies. Therefore, we can conclude that conscription increases coup risk in

anocracies even if we do not use the binary draft variable and instead replace it with a duration variable. Additionally, more months of compulsory military service correspond to higher levels of coup risk.

**Appendix Table 22**. Months of Service

| | Model A27 |
|---|---|
| Months of Service | 0.028 |
| | (0.010)*** |
| Change Military Expenditure | 0.341 |
| | (0.289) |
| Soldier Quality | -0.354 |
| | (0.188)* |
| Military Personnel | -0.173 |
| | (0.138) |
| Change GDP per capita | -3.045 |
| | (2.020) |
| GDP per capita | 0.005 |
| | (0.221) |
| Instability | 0.057 |
| | (0.048) |
| Years Since Coup | -0.214 |
| | (0.125)* |
| Years Since Coup$^2$ | 0.013 |
| | (0.009) |
| Years Since Coup$^3$ | -0.000 |
| | (0.000) |
| Obs. | 648 |
| Log Pseudo Likelihood | -126.891 |
| Wald $\chi^2$ | 48.38 |
| Prob> $\chi^2$ | 0.000 |
| Time Period | 1970-2008 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Senior and Junior Officer Coup**

In this set of models, I examine which cohort of the officer corps carries out the coup attempt. To this end, I divide coup d'état in the anocratic sub-sample in those staged by senior officers, officers above the colonel rank, and those staged by combat officers, officers from the colonel

rank and below. I then run models similar to those in the main text only this time with combat officer coup and senior officer coup as the dependent variables. I also run a second set of models with the polity2 variable to increase the sample size since the observations in the xpolity sample are significantly below the 1,000 observations threshold commonly used in logistic regression models. Regarding coups by combat officers, the draft variable has a positive and statistically significant effect across all models. On the other hand, conscription is found to increase the probability of a coup attempt by senior officers in the polity2 sample, but not in the xpolity sample, calling attention to the low number of observations. The results indicate that the effect of conscription on coup risk in anocracies is not limited to combat or senior officers. The increased prestige and social ties of an army with conscripts enables both senior and combat officers to stage a coup attempt against the anocratic civilian government. We can therefore conclude that conscription increases the probability of a coup attempt by combat officers and we also have strong evidence that this relationship extends to senior officers as well.

**Appendix Table 23**. Combat Officer Coup

| | Model A28 | Model A29 |
|---|---|---|
| Draft | 1.331 | 0.518 |
| | (0.562)** | (0.302)* |
| Change Military Expenditure | -0.319 | 0.016 |
| | (0.378) | (0.130) |
| Soldier Quality | -0.241 | -0.365 |
| | (0.213) | (0.114)*** |
| Military Personnel | -0.290 | -0.328 |
| | (0.167)* | (0.117)*** |
| Change GDP per capita | -1.845 | -1.127 |
| | (2.005) | (1.358) |
| GDP per capita | -0.427 | -0.282 |
| | (0.255)* | (0.176) |
| Instability | 0.074 | 0.099 |
| | (0.078) | (0.041)** |
| Years Since Coup | -0.255 | -0.149 |
| | (0.214) | (0.098) |
| Years Since Coup$^2$ | 0.017 | 0.007 |

| | | |
|---|---|---|
| | (0.012) | (0.005) |
| Years Since Coup$^3$ | -0.000 | -0.000 |
| | (0.000) | (0.000) |
| Obs. | 668 | 1,556 |
| Log Pseudo Likelihood | -64.333 | -210.482 |
| Wald $\chi^2$ | 41.64 | 61.80 |
| Prob> $\chi^2$ | 0.000 | 0.000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Table 24**. Senior Officer Coup

| | Model A30 | Model A31 |
|---|---|---|
| Draft | 0.596 | 1.068 |
| | (0.558) | (0.325)*** |
| Change Military Expenditure | 0.510 | 0.156 |
| | (0.312) | (0.204) |
| Soldier Quality | -0.477 | -0.319 |
| | (0.250)* | (0.112)*** |
| Military Personnel | -0.119 | -0.028 |
| | (0.237) | (0.126) |
| Change GDP per capita | -3.375 | -1.716 |
| | (2.186) | (1.406) |
| GDP per capita | -0.062 | -0.235 |
| | (0.335) | (0.193) |
| Instability | 0.116 | 0.080 |
| | (0.060)* | (0.040)** |
| Years Since Coup | 0.019 | 0.007 |
| | (0.115) | (0.061) |
| Years Since Coup$^2$ | -0.000 | -0.002 |
| | (0.005) | (0.002) |
| Years Since Coup$^3$ | 0.000 | 0.000 |
| | (0.000) | (0.000) |
| Obs. | 688 | 1,556 |
| Log Pseudo Likelihood | -92.94 | -258.829 |
| Wald $\chi^2$ | 19.77 | 32.89 |
| Prob> $\chi^2$ | 0.031 | 0.000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Different Values of Time Polynomials**

In this set of models, I control for different values of time polynomials. In model A32 I only include the basic Years since Coup variable without its square and cubic versions and in A33 I completely remove time polynomials from the model. Once again, the effect of draft*anocracy on the probability of a coup attempt remains positive and statistically significant at the 99% confidence level, hence its effect is not influenced by the time polynomials and temporal trends.

**Appendix Table 25**. Different Values of Time Polynomials

| | Model A32 | Model A33 |
|---|---|---|
| Draft | -0.330 | -0.222 |
| | (0.209) | (0.259) |
| Anocracy | -0.541 | -0.425 |
| | (0.258)** | (0.289) |
| Draft*Anocracy | 1.198 | 1.150 |
| | (0.336)*** | (0.382)*** |
| Change Military Expenditure | -0.000 | -0.000 |
| | (0.000) | (0.000) |
| Soldier Quality | -0.165 | -0.258 |
| | (0.075)** | (0.089)*** |
| Military Personnel | -0.075 | -0.164 |
| | (0.051) | (0.068)** |
| Change GDP per capita | -3.695 | -3.971 |
| | (0.799)*** | (0.814)*** |
| GDP per capita | -0.267 | -0.401 |
| | (0.085)*** | (0.114)*** |
| Instability | 0.110 | 0.152 |
| | (0.023)*** | (0.026)*** |
| Years Since Coup | -0.069 | |
| | (0.011)*** | |
| Obs. | 4,836 | 4,836 |
| Log Likelihood | -605.513 | -640.430 |
| Wald $\chi^2$ | 183.05*** | 143.26*** |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Additional Control Variables**

Since coup risk is a multi-facet phenomenon, I control for further factors that may influence its relationship with draft and anocratic forms of government. To this end, I control for the presence of a left-wing government in power since one would expect the conservative armed forces to be more likely to move against a left-wing government than a right-wing one due to conflicting ideologies. To control for a government's left-wing ideology, I use the Database of Political Institutions from the World Bank (2017) which has information on governments around the globe between 1975 and 2015. Nevertheless, the left-wing government variable has a statistically insignificant effect. Continuing, I control for the effect of leadership transition on coup risk with the lagged by a year version of the leadership transition variable from the Change in Source of Leader Support (CHISOLS) 4.0 data (2016), although its effect is statistically insignificant. Likewise, in model A36 I examine whether the effect of Draft*Anocracy persists without controlling for other forms of political instability besides coups. Furthermore, in model A37 I control for the number of citizens per soldier in the army in a given country. Instead of measuring the absolute size of the armed forces, this variable captures how large is an army in comparison to the country's population. One would expect that the larger the share of people in the army, the larger the army's influence would be in this state. Nonetheless, the variable has a statistically insignificant effect on coup attempt. Finally, the effect of draft*anocracy on the likelihood of a coup attempt remains positive and statistically significant across all four models.

**Table 26.** Additional Control Variables

| | Model A34 | Model A35 | Model A36 | Model A37 |
|---|---|---|---|---|
| Draft | -0.437 | -0.451 | -0.301 | -0.328 |
| | (0.220)** | (0.224)** | (0.206) | (0.218) |
| Anocracy | -0.541 | -0.509 | -0.475 | -0.478 |
| | (0.261)** | (0.263)* | (0.250)* | (0.248)* |
| Draft*Anocracy | 1.309 | 1.294 | 1.100 | 1.185 |
| | (0.348)*** | (0.343)*** | (0.327)*** | (0.332)*** |
| Change Military Expenditure | 0.000 | 0.000 | 0.000 | 0.000 |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Soldier Quality | -0.175 | -0.171 | -0.159 | -0.161 |
| | (0.098)** | (0.095)* | (0.072)** | (0.084)* |
| Military Personnel | -0.046 | -0.057 | 0.006 | |
| | (0.052) | (0.053) | (0.048) | |
| Change GDP per capita | -3.734 | -3.749 | -3.109 | -3.687 |
| | (0.868)*** | (0.864)*** | (0.782)*** | (0.788)*** |
| GDP per capita | -0.261 | -0.254 | -0.314 | -0.277 |
| | (0.105)** | (0.104)** | (0.081)*** | (0.105)*** |
| Instability | 0.093 | 0.092 | | 0.093 |
| | (0.026)*** | (0.026)*** | | (0.023)*** |
| Left-Wing Government | -0.126 | | | |
| | (0.254) | | | |
| Leadership Transition | | 0.059 | | |
| | | (0.203) | | |
| Citizens per Soldier | | | | 0.029 |
| | | | | (0.093) |
| Years Since Coup | -0.220 | -0.218 | -0.255 | -0.206 |
| | (0.080)*** | (0.081)*** | (0.075)*** | (0.067)*** |
| Years Since Coup$^2$ | 0.012 | 0.012 | 0.014 | 0.011 |
| | (0.006)** | (0.006)** | (0.006)** | (0.005)** |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.000)* | (0.000)* | (0.000)* | (0.000)* |
| Obs. | 4,305 | 4,229 | 4,992 | 4,836 |
| Log Pseudo Likelihood | -504.526 | -503.514 | -628.210 | -601.790 |
| Wald $\|^2$ | 153.69 | 150.34 | 170.37 | 175.2 |
| Prob> $\|^2$ | 0.000 | 0.000 | 0.000 | 0.000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Linear Probability with Country and Year Fixed Effects**

For the final appendix model, I include a model with country and year fixed effects as well as a time trend variable to further control for the effect of country and year specific factors on the relationship between draft*anocracy and coup risk. Major political events like international crises, wars, or regime collapses may generate protracted political instability that influences coup risk. Indeed, years 1975-1977, 1989, and 1992 have a positive and statistically significant effect on the probability of a coup attempt. Additionally, the year trend variable has a negative effect on coup attempt and coups become less prevalent over time. Once again, the draft*anocracy interaction term has a positive and statistically significant effect on coup attempt.

**Appendix Table 27**. Linear Probability with Country and Year Fixed Effects

| | Model A38 |
|---|---|
| Draft | -0.021 |
| | (0.014) |
| Anocracy | -0.066 |
| | (0.025)*** |
| Draft*Anocracy | 0.096 |
| | (0.029)*** |
| Change Military Expenditure | -0.000 |
| | (0.000) |
| Soldier Quality | -0.005 |
| | (0.007) |
| Military Personnel | -0.009 |
| | (0.012) |
| Change GDP per capita | -0.004 |
| | (0.008) |
| GDP per capita | -0.028 |
| | (0.013)** |
| Instability | 0.001 |
| | (0.001) |
| Years Since Coup | -0.001 |
| | (0.002) |
| Years Since Coup$^2$ | 0.000 |
| | (0.000)** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000)* |
| Year Trend | -0.001 |

| | |
|---|---|
| | (0.001)* |
| Obs. | 2,259 |
| Wald $\chi^2$ | 309.02 |
| Prob>c2 | 0.000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

# 4 Secret Police and Coup D'état in Authoritarian Regimes

## *4.1 Introduction*

In 1973, prominent officers of the Greek navy organized a coup against the military junta. However, spies of the Greek Military Police-Special Interrogation Unit uncovered the plot and arrested the conspirators before they were able to go ahead with their plans (Couloumbis, 1974, p. 359). The Military Police was the Greek Junta's secret police and guarded the regime from enemies within the state or wider society. Likewise, the KGB spied on the entire Russian society, from intellectuals to ethnic minorities, on behalf of the Soviet Communist Party (Shelley, 1996, p. 19; Richelson, 1986, p. 246-47). Overall, secret police are used by autocrats to repress dissidents, to protect the physical integrity of the government, and to maintain political order (Berman and Waller in Berman and Waller, 2006, p. xv)[33]. However, it is unclear whether secret police contribute to regime stability or their violent operations instigate dissidents to organize against the regime. Up until this point, the lack of large-n data sets, has limited our ability to systematically examine the effect of secret police on political repression, protests, and coups across autocracies on a global scale. By introducing a new large-n data set

[33] Despite what the name suggests, the existence of the secret police is widely known to the public. Plate and Darvi accentuate this oxymoron when they ask, "Is there a single Soviet citizen in the entire U.S.S.R. who does not know the KGB?" (1982, p. 9). Instead, it's the organization's inner workings and the identity of its agents that remain a secret.

on secret police across autocracies, we can now systematically explore the effect of these organizations on socio-political conditions in autocratic regimes globally.

In this study, I argue that secret police are intertwined with low coup risk in autocratic regimes. Secret police employ a range of coup proofing operations, such as spy networks and the surveillance of military officers, that decrease the willingness and opportunity of military officers to stage a coup. To assess this relationship, I introduce a novel variable on secret police organizations in authoritarian regimes for the years 1946 to 2018. This variable is a product of data collection from qualitative and small-n quantitative studies across the secret police literature. The study's findings stress the decreased probability of a coup attempt in autocratic regimes with secret police compared to autocratic regimes without secret police. In what follows, I present anecdotes of secret police activities in autocracies and discuss how selective recruitment establishes ties of loyalty between secret police and the autocrat. Then I examine how secret police intelligence operations impede the planning and organization of a coup attempt and triangulate the theoretical claims with anecdotal evidence to demonstrate how secret police negatively affect coup risk. In the empirics, I introduce the large-n secret police variable and quantitatively assess the effect of secret police on coup risk in autocracies. Finally, I discuss the empirical findings and present the study's concluding remarks.

The study has important policy implications since it highlights how security organizations, like the secret police, may facilitate autocratic survival. In 2018, 18 out of the 65 authoritarian states across the world had secret police. A close inspection of Figure 1 also reveals that secret police are present in some of the most notable autocratic regimes, like the People's Republic of China, Russia, and Saudi Arabia. Therefore, by examining the impact of secret police on coup risk the study advances the discussion on authoritarian stability. Crucially, the study contributes to the debate on structural coup proofing by disaggregating different types of internal security forces that can counterbalance the regular armed forces.

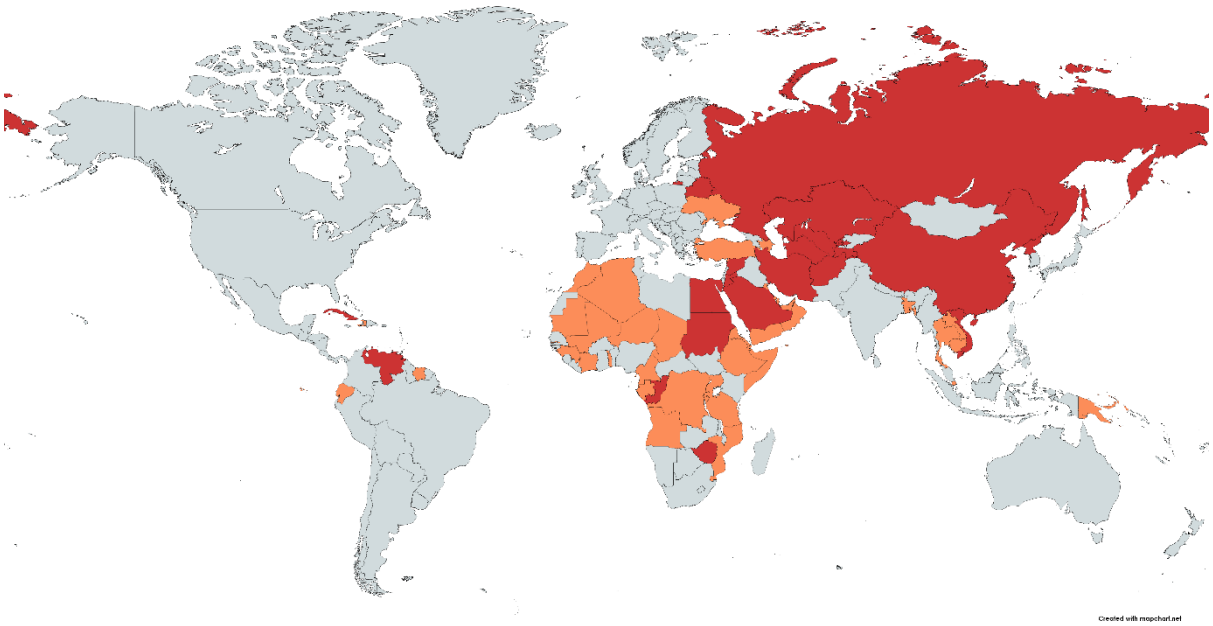


**Figure 4.** Map of authoritarian states with an active secret police organization in 2018 based on the Polity Index. Red color indicates authoritarian regimes with secret police while orange color indicates authoritarian regimes without secret police. The rest of the states in the map are either democracies or states with a missing value as their population is less than half a million people.

Secret police are political police forces meaning that they are established specifically to repress political opponents, root political dissidents out of the state, and overall neutralize political activity through terror[34] (Berman and Waller, 2006). The term "secret police" is by design general to encourage inclusion and generalizations (Plate and Darvi, 1982, p. 11), and as a result one cannot find a conclusive secret police definition in the literature. For the purposes of this study, I define secret police as an internal security force that employs violent police tactics and intelligence operations against political opponents and dissidents. The operational repertoire of secret police forces consists of "searches, arrests, interrogation, torture, and indefinite detention" to extract information (Plate and Darvi, 1982, p. 11).

[34] Secret police are predominantly found in authoritarian or totalitarian regimes (Berman and Waller in Berman and Waller, 2006, p. xv). The division of power and the overall inclusive legal and constitutional framework that define a democratic regime do not allow for the existence of secret police organizations. However, there have been instances throughout the history when a democratic government has used internal security agencies to spy on the opposition or other civilian interest groups. Harry S. Truman warned that the FBI under Hoover leaned towards the direction of a secret police due its extensive surveillance operations and political blackmailing.

Additionally, secret police organizations specialize in intelligence gathering operations, such as informant networks, to monitor dissidents (Plate and Darvi, 1982; Greitens, 2016, p. 45)[35]. In summary, secret police are internal security agencies that answer directly to the regime leadership instead of other security organizations and use intelligence gathering operations and ultra-violent policing practices to prosecute an autocrat's political opponents. With regards to the violent methods associated with secret police operations, the Greek Military Police operated under the dogma "*Whoever enters this facility, will leave as a friend or cripple*" (Karanikas, 2010). All in all, secret police include some of history's most notorious internal security forces like the KGB, the Stasi, the Chilean DINA, the Greek Military Police-Special Investigations Unit, and the Mukhabarat among others.

## *4.2 The Autocratic Security Apparatus and Coup Risk*

The modus operandi of the secret police is different from that of military intelligence or paramilitary units. Specifically, military intelligence agencies focus on external threats, whereas secret police target internal threats, such as political dissidents or the opposition. In the Soviet Union, KGB agents were tasked with internal security while the GRU (military intelligence) performed exclusively foreign intelligence operations. Importantly, secret police answer directly to the autocrat (Shelley 1996), whilst military intelligence is part of the regular military apparatus and reports to senior military officials. For this reason, military intelligence is monitored by the secret police like the rest of the military apparatus. Case in point, the GRU was infiltrated by KGB spies to monitors its activities (Caron, 1971, p. 67). Conversely, like the secret police, paramilitaries operate outside of regular military command and have close

[35] To give an example, even President Yeltsin or Chairman Gorbachev did not eschew the scope of KGB's surveillance operations (Albats, 1995, p. 276-8). Likewise, when conventional means proved fruitless against mountainous guerilla groups, the Bulgarian communist regime used secret police agents to infiltrate those groups and destroy them from the inside (Baev and Grozev in Persak and Kamiński, 2005, p. 60).

ties to the regime, however, paramilitaries have equipment and organization similar to the regular army and are partially militarized to "balance against regular military units" (Böhmelt and Clayton, 2018, p. 203; Belkin and Schofer, 2003; Pilster and Böhmelt, 2011; Quinlivan, 1999). Therefore, while paramilitaries like the Republican Guard imitate the organization, training, and operations of the regular army, secret police are internal police forces that utilize intelligence and ultra-violent methods to root out an autocrat's political rivals.

For its part, the military is a crucial actor for autocratic survival (Geddes, Frantz, and Wright, 2014; Wintrobe, 2012). The military protects the regime from internal and external threats but remains a potential threat to the autocrat. Dictators were forced out of office via coup in two out of three unconstitutional exits between 1945 and 2002 (Svolik, 2009, p. 477-478) and suffer from twice as many coup d'états compared to democratic leaders (Brooker, 2000). The coups in Turkey (2016), Libya (2016), Zimbabwe (2017), and Sudan (2019), serve as a contemporary reminder that the military is still a threat to autocratic survival.

With regards to coup risk, the literature draws attention to the significant influence of sociopolitical factors on coup risk. Factors such as high poverty levels or robust economic development have a positive and negative effect on coup risk respectively (Londregan and Poole, 1990; Belkin and Schofer, 2003; Powell, 2012). Additionally, higher social spending and political liberalization also decrease the likelihood of subaltern coups (Albrecht and Eibl, 2018). Simultaneously, political liberalization may trigger a coup by senior officers (Albrecht and Eibl, 2018). Specifically, mass protests signal regime illegitimacy and may prompt an intervention by the senior military leadership in defense of the status quo (Johnson and Thyne, 2018; Koehler and Albrecht, 2019). On the other hand, severe foreign threats induce military loyalty since in the event of a coup the armed forces would have to defeat both pro-government forces and foreign rivals (McMahon and Slantchev, 2015). Regarding military capabilities, both high military spending and a high degree of force mechanization mitigate the prospects

of military intervention in politics (Powell, 2012; Albrecht and Eibl, 2018; Choulis et al., working paper). Civil wars also make states coup prone, but war-time coups are less likely to succeed (Bell and Sudduth, 2017). Consequently, when examining coup risk, one must consider a wide array of sociopolitical factors besides the security apparatus.

To counter praetorianism in the armed forces, autocrats also establish loyal paramilitary organizations or exploit sectarian politics to prevent the coordination of potential usurpers in the military (Quinlivan, 1999; Belkin and Schofer, 2003; Pilster and Böhmelt, 2011, 2012; Singh, 2014; Brown, Fariss, and McMahon, 2016; Albrecht and Eibl, 2018; Brooks, 2019; Dragu and Przeworski, 2019). However, the coup proofing effectiveness of paramilitary organizations is an on-going debate. Counterbalancing with paramilitaries is found to decrease both the probability of a coup attempt and the likelihood of a successful outcome (Powell, 2012; Böhmelt and Pilster, 2015; Albrecht and Eibl, 2018)[36]. Greitens makes the case that states with socially exclusive and fragmented security apparatuses are less likely to experience a coup because fragmentation renders the security agencies unable to coordinate (2016, p. 18-19). Nevertheless, evidence suggest that excessive fragmentation of the security apparatus may increase coup risk because military forces are too fragmented and too weak to resist a coup (Böhmelt and Pilster, 2015). Case in point, Idi Amin successfully expelled Milton Obote's government in Uganda as the security apparatus was incapable of effectively responding to the coup attempt due to extreme fragmentation of military authority and the absence of a commanding paramilitary force loyal to the government (Decalo 1989, p. 10-11). Similarly, efforts to change an army's ethnic composition may result in a reactionary coup as the army attempts to defend its corporate interests (Harkness, 2016). Indeed, more recent studies downplay the effect of counterbalancing on coup risk and instead emphasize on its negative

[36] Although, coup proofing through paramilitary organizations is also found to decrease the state's military effectiveness (Pilster and Böhmelt, 2011).

effect on coup success (De Bruin, 2018). The presence of coup proofing organizations, like presidential guards, militarized police, or militias, decreases the probability of a successful coup but may also incentivize extensive fighting and thus escalate coups into civil wars (De Bruin, 2020). Consequently, it is imperative to disaggregate internal security forces to distinguish between paramilitary organizations that contribute to lower coup risk and those that do not.

With respect to intelligence-based coup proofing policites, autocrats supervise the entire state mechanism "by placing intelligence agents within the state hierarchy to monitor subordinates" (Barros, 2016, p. 962-67). However, autocratic dependence on intelligence officers may induce a principal-agent problem. To this end, Scharpf and Gläßel (2019) make the case that secret police organizations have some of the most loyal cadres among the autocratic security apparatus. This increased loyalty towards the regime can be traced back to selective recruitment. Secret police tend to be staffed with underachievers since "the arduous nature of secret police work offers underachievers the opportunity to signal their value to the regime" (Scharpf and Gläßel, 2019, p. 2; Zakharov, 2016). In addition, for the authoritarian leadership "underachievers are beneficial because they must diligently work toward the autocrat's interests to retain their career chances." (Scharpf and Gläßel, 2019, p. 5). Subsequently, secret police agents belong to the hardcore supporters of an autocratic government as their professional interests are tied to the regime's survival.

It is also worth noting that the violent nature of secret police work, such as torture or state sponsored killings, further cements the ties of loyalty. If the regime collapses, secret police agents will be targeted due to their violent history against the opposition. Because of this violent past, secret police are the first security agency to be dissolved after a regime collapse (Berman and Waller in Berman and Waller, 2006, p. xvii). For example, after the fall of the

Iron Curtain in Europe the files of the secret police became public and former agents were excluded from the new security apparatus (Milosavljevic and Pavicevic, 2002; Berman and Waller in Berman and Waller, 2006, p. xvii; Marx in Bruinsma and Weisburd, 2014). Therefore, secret police agents are expected to be loyal to the regime and defend the government from a military coup to preserve their professional interests.

The rest of the study is divided into three sections. In the theory, I explore the underlying causal mechanism that links the operations of the secret police with a decrease in the probability of a coup attempt. In the empirics, I introduce the research design and examine the results of the regression analysis. Finally, I present the study's conclusions and policy implications that arise from the findings in the last section.

## *4.3 Secret Police Coup-Proofing Operations*

Secret police decrease the probability of a coup in autocracies because their operational repertoire enables an early intervention to a coup's preparation stage. Secret police gather intelligence through spy networks and surveillance operations that mitigate the ability of military officers to go undetected when planning a coup. Inparticular, secret police agents spy on other security agencies, like the armed forces, to collect information on the government's opponents (Gieseke in Persak and Kamiński, 2005, p. 169). As such, secret police operations increase the probability that dissatisfied military officers will be detected before the coup attempt materializes. To the contrary, paramilitaries lower the coup risk by increasing the costs associated with the execution of a coup attempt since in the event of a coup the army would have to defeat similarly equipped units in the battlefield[37]. Paramilitary organizations, such as a presidential guard, can deter usurpers, but they cannot spy on the entire state apparatus to

[37] To give an example, Omar Bongo's presidential guard was stronger than the regular Gabonese army as it possessed more troops, better equipment, and ethnic criteria of recruitment guaranteed its loyalty to the dictator (Decalo, 1989, p. 562, Barrows in Foltz and Bienen, 1985, p. 106).

stop a coup during its planning stage. For operations of this scale, a regime needs a political yet non-accountable internal intelligence agency. Therefore, paramilitaries increase the costs of a coup in its execution phase, whereas secret police rely on espionage to intervene in the planning and coordination phase. In the following paragraphs I review the intelligence operations of the secret police and discuss how they affect the willingness and opportunity of military officers to stage a coup.

The operational repertoire of the secret police includes a large network of informers, many of them professional spies, that provide information on dissidents or other disloyal cadres in the state apparatus (Dragu and Przeworski, 2019, p. 79). Scharpf and Gläßel emphasize the importance of informer networks claiming that "Secret police forces run extensive spying networks to surveil and detect conspiring enemies within the elite, the security apparatus, and society at large." (2019, p. 1). Consequently, the extensive espionage networks are the cornerstone of every secret police. Lenin's Cheka, the predecessor of all contemporary secret police organizations, sustained "an empire-wide system of secret informants to report the slightest dissent" (Waller in Berman and Waller, 2006, p. 3, see also Ferdinand, 1991, p. 135-6). Likewise, Stasi's spy networks were of such a large-scale that the organization had informants within the ministries, the armed forces, and even itself (Geddes, Wright, and Frantz, 2018, p. 156, see also Rosenzweig and Le Forestier 1992). Accordingly, in some branches of the Red Army, one out of three servicemen served as a KGB informer (Richelson 1986, p. 234). Informers were either paid for their services or were forced to cooperate with the secret police through blackmail (Deletant in Persak and Kamiński, 2005, p. 314)[38]. To demonstrate the size of these networks, the Romanian Securitate's network of informers grew from 42,187 in 1951 to around 450,000 people in 1989 (Deletant in Persak and Kamiński, 2005, p. 314-15).

[38] To put it simply, "Charges against them for offences committed were dropped in return for collaboration" (Deletant in Persak and Kamiński, 2005, p. 314).

In a similar manner, NKVD's massive espionage network had approximately 500,000 informants by mid-1930s (Gregory, 2009, p. 39). To conclude, the informant networks of the secret police penetrate every state institution and act as a constant source of information for dissidents, especially dissatisfied military officers. If the latter attempt to organize a plot against the government, then the informants will notify secret police agents and they will intervene to arrest them.

In conjunction with informer networks, secret police employ surveillance operations within state institutions to detect disloyal public servants or military officers. Secret police agents bug telephones or other communication devices to intercept communications and get information on potential plots against the regime (Dragu and Przeworski, 2019, p. 79, Kramer, 1985, p. 51). For example, Pinochet used the secret police to spy on other officers of the ruling coalition in an effort to consolidate his power (Geddes, Wright, and Frantz, 2018, p. 161). Similarly, KGB servicemen were deployed down to the company level to perform counterintelligence operations and monitor military officers (Caron, 1971, p. 67). Even the GRU was infiltrated by KGB spies (Caron, 1971, p. 67). Westwards, East German secret police officers were tasked with monitoring the People's Police and the National People's Army for disloyal cadres (Gieseke in Persak and Kamiński, 2005, p. 169; Herspring, 1999, p. 565). Even in the People's Republic of China, authority over domestic security was soon transferred from the People's Liberation Army to the secret police (Ferdinand, 1991, p. 140). Overall, secret police agents permeate the military hierarchy and spy on military officers to uncover plots against the government. It is therefore difficult for conspirators to recruit other officers for the plot without being detected by secret police officers or without recruiting a spy into their ranks. Thereby, the coordination necessary for a coup becomes an arduous task since communications inside the armed forces are monitored by the secret police. Consequently, secret police decrease the opportunities available to military officers to stage a coup.

At an individual level, secret police also decrease the willingness of military officers to conspire against the government. Secret police espionage deters the growth of praetorianism in the military since military officers will eschew conspiracies against the government to avoid a grueling interrogation by the secret police. Most pertinently, if an officer is found to conspire against the government, his career prospects and physical integrity will be endangered. Thus, the operations of the secret police not only impede the coordination of potential plotters but also deter the association of individual military officers with anti-government activities in fear of implications to their careers and livelihoods. To illustrate this point, career advancement in the East German state was subjected to Stasi's vetting process and indications of anti-government activity would be detrimental for one's career (Rosenzweig and Le Forestier 1992). As a result, secret police in authoritarian regimes also decrease the willingness of military officers to join a plot against the government.

With regards to the principal-agent problem, despite their powerful position in the authoritarian security apparatus, secret police rarely disobey the ruler. Members of the secret police are some of the most loyal cadres within the authoritarian state due to selective recruitment. As a rule, dictators prefer to exchange competence for loyalty (Egorov and Sonin, 2011; Zakharov, 2016). Low skilled subordinates are less likely to betray the autocrat since they have few outside options compared to "competent viziers" (Egorov and Sonin, 2011; Bueno de Mesquita et al., 2003). As such, secret police are staffed with underachievers that want to prove their value to the ruler to advance their careers and have few career opportunities outside of the security apparatus (Scharpf and Gläßel, 2019; Egorov and Sonin, 2011). In Czechoslovakia, officers of the secret police had poor education as the organization recruited primarily blue-collar workers (Blažek and Žáček in Persak and Kamiński, 2005, p. 106). Likewise, the Gestapo was forced to recruit marginally qualified personnel due to its rapidly expanding operational needs (Browder, 1996, p. 67). Stalin's praetorians were also poorly

educated (Gregory, 2009, p. 58). Hence, the poor socioeconomic background of secret police agents reaffirms the view that they have limited career options outside of the organization and are thus invested in the status quo. It is worth reiterating that due to the profession's violent nature if the regime collapses then secret police agents will suffer severe repercussions, like exclusion from the new security apparatus or even criminal charges[39] (Milosavljevic and Pavicevic, 2002; Berman and Waller in Berman and Waller, 2006, p. xvii; Marx in Bruinsma and Weisburd, 2014).

As a consequence of their limited outside options and potential punishment in case of regime collapse, secret police officers become very loyal to the autocrat and the status quo. In Chile, the secret police reported daily to Pinochet and only indirectly to the rest of the military Junta (Policzer, 2009, p. 86). In the Brazilian Junta, DOI agents enjoyed operational autonomy and their operations "became illegal, even by the military's own rules" (Stepan, 1988, p. 27). Similarly, Soviet party members could not command NKVD officers and the agency had full autonomy over its operations and appointments (Shelley, 1996, p. 31).

It must be noted that despite poor education or the absence of prior life attainments, secret police do not lack high intra-organizational discipline that promotes operational competency (Plate and Darvi, 1982). In East Germany, secret police agents mirrored the discipline of professional soldiers and had established the esprit de corps of an elite unit (Gieseke in Persak and Kamiński, 2005, p. 174). Thus, secret police agents may be underachievers, but the organization has the necessary infrastructure in the form of policing schools to train them, and overall organizational success is "more often attributable to the powers they wield than to agents' brilliantly performed work" (Plate and Darvi, 1982, p. 34, 50-51). Therefore, through selective recruitment an autocrat can overcome the principal-agent problem and establish a loyal security organization in the form of the secret police.

[39] See the trials of senior Greek Military Police personnel after the fall of the Greek Junta in 1974.

To summarize, secret police in autocratic regimes undertake a series of coup-proofing strategies, such as spy networks and surveillance operations, that decrease the willingness and opportunity of military officers to stage a coup. These coup-proofing operations affect both senior and middle ranking officers since secret police monitor the activities of senior officers and permeate the combat ranks with informants. For example, during the Bulgarian 1965 coup attempt, the secret police intercepted communications of hardliners in the higher echelons of the army plotting to overthrow the government of Todor Zhivkov and arrested them before the coup was materialized (Conquest in Andrews and Ra'anan, 1969). Similarly, informants of the Greek Military Police uncovered a plot of middle ranking navy officers against the junta in 1973 and the conspirators were arrested before they were able to go ahead with their plans (Couloumbis, 1974, p. 359). Likewise, a CIA-led coup in 1996 against Saddam Hussein failed because Mukhabarat agents had infiltrated the conspirators and had even hijacked a CIA secure satellite communications unit to get hold of the coup plans (Ritter, 2005). Subsequently, the coup proofing operations of the secret police create serious communication and coordination obstacles to military officers that want to overthrow an autocrat. Accordingly, the study's research hypothesis is the following:

*Autocratic regimes with a secret police organization are less likely to experience a coup d'état compared to autocratic regimes without secret police.*

## *4.4 Empirics*

### 4.4.1 Data and Method

For the empirical analysis, I run a series of logistic regression models to examine the effect of secret police on the probability of a coup attempt in autocracies. To this end, I employ Powell's and Thyne's Global Instances of Coups from 1950-Present data set (2011). I use country-years as the unit of analysis and the global coverage of the data set greatly improves the scope of the

empirical analysis. I also utilize the Autocratic Breakdown and Regime Transitions data set by Geddes, Wright, and Frantz (2014) to identify autocratic regimes. A regime is registered as autocratic when the "executive achieves power through undemocratic means and, with his inner circle establishes new rules for choosing leaders and policies" (Geddes, Wright, and Frantz, 2014). The data set includes information for 280 autocratic regimes between years 1946-2010. The data set also distinguishes between monarchical, single-party, personalist, and military autocratic regimes which will prove to be useful for robustness checks.

*Dependent Variable*

I use the coup attempt variable from Powell and Thyne (2011) as the study's dependent variable to explore the effect of secret police on coup risk in autocratic regimes. Coup attempt is a binary variable in which a value of 1 corresponds to a coup attempt or 0 otherwise. Of a total of 4,412 country-year observations in the sample, coup attempt is assigned a value of 1 in 270 cases or 6.11% of the total observations. All other cases are assigned a value of 0. Finally, due to the binary nature of the coup attempt variable, I use a binary time-series cross-sectional logit regression to estimate the effect of secret police on coup attempt.

**Table 4.** Descriptive Statistics

| Variable | Observations | Mean | SD | Minimum | Maximum |
|---|---|---|---|---|---|
| Coup Attempt | 4,412 | 0.061 | 0.239 | 0 | 1 |
| Secret Police | 4,429 | 0.341 | 0.474 | 0 | 1 |
| Military Expenditure | 2,553 | 5.982 | 2.075 | -2.855 | 12.57 |
| Change Mil Expenditure | 4,457 | 0.026 | 0.177 | -1.244 | 2.773 |
| GDP per capita | 4,263 | 7.772 | 1.016 | 5.293 | 13.35 |
| Change GDP per capita | 4,457 | 0.013 | 0.118 | -1.594 | 3.081 |
| Military Personnel | 4,167 | 3.800 | 1.728 | 0 | 8.665 |
| Instability | 3,980 | 3.291 | 3.645 | 0 | 10.85 |
| Counterbalancing | 2,924 | 0.482 | 0.353 | 0 | 1.521 |

*Independent Variable*

Until now, no large-n secret police variable is present in the civil-military relations literature. While the Military Balance data set (2019) has information on the size of various paramilitary organizations across the globe, secret police are under-reported in the data since there are no available information on their size while the regime is still in power. As a result, the data set includes information only for a very limited number of secret police organizations located in former Communist states and for a limited number of years. Likewise, De Bruin's Intelligence variable in the State Security Forces data set (2020) has information on intelligence services and secret police in 22 states. However, the variable captures primarily intelligence services, like the Federal Bureau of Investigations or the Slovak Information Service, which are not the same as secret police. Nevertheless, the data set is very useful, since it includes information on various paramilitary organizations that could potentially be classified as secret police based on their policing activities and institutional role. Plate and Darvis (1982) explicitly examine secret police organizations, mostly non-European ones, but the analysis ends in 1982.

To overcome data limitations, I make use of small-n studies from the secret police literature to construct the first large-n secret police variable. A detailed list of secret police organizations and relevant sources can be found in the chapter's appendix. The variable is a binary one and I assign a value of 1 if a secret police organization is present in a country in a given year or 0 otherwise. I register a paramilitary organization as secret police if it fulfills a series of relevant criteria. Specifically, a security organization is coded as secret police if *a)* it is a political police force, indicating that it targets primarily political opponents and dissidents, *b)* it operates independently from other police organizations and answers directly to the regime leadership, *c)* the identity of its members and its operations are secret, *d)* it is an internal intelligence service that specializes on political intelligence and surveillance operations, *e)* it carries out violent policing practices, such as arbitrary searches, arrests, interrogations, torture, disappearances,

and surveillance. Consequently, although regular police organizations may carry out clandestine operations, like the ones of an anti-narcotics department, their targets are not the regime's political opponents but criminal operations.

Plate and Darvi make the case in the 1980s that only a dozen of security institutions in the world could be considered as hard-core secret police organizations owing to the fact that other internal-security organizations, like the ones in Western democracies, may use some violent methods, such as surveillance, but not to the relevant degree or intensity and thus do not belong in the same category as secret police (1982, p. 11). For instance, the Malaysian Special Branch used to monitor citizens affiliated with the communist party, but its primary goal was foreign intelligence and fighting the communist insurrection instead of terrorizing political dissidents with ultra-violent practices. To the contrary, the Greek Junta's Military Police and Saddam's Mukhabarat were used as political police forces denoting that they were tasked with political intelligence and repression of dissidents. Both answered directly to the regime leadership and used informant networks and ultra-violent methods to terrorize the population. Specifically, both agencies surveilled the population and used torture, arbitrary arrests, blackmailing, and other violent acts to extract information against dissidents. Moreover, the regular police may carry out violent acts, but the identity of its members is not secret as it recruits officers from the broader society. Additionally, the regular police in authoritarian regimes is not independent from other security agencies and does not have jurisdiction over the secret police.

In appendix table 39, I also examine the determinants of secret police to ascertain whether secret police are more prevalent in some autocratic regimes than others. One could argue that secret police are more likely to be present in consolidated autocracies that are ruled by an all-powerful institution with a firm grip on society, like a communist party. Similarly, secret police are strongly associated as a concept with the USSR and other communist regimes in Europe

during the Cold war. However, single party and communist regimes are found to be no more likely to have secret police than other authoritarian regimes.

Regarding the variable itself, I lag the secret police variable by a year because the organization would need some months to set up the spy networks and to infiltrate the armed forces and the rest of the state. As such, I expect the causal mechanism to come into effect a year after the establishment of the secret police. Therefore, of a total of 4,429 observations, secret police are present in 1,512 (34.13%) of the authoritarian country-years. Specifically, out of 117 autocracies in the data, 55 (47%) had secret police for at least a year compared to 62 (53%) of autocracies that have never established one. The variable includes secret police from every world region and candidate cases were discovered through mentions in the secret police literature and relevant data set on paramilitary forces. After registering the cases, I examined each specific case and removed those that did not meet the five secret police criteria, such as the Malaysian Special Branch, the Haitian Macoute, the Turkish National Intelligence Organization, or the Jordanian Public Security. In-text information regarding the active years of each secret police have been verified with online sources. In some instances, like the Greek Military Police, an organization may pre-exist an autocratic regime and is thus registered as secret police only after being repurposed by the new government. It must also be noted that the available data only allow for a binary iteration of the variable since information on the size of each organization or the informant networks is rare outside of certain case studies[40]. Importantly, since I relied predominantly on English literature, there is potential source bias for secret police in Europe and the Americas, especially since secret police in the Warsaw pact

[40] To demonstrate this point, reports on the size of Iranian Savak between 1974-6 vary from 3,120 to 30,000 and 60,000 and up to 3 million Iranians may have potentially worked for the organization (Halliday, 1979, p. 80; Plate and Darvi, 1982, p. 385). Nonetheless, the data will be updated with a smaller-n, numeric version of the secret police variable as more information becomes available. I also recognize that regional experts and other academics may have excellent recommendations of security agencies that could be classified as secret police but are missing from the list and I am looking forward to their suggestions.

countries were particularly featured in the literature. However, the isometric regional distribution observed in Figure 5 indicates that the wide array of sources has largely mitigated a possible pro-European bias. It should be mentioned that studies on secret police, like Plate and Darvi (1982), Berman and Waller (2006), and Scharpf and Gläßel (2019), tend to not limit themselves to European affairs but put a large emphasis on secret police outside of Communist Europe thus helping reduce potential pro-European bias. Finally, for a detailed list of the secret police organizations included in the variable as well as the literature used to construct it please refer to the chapter's appendix.

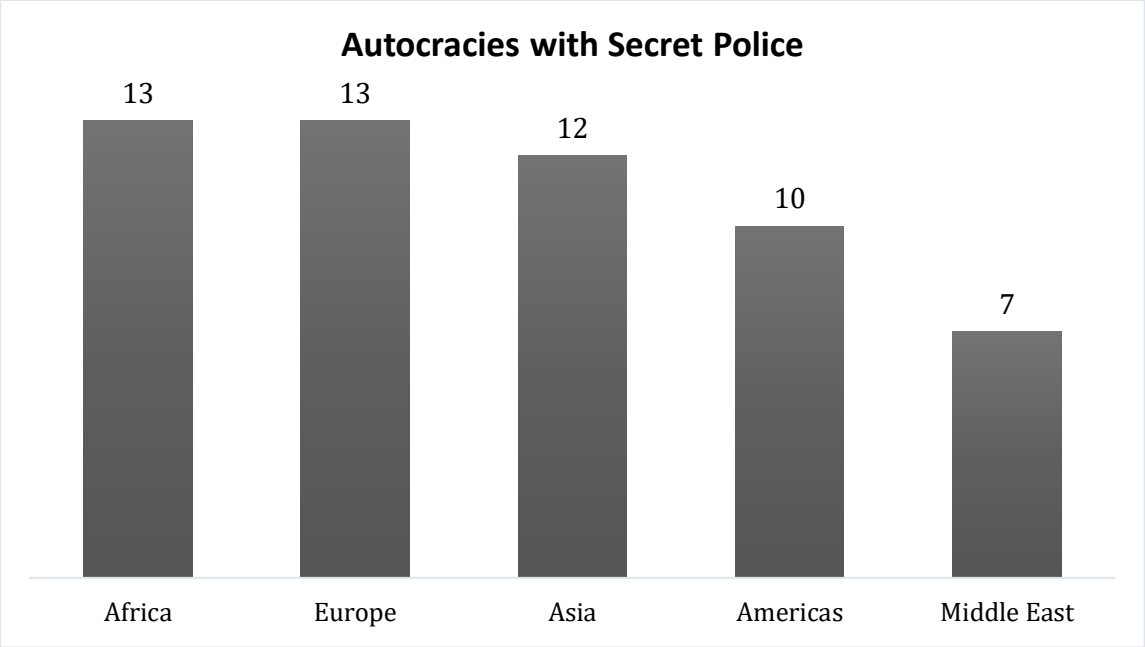



**Figure 5.** Regional Distribution of Autocracies with Secret Police

*Control Variables*

A state's socioeconomic conditions and the composition of its armed forces are also crucial determinants of coup risk. More accurately, a state's level of economic development has a profound impact on the probability of a coup attempt (Belkin and Schofer, 2003; Powell, 2012). On this account, research has demonstrated that states suffering from high levels of poverty are

more likely to experience a coup attempt (Londregan and Poole, 1990). Likewise, high GDP coincides with high state capacity. Thereby, autocracies with enough resources to invest in the security sector may be more likely to establish a secret police organization compare to poorer states. As such, the effect of secret police on coup risk may be driven by high state capacity. To control for economic development, I use the GDP per capita variable by the World Bank and Gleditsch (2002). I also capture the yearly trend of an economy with the Change in GDP per capita variable. Both variables are based on real income data in 2005 prices and are logged and lagged by a year (Böhmelt, Escribà-Folch, and Pilster, 2018). On a similar note, political instability is found to have a positive effect on the probability of a coup attempt (Powell, 2012; Böhmelt, Escribà-Folch, and Pilster, 2018). Social unrest weakens the government's position in power and its legitimacy to rule. Extensive political instability might signal to the military that the government does not have the support of the population to resist a coup d'état. As a result, the military may intervene and take control of the government to restore public order and protect its corporate interests. Simultaneously, illegitimacy may prompt an autocratic government to establish a secret police to protect its position in power. To control for the effect of political instability on coup risk I use the logged and lagged version of Bank's Instability Index (2011).

Another important set of factors that influence coup risk is the composition and corporate interests of the armed forces. Defense budget is the most prominent military corporate interest. It exerts a direct effect on a military's ability to carry out its professional duties and affects the living conditions of its personnel. Hence, budget cuts are expected to increase a military's disposition to move against the government (Ezrow and Frantz, 2011). If an autocrat expects resistance to defense budget cuts, then the establishment of a secret police may mitigate such a threat. To control for military spending and budgetary reductions, I use the Military Expenditure variable from the Correlates of War v5 data set on National Capabilities (2012). I

also generate a Change in Military Expenditure variable to capture yearly changes in the military budget. I then employ a logged and lagged by a year version of both variables. Additionally, states with large armies are found to be less likely to experience a coup (Powell, 2012). To this end, I control for army size with the logged and lagged version of the Military Personnel variable in the COW data set (2012).

Furthermore, to reduce their vulnerability to a coup from the armed forces, dictators employ a series of coup proofing policies. To this end, authoritarian leaders exploit ethnic, religious, or blood ties to establish loyal paramilitary organizations to counterbalance the armed forces (Quinlivan, 1999; Horowitz, 1985; Nordlinger, 1977; Pollack, 2002; Belkin and Schofer, 2003; Böhmelt and Pilster, 2011, 2015; Brown, Fariss, and McMahon, 2016; Brooks, 2019). To rule out the possibility that the secret police variable captures the same effect as paramilitaries, I use Böhmelt's and Pilster's counterbalancing variable (2011). The counterbalancing variable receives a value of 1 if only a single effective ground-combat military organization is present in country whereas higher values denote the existence of more rivaling military organizations (Böhmelt and Pilster, 2011, p. 340)[41]. If secret police operate similarly to other paramilitaries, the inclusion of the counterbalancing control variable is expected to nullify its effect on coup risk. Like the rest of control variables, counterbalancing is logged and lagged by a year. Finally, I employ a series of spell variables that capture a state's coup free years to control for temporal dependence and time's pacifying effect on coup risk. For models with additional control variables, such as the degree of totalitarianism and threat environment, please refer to the chapter's appendix.

[41] The Böhmelt and Pilster counterbalancing variable is based on information from the Military Balance data set and as a result secret police are under-reported.

### 4.4.2 Empirical Analysis

The results of the regression analysis provide unique insight on the effect of secret police on coup risk. The secret police variable has a negative and statistically significant effect on coup attempt across all main text models. The effect is consistent even when the sample size is decreased with the inclusion of the counterbalancing variable. Hence, neither socioeconomic nor military variables neuter the effect of secret police on coup attempt. To visualize this effect, I include a graph of first differences estimates for secret police in Figure 6. More precisely, autocratic states with a secret police are less likely to experience a coup by 4 percentage points (-6.9 and -1.1% bounds) in model 10, by 4.4 percentage points (-7.4 and -1.4% bounds) in model 11, and by 2.7 percentage points (-4.8 and -0.5% bounds) in model 12.

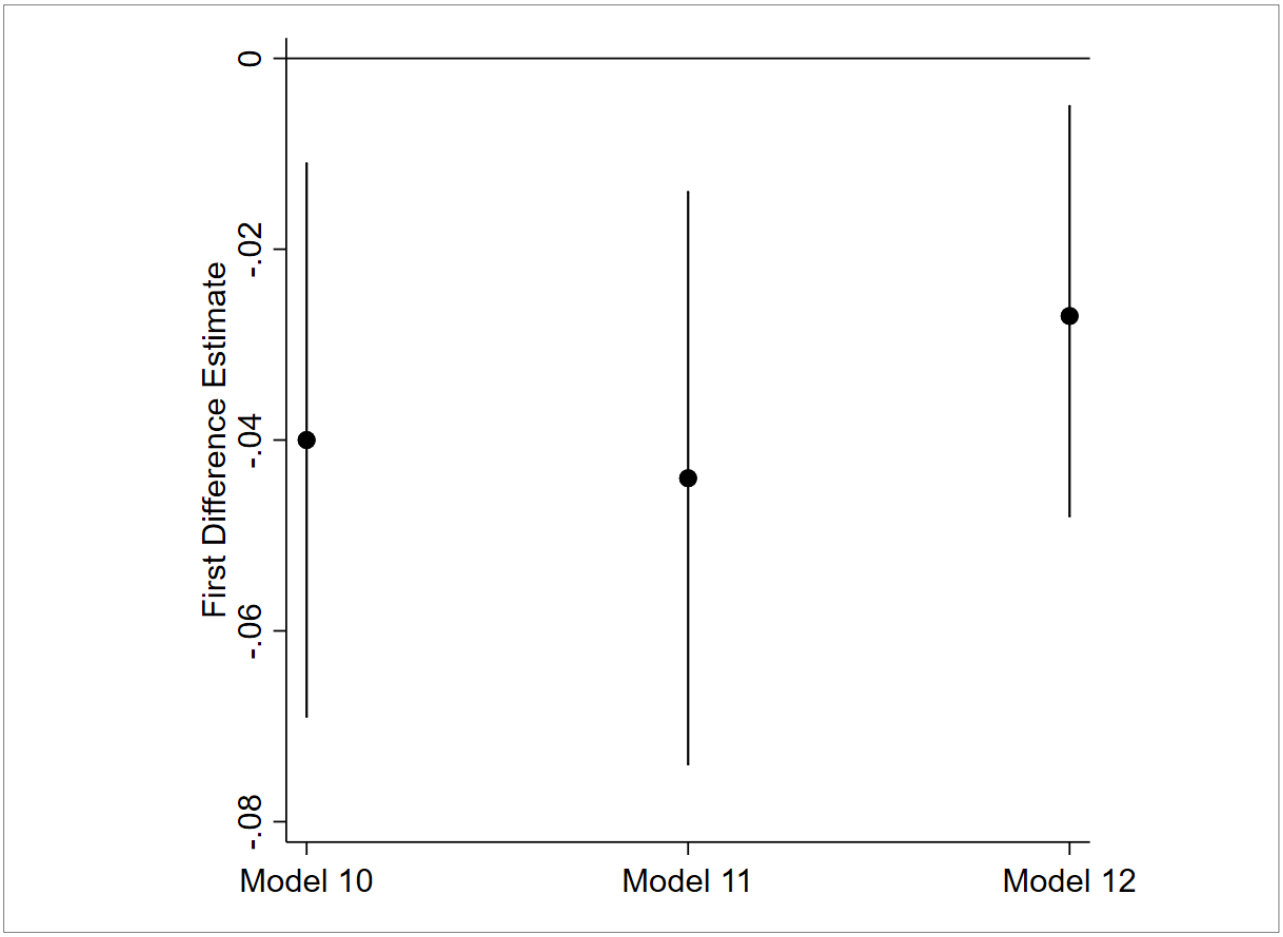
**Table 5.** The relationship between Secret Police and Coup Attempt in Authoritarian Regimes

| | Model 9 | Model 10 | Model 11 | Model 12 |
|---|---|---|---|---|
| Secret Police | -0.838 | -0.777 | -0.853 | -0.617 |
| | (0.211)*** | (0.261)*** | (0.270)*** | (0.254)** |
| Military Expenditure | | 0.022 | 0.027 | 0.028 |
| | | (0.062) | (0.099) | (0.096) |
| Change Mil Exp | | 0.261 | 0.274 | 0.281 |
| | | (0.366) | (0.327) | (0.377) |
| GDP per capita | | -0.107 | -0.069 | -0.204 |
| | | (0.116) | (0.125) | (0.125) |
| Change GDP per capita | | -1.884 | -2.105 | -2.436 |
| | | (0.647)*** | (0.669)*** | (0.812)*** |
| Military Personnel | | | -0.115 | -0.141 |
| | | | (0.120) | (0.122) |
| Instability | | | 0.104 | 0.100 |
| | | | (0.029)*** | (0.033)*** |
| Counterbalancing | | | | 0.011 |
| | | | | (0.373) |
| Years Since Coup | -0.248 | -0.222 | -0.164 | -0.171 |
| | (0.042)*** | (0.051)*** | (0.047)*** | (0.054)*** |
| Years Since Coup$^2$ | 0.011 | 0.008 | 0.005 | 0.006 |
| | (0.003)*** | (0.003)** | (0.002)* | (0.003)* |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.000)*** | (0.000)* | (0.000) | (0.000) |

| | | | | |
|---|---|---|---|---|
| Constant | -1.429<br>(0.156)*** | -0.735<br>(0.697) | -1.297<br>(0.761)* | -0.312<br>(0.768) |
| Obs. | 4,386 | 2,553 | 2,481 | 2,016 |
| Log Pseudo Likelihood | -913.443 | -506.391 | -486.572 | -344.090 |
| Wald $\chi^2$ | 100.18 | 92.48 | 106.4 | 123.75 |
| Prob>$\chi^2$ | 0.000 | 0.000 | 0.000 | 0.000 |
| Time Period | 1950-2010 | 1951-2010 | 1951-2010 | 1970-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Figure 6.** First Difference estimates for Secret Police




*Note: Dash lines represent 95% confidence intervals while holding all other variables at observed values.*

Taking all this information into consideration, secret police in authoritarian regimes appear to decrease the military's ability to orchestrate a coup d'état. Both the regression analysis and the first differences graph provide support to the study's research hypothesis since the effect of secret police on coup attempt is negative and statistically significant. Consequently, autocracies with secret police are found to be less likely to experience a coup d'état compared to autocracies without secret police. Hence, it comes as no surprise that the Egyptian leadership formally re-instated the secret police less than a year after its ostensible de-activation in 2013 (Kingsley, 2013). Regarding control variables, political instability is found to have a positive and statistically significant effect on coup risk whereas, economic development has the opposite effect. However, contrary to previous findings, military size, and wealth have an insignificant effect on coup risk, potentially because this is an autocratic sub-sample and the sample is based on the Geddes, Wright, and Frantz data on autocracies (2014) instead of the polity2 index. Additionally, the counterbalancing variable has an insignificant effect on coup risk thus providing further evidence that secret police operate differently from other paramilitaries. Secret police intervene in a coup's planning stage whereas counterbalancing paramilitaries deter aggression against the government because they increase costs during a coup's execution phase. In appendix table 42, I replicate model 12 but instead of Böhmelt's and Pilster's counterbalancing variable (2011) I use De Bruin's (2018) counterweight count variable and the results remain the same. Therefore, the results give support to De Bruin's (2018) findings that counterbalancing paramilitaries do not decrease coup risk. Instead, the establishment of a new counterbalancing institution may correspond to increased coup risk (De Bruin 2018). We can conclude from these findings that secret police have a distinct effect on coup risk compared to other paramilitaries and, unlike counterweights, secret police decrease the likelihood of a coup attempt against the government by intervening in a coup's planning and coordination stage.

Apart from the main text models, I also include a series of robustness checks in the chapter's appendix to elaborate on the relationship between secret police and coup attempt. Accordingly, I control for endogeneity with a two-stage bivariate model in which secret police is the dependent variable in the selection stage and time polynomials function as the exclusion restrictions. Likewise, I include models with additional control variables, like autocratic regime duration, threat environment, and interstate rivalry. What's more, the appendix introduces a variation only model in which cases that do not display variation in the secret police variable are excluded from the analysis. Furthermore, I also estimate country fixed effects models along with region and year fixed effects models. Nevertheless, the negative and statistically significant effect of secret police on coup attempt persists throughout the robustness checks. To summarize, for a more thorough analysis on the relationship between secret police and coup attempt please refer to the chapter's appendix.

## *4.5 Conclusion*

Secret police lie at the heart of the security apparatus in many authoritarian regimes. This study makes a novel contribution to the coup literature by drawing attention to the negative effect of secret police on coup risk. The operational repertoire of secret police includes spy networks and surveillance operations that penetrate every level of the military chain of command. These espionage operations severely limit the ability of military officers to coordinate and plan a coup without alerting the internal security forces. Additionally, secret police operations within the army deter individual officers from participating in plots against the government, due to the threat of severe sanctions by the secret police. Therefore, secret police decrease the willingness and opportunity of military officers and other regime insiders to stage a coup d'état by intervening in the coup preparation stage. Subsequently, secret police are a vital aspect of the authoritarian security apparatus, but authoritarian rulers may be unable to establish them if they do not possess the relevant institutional know-how. Most pertinently, an autocrat may refrain

from establishing a secret police to avoid a strong reaction by the armed forces or other members of the governing coalition that would perceive this move as an effort to consolidate power.

The study produces important policy implications. Essentially, since secret police shield the regime from a coup, autocrats are able to allocate resources to the armed forces without fearing internal repercussions. Major authoritarian powers with secret police, like Iran, also have sizeable armed forces with state-of-the-art equipment. It may also be noted that the study makes a novel contribution to the literature on structural coup proofing. More precisely, the study contributes to the debate on counterbalancing by disaggregating internal security agencies and highlighting that secret police improve the survival prospects of an autocratic leader by decreasing the probability of an authoritarian turn over via a coup. Therefore, secret police are vital to authoritarian survival from internal threats, especially those from the armed forces. Consequently, the establishment of a secret police is a worthy investment for an autocrat as the prospects of autocratic survival increase. However, democratic policymakers and civil society have more reasons to investigate the role of secret police in autocracies. Secret police are inextricably linked with political violence, human rights abuse, and suppression of democracy. Subsequently, secret police, besides guarding the regime from the military, terrorize political activists and civilians and enable the autocrat to consolidate power.

With regards to future research, an examination of the factors that determine the establishment of secret police in autocracies might be a fruitful academic endeavor. To this end, Greitens argues that when political actors decide on the levels of force fragmentation, they confront a trade-off between coup risk and popular unrest (2016, p. 32). However, high levels of force fragmentation are found to increase coup risk (Böhmelt and Pilster, 2015). Hence, it is of vital importance to explore more thoroughly what type of security institutions actually contribute to regime survival and what other benefits secret police offer besides decreased coup risk. While

this study touched upon the effect of the secret police on civil-military relations, more research is needed to properly understand the role of secret police in autocracies. The findings highlight the tacit influence of the secret police over the autocratic security apparatus as its agents monitor military officers and other dissidents. On top of that, the study underscores the profound sway of secret police in autocracies as they control the flow of information through their ubiquitous intelligence networks. However, the extend of this influence eschews the existing literature. Going back to Greitens, it may very well be the case that secret police are popular because they counteract both coup risk and civil unrest. Consequently, a large-n study on the structure of security organizations and their informant networks would be a very useful addition to the field of civil-military relations.

As a closing remark, the authority of intelligence services over politics is not limited to autocratic regimes. The influential role of intelligence services also extends to democracies, especially in connection with the War on Terror. As intelligence services join the public discourse it is imperative to properly address the modus operandi of the intelligence sector in democracies. Overall, this study explicates how secret police reduce coup risk, but more inquiry is required to fully understand how secret police function and why certain autocracies establish them while others do not. The recent Egyptian case demonstrates that autocrats are unwilling to abolish the secret police even when under substantial international pressure. As long as secret police exist in autocracies, not only civilians but also civil servants, military officers, and others, will be victims of the reign of terror.

## *4.6 Chapter Three Appendix*

The appendix contains robustness checks for the logit models presented in the main text. Below I list those robustness checks in the order they are positioned in the appendix.

- Appendix Table 28 shows the results of an **out-of-sample 4-fold cross-validation**.
- Appendix Table 29 presents year and region **fixed effects models**.
- In Appendix Table 30 I use a **country fixed effects model**.
- Appendix Table 31 includes a **three-stage least-squares model** to explore the possibility of reverse causality.
- Furthermore, in Appendix Table 32 I control for the impact of the **external and internal threat environment** on coup risk.
- Likewise, in Appendix table 33 I employ a **country-specific random intercept model.**
- Accordingly, in Appendix Table 34 you can find models with **additional control variables**.
- Continuing, I include a **two-stage bivariate model** in Appendix Table 35 and a **Heckman sample selection** model in Appendix Table 36.
- In a similar manner, in Appendix Table 37 I **omit countries that show no variation in the secret police variable.**
- **Different lag versions** of the secret police variable can be found in Appendix Table 38.
- In Appendix Table 39 I control for **the determinants of secret police.**
- In Appendix Table 40 I consider the effect of **military academies** on coup risk.
- In Appendix Table 41 I examine the effect of secret police **on senior and junior coup d'état.**
- In Appendix Table 42 I control for **additional counterbalancing variables.**
- Finally, I present the list of **secret police** organizations across the world in Appendix Table 43.

**Out-of-Sample 4-Fold Cross Validation**

I use a 4-fold cross-validation model to control for out-of-sample errors, such as data overfitting. In a 4-fold cross validation, the sample is divided into four approximately equal-in size groups (James et al., 2013). The first three groups operate as training sets in order to calculate the model parameters, while the fourth group is used to evaluate the performance of the model of interest. For the purposes of this research, I compare main text model 11 with a control only model. To determine the models' out-of-sample predictive capacity, I use the ROC curve. "*The area under the Receiver Operator Characteristic (ROC) curve ranges from a low value of 0.5 if there is no improvement in predictive power over a random guess to 1.0 for perfect classifications of outcomes*" (Böhmelt and Pilster, 2018, p. a2). Main text model 11 has an average ROC value of 0.7690 and thus outperforms a random guess. Furthermore, main text model 11 has a higher average ROC value than the control only model. Consequently, the inclusion of the secret police variable increases the model's predictive ability.

**Appendix Table 28**. Out-of-Sample 4-Fold Cross Validation

| Cycle Run | Main Text Model 11 | Model without Secret Police |
|---|---|---|
| 1 | 0.7745 | 0.7688 |
| 2 | 0.7745 | 0.7574 |
| 3 | 0.7745 | 0.7688 |
| 4 | 0.7745 | 0.7500 |
| 5 | 0.7745 | 0.7688 |
| 6 | 0.7745 | 0.7561 |
| 7 | 0.7745 | 0.7688 |
| 8 | 0.7745 | 0.7549 |
| 9 | 0.7745 | 0.7688 |
| 10 | 0.7745 | 0.7527 |
| Average Value | 0.7745 | 0.7615 |

*Note*: Table entries are area under ROC curve statistics.

**Year and Region Fixed Effects**

The level of coup risk in a state is influenced by regional characteristics, like regional instability, ethnography, or a history of praetorianism. Additionally, secret police may be more attached to certain regions of the world, like Eastern Europe or Latin America, than others. Simultaneously, major political events such as wars, the fall of a great power, or oil crises may also have an impact on the stability of an autocratic regime in a given year. To control for regional characteristics and major political events, I run year and region fixed effects models. Despite year and region fixed effects, the secret police variable still has a negative and statistically significant effect at the 99% confidence level on the probability of a coup attempt.

**Appendix Table 29.** Fixed Effects

| | Model A39 | Model A40 |
|---|---|---|
| Secret Police | -0.915 | -0.921 |
| | (0.276)*** | (0.283)*** |
| Military Expenditure | -0.006 | -0.055 |
| | (0.090) | (0.088) |
| Change Mil Exp | 0.235 | 0.296 |
| | (0.366) | (0.351) |
| GDP per capita | -0.136 | -0.209 |
| | (0.118) | (0.133) |
| Change GDP per capita | -2.199 | -2.155 |
| | (0.713)*** | (0.718)*** |
| Military Personnel | -0.065 | 0.051 |
| | (0.106) | (0.121) |
| Instability | 0.099 | 0.083 |
| | (0.028)*** | (0.028)*** |
| Years Since Coup | -0.144 | -0.139 |
| | (0.054)*** | (0.055)** |
| Years Since Coup$^2$ | 0.005 | 0.004 |
| | (0.003) | (0.003) |
| Years Since Coup$^3$ | -0.000 | -0.000 |
| | (0.000) | (0.000) |

| | | |
|---|---|---|
| Obs. | 2,261 | 2,440 |
| Log Likelihood | -383.725 | -449.750 |
| LR $c^2$ | 110.3 | 103.12 |
| Prob>$c^2$ | 0.000 | 0.000 |
| FE | Year | Region |
| Time Period | 1951-2010 | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Country Fixed Effects**

Country-level characteristics like religion, culture, political system, or the history of civil-military relations have a profound impact on a state's coup risk level. To control for country-level characteristics, I employ a country fixed effects model. I thus exclude from the analysis countries that do not display a variation in the secret police variable. As a result, autocracies that have never established a secret police organization or that had secret police present for the entirety of the data set are not included in this model. In addition, country-years with perfect classification of outcomes are omitted from fixed effects models (Escribà-Folch, Böhmelt, and Pilster, 2019). Thereupon, autocracies that have never experienced a coup d'état are not included in the analysis. Hence, the model experiences a significant drop in observations compared to the main text model. Likewise, country fixed effects are not ideal when estimating the effect of variables that do not display strong fluctuation in their values across time, like the secret police variable (Plümper and Troeger, 2011). However, the effect of secret police on coup attempt is still statistically significant in the simple model. The effect becomes insignificant when the control variables are included, and the number of observations drops dramatically. Similarly, only change in military expenditure is statistically significant in this model. The effect becomes statistically significant once again when we remove the military expenditure variables from the equation and the number of observations doubles as a result.

**Appendix Table 30**. Country Fixed Effects

| | Model A41 | Model A42 | Model A43 |
|---|---|---|---|
| Police | -0.668 | -0.182 | -0.705 |
| | (0.303)** | (0.455) | (0.314)** |
| Military Expenditure | | -0.306 | |
| | | (0.298) | |
| Change Mil Exp | | 1.278 | |
| | | (0.596)** | |
| GDP per capita | | 0.720 | -0.081 |
| | | (0.610) | (0.337) |
| Change GDP per capita | | -0.944 | -1.325 |
| | | (1.395) | (0.938) |
| Years Since Coup | -0.195 | 0.008 | -0.204 |
| | (0.072)*** | (0.133) | (0.073)*** |
| Years Since Coup$^2$ | 0.009 | -0.008 | 0.009 |
| | (0.004)* | (0.011) | (0.004)** |
| Years Since Coup$^3$ | -0.000 | 0.000 | -0.000 |
| | (0.000) | (0.000) | (0.000) |
| Obs. | 996 | 420 | 969 |
| Log Likelihood | -215.198 | -101.025 | -207.359 |
| LR $c^2$ | 20.51*** | 21.45*** | 22.38*** |
| Time Period | 1951-2010 | 1951-2010 | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Three State Least Squares**

I use three-stage least-squares to explore the case of reverse causality between coup attempt and secret police. For the purposes of the 3LS model, I use different control variables in each stage. In the first stage with coup attempt as the dependent variable, I include the secret police, military expenditure and GDP variables, as well as the temporal control variables. The secret police variable once again has a negative and statistically significant effect on coup attempt. The second stage has secret police as the dependent variable, and I include coup attempt, military personnel, political instability, military regime, and state rivalry as the independent variables. I include the military regime variable in the analysis since qualitative evidence suggest that rulers in military juntas are likely to establish a secret police organization to spy

on other military officers (Geddes, Wright, and Frantz, 2018, p.161). In a similar manner, I expect authoritarian states that are engaged in a state rivalry to use the secret police to limit the influence of rivals in their internal affairs. While the military personnel variable is statistically insignificant, the coup attempt variable has a negative and statistically significant effect on secret police. This makes sense since in the event of a coup attempt the new government will abolish the secret police agency of the previous government since it was a tool of repression and control aimed towards the opposition and the armed forces. Likewise, authoritarian regimes that experience political instability are found to be more likely to have secret police. Finally, military juntas or authoritarian regimes participating in a state rivalry are found in this specific model to be more likely than other authoritarian regimes to have a secret police organization.

**Appendix Table 31.** Three Stage Least Regression

| | Attempt | Secret Police |
|---|---|---|
| Secret Police | -0.046 | |
| | (0.014)*** | |
| Attempt | | -0.837 |
| | | (0.155)*** |
| Military Expenditure | -0.000 | |
| | (0.003) | |
| Change Mil Exp | 0.023 | |
| | (0.021) | |
| GDP per capita | 0.000 | |
| | (0.006) | |
| Change GDP per capita | -0.070 | |
| | (0.045) | |
| Military Personnel | | 0.009 |
| | | (0.013) |
| Instability | | 0.006 |
| | | (0.001)*** |
| Military Regime | | 0.229 |
| | | (0.022)*** |
| State Rivalry | | 0.129 |
| | | (0.021)*** |
| Years Since Coup | -0.017 | |

| | | |
|---|---|---|
| | (0.003)*** | |
| Years Since Coup$^2$ | 0.000 | |
| | (0.000)*** | |
| Years Since Coup$^3$ | -0.000 | |
| | (0.000)** | |
| Constant | 0.179 | -0.021 |
| | (0.044)*** | (0.141) |
| Obs. | 1,956 | |
| Time Period | 1951-2000 | |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Threat Environment**

As it was stated previously, internal and external threats may destabilize an autocratic political system and increase coup risk. More precisely, civil wars increase the probability of a coup attempt since they augment a government's dependence to its armed forces or bring forward rival groups that challenge the supremacy of the government (Quinlivan, 1999; Böhmelt, Escribà-Folch, and Pilster, 2018). To control for the effect of internal and external threats on coup risk, I use the civil conflict and militarized interstate dispute variables from Böhmelt, Escribà-Folch, and Pilster (2018). In accordance with the literature, civil conflict is found to increase the likelihood of a coup attempt. Likewise, autocratic regimes engaged in a militarized interstate dispute are less likely to experience a coup. The rest of the results mirror the findings of main text model 11 and once more the secret police variable has a negative and statistically significant effect on the probability of a coup attempt.

**Appendix Table 32.** Threat Environment

| | Model A44 |
|---|---|
| Secret Police | -0.766 |
| | (0.284)*** |
| Military Expenditure | 0.051 |

| | |
|---|---|
| | (0.097) |
| Change Mil Exp | 0.266 |
| | (0.315) |
| GDP per capita | -0.013 |
| | (0.131) |
| Change GDP per capita | -1.910 |
| | (0.631)*** |
| Military Personnel | -0.158 |
| | (0.113) |
| Instability | 0.077 |
| | (0.035)** |
| Civil Conflict | 0.774 |
| | (0.293)*** |
| Militarized Dispute | -0.420 |
| | (0.146)*** |
| Years Since Coup | -0.179 |
| | (0.050)*** |
| Years Since Coup$^2$ | 0.006 |
| | (0.003)** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000) |
| Constant | -1.626 |
| | (0.789)** |
| Obs. | 2,481 |
| Log Pseudo Likelihood | -478.144 |
| Wald $c^2$ | 159.49 |
| Prob>$c^2$ | 0.000 |
| Time Period | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Country-Specific Random Intercept Model**

As it has already been discussed throughout the study, coup risk is influenced by various socioeconomic factors, such as wealth, economic growth, political development, or a state's internal and external threat environment (Belkin and Schofer, 2003; Powell, 2012; Böhmelt and Pilster, 2015, 2018). To control for the impact of country-specific characteristics on the likelihood of a coup attempt, I run a country-specific random intercept variation of main text model 11. The model has 106 set of groups with an average value of 23.4 country years. The

model's results mirror those of main text model 11 and once more secret police have a negative and statistically significant effect on the probability of a coup attempt.

**Appendix Table 33**. Country-Specific Random Intercept Model

Number of groups = 106, Observations per group: min = 1, average = 23.4, max 50

| | Model A45 |
|---|---|
| Police | -0.856 |
| | (0.294)*** |
| Military Expenditure | 0.024 |
| | (0.104) |
| Change Mil Exp | 0.291 |
| | (0.353) |
| GDP per capita | -0.136 |
| | (0.145) |
| Change GDP per capita | -2.217 |
| | (0.725)*** |
| Military Personnel | -0.119 |
| | (0.124) |
| Instability | 0.100 |
| | (0.029)*** |
| Years Since Coup | -0.117 |
| | (0.059)** |
| Years Since Coup$^2$ | 0.003 |
| | (0.003) |
| Years Since Coup$^3$ | -0.000 |
| | (0.000) |
| Constant | -1.109 |
| | (0.958) |
| Obs. | 2,481 |
| Log Likelihood | -484.784 |
| Wald $c^2$ | 63.84*** |
| Country Variance | 0.307 |
| LR Test vs. Logistic Regression | 3.58** |
| Time Period | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Additional Control Variables**

In this set of models, I include additional control variables to the analysis in order to have a more comprehensive understanding of the factors that influence coup risk and to check if the effect of secret police on coup risk persists even with the inclusion of additional control variables. In the first model, I include a binary autocratic regime variable to distinguish between anocratic and other authoritarian regimes. However, autocracies are found to be equally likely to experience a coup compared to anocracies. Furthermore, colonial past is found to heavily influence the post-independence security forces. For instance, former colonies may have weak institutions of civilian control, they may suffer from severe ethnic stratification in the armed forces due to selective recruitment during the colonial era, and they may even have more counterbalancing opportunities (Horowitz, 1985; Ray, 2012, 2019; Geddes, Wright, and Frantz, 2018; Mehrl and Choulis, 2021). For these reasons, I control for the effect of British colonialism using the former British colony binary variable from Toronto's data set on conscription (2017). Nevertheless, the effect of British colonialism on coup risk is statistically insignificant. In the third model, I control for external threats with the interstate rivalry variable from Toronto's data set on conscription (2017). However, interstate rivalry does not seem to increase coup risk in autocracies. In the fourth model, I control for how many years a specific autocratic regime is in power. The variable exerts a negative and statistically significant effect on coup risk. In the fifth model, I control for the effect of military spending on coup attempt by dividing total military expenditure with military size. However, the new variable has a statistically insignificant effect on coup attempt. Finally, I distinguish among autocratic variants based on the GWF binary variables. Thus, monarchies and single party regimes are less likely to experience a coup compared to personalist autocracies whereas juntas are more likely. Overall, despite the inclusion of additional control variables, the negative and statistically significant effect of secret police on coup attempt persists.

**Appendix Table 34a.** Additional Control Variables

| | Model A46 | Model A47 | Model A48 |
|---|---|---|---|
| Secret Police | -0.834 | -0.912 | -0.927 |
| | (0.279)*** | (0.262)*** | (0.269)*** |
| Military Exp | 0.022 | 0.029 | 0.027 |
| | (0.100) | (0.106) | (0.093) |
| Change Mil Ex | 0.279 | 0.132 | 0.136 |
| | (0.329) | (0.320) | (0.323) |
| GDP per Capit | -0.094 | -0.019 | -0.016 |
| | (0.127) | (0.134) | (0.120) |
| Change GDPpc | -2.138 | -1.853 | -1.826 |
| | (0.702)*** | (0.654)*** | (0.673)*** |
| Military Persor | -0.111 | -0.136 | -0.152 |
| | (0.119) | (0.123) | (0.115) |
| Instability | 0.097 | 0.109 | 0.109 |
| | (0.029)*** | (0.031)*** | (0.031)*** |
| Autocracy | -0.211 | | |
| | (0.167) | | |
| British Colony | | -0.111 | |
| | | (0.264) | |
| State Rivalry | | | 0.293 |
| | | | (0.219) |
| Years Since Cc | -0.175 | -0.151 | -0.151 |
| | (0.052)*** | (0.054)*** | (0.054)*** |
| Years Since Cc | 0.007 | 0.004 | 0.004 |
| | (0.003)* | (0.003) | (0.003) |
| Years Since Cc | -0.000 | -0.000 | -0.000 |
| | (0.000) | (0.000) | (0.000) |
| Constant | -0.924 | -1.508 | -1.610 |
| | (0.759) | (0.812)* | (0.775)** |
| Obs. | 2,454 | 1,956 | 1,956 |
| Log Pseudo Lil | -479.422 | -426.961 | -425.996 |
| Wald $c^2$ | 111.08 | 88.4 | 88.2 |
| Prob>$c^2$ | 0.000 | 0.000 | 0.000 |
| Time Period | 1951-2010 | 1951-2000 | 1951-2000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Appendix Table 34b.** Additional Control Variables

| | Model A49 | Model A50 | Model A51 |
|---|---|---|---|
| Secret Police | -0.851 | -0.813 | -0.882 |
| | (0.264)*** | (0.269)*** | (0.272)*** |
| Military Expenditure | 0.057 | 0.125 | 0.028 |
| | (0.097) | (0.128) | (0.102) |
| Change Mil Exp | -0.266 | 0.335 | 0.357 |
| | (0.322) | (0.332) | (0.320) |
| GDP per capita | -0.039 | -0.060 | -0.032 |
| | (0.123) | (0.124) | (0.138) |
| Change GDP per capita | -1.981 | -2.029 | -2.088 |
| | (0.674)*** | (0.667)*** | (0.674)*** |
| Military Personnel | -0.146 | -0.339 | -0.173 |
| | (0.115) | (0.205)* | (0.136) |
| Instability | 0.101 | 0.103 | 0.097 |
| | (0.029)*** | (0.029)*** | (0.027)*** |
| Autocratic Variant Duration | -0.023 | | |
| | (0.012)* | | |
| Military Regime | | | 0.429 |
| | | | (0.252)* |
| Monarchy | | | -0.673 |
| | | | (0.391)* |
| Single Party Regime | | | -0.650 |
| | | | (0.228)*** |
| Spending per Soldier | | -0.307 | |
| | | (0.247) | |
| Years Since Coup | -0.142 | -0.157 | -0.129 |
| | (0.045)*** | (0.048)*** | (0.051)** |
| Years Since Coup$^2$ | 0.005 | 0.005 | 0.004 |
| | (0.002)* | (0.003)* | (0.003) |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 |
| | (0.000) | (0.000) | (0.000) |
| Constant | -1.421 | -0.585 | -1.480 |
| | (0.744)* | (0.901) | (0.811)* |
| Obs. | 2,481 | 2,451 | 2,481 |
| Log Pseudo Likelihood | -482.545 | -482.772 | -477.981 |
| Wald $c^2$ | 105.06 | 119.0 | 123.36 |
| Prob>$c^2$ | 0.000 | 0.000 | 0.000 |
| Time Period | 1951-2010 | 1951-2010 | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Bivariate Two Stage Model**

Since secret police are established in authoritarian states as tools of political repression or may be established in authoritarian states with governments that do not trust the armed forces, there is an argument to be made that secret police are instituted in states with weak civilian control over the armed forces. On the other hand, a state needs to have a certain degree of institutional expertise and available resources to form a security organization. To control for sample selection bias, I use a bivariate two stage probit model in which secret police are the dependent variable of the first equation and coup attempt the dependent variable of the second equation. The latter is estimated spontaneously with the first while controlling for the correlation in the equations' error processes (Beardsley, 2008, p. 731). For the bivariate two stage model to work properly one needs to have an instrumental variable in the first equation that is then excluded from the second stage (Beber, 2012). In the first set of models, I use the peace years temporal control variables as the instrumental variables. In the second set of models, I add to the instruments a variable that captures the presence of a secret police in a neighboring ideologically similar autocracy. In more detail, I assign a value of 1 if a neighboring autocracy established a secret police organization in the last five years. The coup proofing literature accentuates that leaders emulate the counterbalancing policies of their experiential peer group (Böhmelt, Ruggeri, and Pilster, 2015). Following the same logic, an autocrat is expected to emulate the coup proofing policies of neighboring autocrats that share similar ideological and regime characteristics (for instance, another junta or single party regime). Consequently, an autocrat is more likely to establish a secret police organization if a neighboring peer autocrat has a positive experience with his newly established secret police. To this end, the neighboring secret police variable would have a direct effect on the establishment of secret police and an indirect effect on coup risk.

Regarding the findings, authoritarian states suffering from political instability are more likely to have a secret police organization to control the public. Wealthier states are also more likely to have secret police since they have a lot of resources to invest in the security apparatus. Likewise, authoritarian states with large armed forces are more likely to have secret police to monitor the extensive military apparatus. Additionally, the effect of military regimes on secret police is insignificant. Finally, secret police are more likely to be present in an autocracy, if a neighboring and ideologically similar state established a secret police organization in the past 5 years. In terms of the results of the second equation, the secret police variable has a negative and statistically significant effect on the probability of a coup attempt.

**Appendix Table 35.** Bivariate Two Stage Model

| | Secret Police | Attempt | Secret Police | Attempt |
|---|---|---|---|---|
| Secret Police | | -1.865 | | -1.665 |
| | | (0.151)*** | | (0.202)*** |
| Military Expenditure | -0.113 | -0.062 | -0.108 | -0.041 |
| | (0.029)*** | (0.034)* | (0.029)*** | (0.038) |
| Change Mil Exp | -0.284 | 0.002 | -0.284 | 0.051 |
| | (0.122)** | (0.139) | (0.123)** | (0.150) |
| GDP per capita | 0.256 | 0.084 | 0.246 | 0.046 |
| | (0.038)*** | (0.049)* | (0.039)*** | (0.054) |
| Change GDP per | -0.238 | -0.866 | -0.203 | -0.957 |
| | (0.249) | (0.301)*** | (0.252) | (0.321)*** |
| Military Personnel | 0.556 | 0.217 | 0.571 | 0.142 |
| | (0.037)*** | (0.058)*** | (0.037)*** | (0.070)** |
| Instability | 0.031 | 0.051 | 0.030 | 0.056 |
| | (0.008)*** | (0.010)*** | (0.008)*** | (0.011)*** |
| Military Government | -0.117 | 0.289 | -0.149 | 0.361 |
| | (0.090) | (0.096)*** | (0.094) | (0.104)*** |
| Neighboring Secret Pol | | | 0.398 | |
| | | | (0.092)*** | |
| Years Since Coup | 0.071 | | 0.077 | |
| | (0.014)*** | | (0.015)*** | |

| | | | | |
|---|---|---|---|---|
| Years Since Coup$^2$ | -0.003 | | -0.003 | |
| | (0.000)*** | | (0.000)*** | |
| Years Since Coup$^3$ | 0.000 | | 0.000 | |
| | (0.000)*** | | (0.000)*** | |
| Constant | -4.513 | -2.074 | -4.625 | -1.817 |
| | (0.279)*** | (0.336)*** | (0.283)*** | (0.369)*** |
| Obs. | 2,481 | | 2,481 | |
| Log Likelihood | -1666.353 | | -1655.756 | |
| Wald $c^2$ | 954.01 | | 854.76 | |
| Prob>$c^2$ | 0.000 | | 0.000 | |
| LR test of $\rho$=0 | 24.07*** | | 12.88*** | |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Heckman Sample Selection Model**

In the appendix below, I use a Heckman sample selection model to explore the impact of secret police on the probability of a successful coup attempt. To assess the effect of secret police on coup success, I run a Heckman sample selection model with Powell's and Thyne's (2011) coup success variable as the dependent variable of the outcome stage. The variable is assigned a value of 1 if a successful coup has taken place in a country in a given year or 0 otherwise. As the model's exclusion restrictions, the years since coup variables are not included in the outcome stage[42]. In the second set of models, I replace years since coup with military regime as the exclusion restriction. Regarding the selection stage, the results mirror the findings of main text model 11, as the secret police variable has a negative and statistically significant effect on coup attempt in both sets of models. Nevertheless, the effect of secret police on coup success is statistically insignificant, same with all the control variables. We can thus conclude that there is no relationship between secret police and coup success. This probably happens because if secret police have not intervened in the coup's planning stage and the plot has gone

[42] "Exclusion restrictions, like instrumental variables, are variables that affect the selection process but not the substantive equation of interest." (Bushway, Johnson, and Slocum, 2007).

undetected then its agents have failed. Therefore, in accordance with previous studies that emphasize on the role of paramilitaries as a tool of general instead of immediate deterrence (Böhmelt and Pilster, 2015; Fearon, 1994), secret police operations may deter coup onset but have limited influence on the course of events after a coup outbreak. Therefore, secret police are expected to only affect the probability of a coup occurring and not the success of one.

**Appendix Table 36.** Heckman Sample Selection Model

| | Attempt | Success | Attempt | Success |
|---|---|---|---|---|
| Secret Police | -0.379 | -0.004 | -0.378 | 0.134 |
| | (0.124)*** | (0.357) | (0.129)*** | (0.350) |
| Military Expenditure | 0.022 | 0.059 | 0.007 | 0.050 |
| | (0.047) | (0.100) | (0.049) | (0.112) |
| Change Mil Exp | 0.192 | -0.146 | 0.208 | -0.228 |
| | (0.169) | (0.411) | (0.166) | (0.437) |
| GDP per capita | -0.056 | -0.061 | -0.049 | -0.027 |
| | (0.061) | (0.125) | (0.067) | (0.155) |
| Change GDP per capita | -1.103 | 0.052 | -1.082 | 0.375 |
| | (0.354)*** | (0.971) | (0.347)*** | (1.174) |
| Military Personnel | -0.066 | -0.142 | -0.079 | -0.113 |
| | (0.059) | (0.115) | (0.066) | (0.129) |
| Instability | 0.050 | -0.003 | 0.047 | -0.011 |
| | (0.014)*** | (0.042) | (0.013)*** | (0.042) |
| Military Regime | | | 0.334 | |
| | | | (0.123)*** | |
| Years Since Coup | -0.086 | | -0.074 | 0.074 |
| | (0.025)*** | | (0.026)*** | (0.095) |
| Years Since Coup$^2$ | 0.003 | | 0.002 | -0.003 |
| | (0.001)** | | (0.001)* | (0.006) |
| Years Since Coup$^3$ | -0.000 | | -0.000 | 0.000 |
| | (0.000)* | | (0.000) | (0.000) |
| Constant | -0.653 | 0.538 | -0.731 | 0.622 |
| | (0.369)* | (1.289) | (0.402)* | (1.030) |
| Obs. | 2,481 | | 2,481 | |
| Log Pseudo Likelihood | -586.978 | | -581.324 | |
| Wald $c^2$ | 2.75 | | 7.09 | |
| Prob>$c^2$ | 0.907 | | 0.717 | |
| Time Period | 1951-2010 | | 1951-2010 | |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Variation Only Sample**

For the purposes of this robustness check, I exclude from the analysis countries that do not display a variation in the secret police variable. To be more precise, I exclude countries that have never established a secret police or countries that had secret police active for the entirety of the data. As I include only states with variation in the secret police variable, the number of observations in this model drops significantly compared to the main text models. Nonetheless, the results remain the same and secret police once again have a negative and statistically significant effect at the 95% confidence level on the probability of a coup attempt.

**Appendix Table 37.** Secret Police Variation Only

| | Model A52 |
|---|---|
| Secret Police | -0.940 |
| | (0.428)** |
| Military Expenditure | 0.163 |
| | (0.160) |
| Change Mil Exp | 1.229 |
| | (0.416)*** |
| GDP per capita | -0.025 |
| | (0.223) |
| Change GDP per capita | -0.706 |
| | (1.108) |
| Military Personnel | -0.126 |
| | (0.215) |
| Instability | 0.029 |
| | (0.057) |
| Years Since Coup | -0.290 |
| | (0.065)*** |
| Years Since Coup$^2$ | 0.009 |
| | (0.003)** |
| Years Since Coup$^3$ | -0.000 |
| | (0.000)* |
| Constant | -1.507 |
| | (1.221) |
| Obs. | 840 |
| Log Pseudo Likelihood | -141.315 |
| Wald $c^2$ | 139.81 |
| Prob>$c^2$ | 0.000 |
| Time Period | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Different Lag Structures for Secret Police**

In this robustness check, I use different lag versions of the secret police variable to estimate the effect of secret police on coup risk throughout the years. Since the secret police spy networks expand and become more effective with time, the organization's coup proofing capabilities shall remain stable throughout the years. The results of the different lag structures emphasize this point since the secret police variable produces a statistically significant effect across all lag structures.

**Table 38.** Different Lag Structures for Secret Police

| | Coefficient Estimate |
|---|---|
| Lag 2 | -0.808 (0.270)*** |
| Lag 3 | -0.856 (0.312)*** |
| Lag 4 | -0.936 (0.319)*** |
| Lag 5 | -0.824 (0.311)*** |
| Lag 6 | -0.776 (0.320)** |
| Lag 7 | -0.504 (0.299) |
| Lag 8 | -0.592 (0.274)** |
| Lag 9 | -0.589 (0.296)** |
| Lag 10 | -0.676 (0.284)** |
| Lag 11 | -0.688 (0.292)** |
| Lag 12 | -0.613 (0.291)** |
| Lag 13 | -0.754 (0.326)** |
| Lag 14 | -0.802 (0.305)*** |
| Lag 15 | -1.222 (0.375)*** |

Note: Table entries are coefficients. Standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Determinants of Secret Police**

In this robustness check, I examine the factors that determine whether secret police are present in an autocracy. To this end, I control for state capacity with GDP per capita as well as military expenditure. Additionally, I control for political instability since internal political turmoil may incentivize the establishment of a political police force. Most importantly, I control for the degree of autocratic consolidation and institutionalization. Single-party regimes are considered to be more institutionalized than other autocracies (Geddes, Wright, and Frantz, 2018; see also Magaloni and Kricheli, 2006), and as a result they might be more capable of establishing an omniscient and intrusive organization, like the secret police, since they have a very powerful position within the political system. Therefore, in appendix table 39 I examine how likely it is for single party regimes to have a secret police using the single-party regime variable from Geddes, Wright, and Frantz (2018). Furthermore, secret police are strongly associated as a concept with the single party communist regimes in Europe during the Cold war, especially the Soviet KGB. To eliminate the possibility that the effect of secret police on coup attempt is confounded by a potential prevalence of secret police organization in communist regimes, I also control for communist regimes besides single party ones. Specifically, I control for the effect of communist regimes on the presence of secret police in appendix table 39 using Milan Svolik's (2012) communist leadership variable to disaggregate single party regimes from communist regimes which can be predominantly found in the USSR-affiliated Eastern Europe. However, neither single party regimes nor communist regimes have a statistically significant effect on the presence of secret police in autocratic regimes. Subsequently, these models reaffirm the position that single party or communist regimes, namely USSR and its affiliates, are no more likely than other autocratic regimes to use a secret police. Besides regime type,

wealthier autocracies seem to be more likely to have a secret police than other autocratic regimes, presumably because they have the resources to establish paramilitary organizations.

**Appendix Table 39.** Determinants of Secret Police

| | Model A53 | Model A54 |
|---|---|---|
| Single Party | -0.367 | |
| | (0.339) | |
| Communist | | 0.840 |
| | | (0.718) |
| Military Expenditure | 0.165 | 0.105 |
| | (0.121) | (0.140) |
| GDP per capita | 0.365 | 0.390 |
| | (0.171)** | (0.222)* |
| Instability | -0.033 | -0.021 |
| | (0.048) | (0.056) |
| Secret Police Years | -1.739 | -2.405 |
| | (0.270)*** | (0.349)*** |
| Secret Police Years $^2$ | 0.068 | 0.135 |
| | (0.021)*** | (0.030)*** |
| Secret Police Years $^3$ | -0.000 | -0.002 |
| | (0.000)** | (0.000)*** |
| Constant | -0.645 | -0.488 |
| | (1.030) | (1.344) |
| Obs. | 2,497 | 2,427 |
| Log Pseudo-Likelihood | -208.803 | -166.330 |
| Wald $\chi^2$ | 188.22 | 252.15 |
| Prob>$\chi^2$ | 0.000 | 0.000 |
| Time Period | 1951-2010 | 1951-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Controlling for Military Academies**

Evidence suggest that military academies increase coup risk because they offer opportunities for officer networking (Böhmelt, Escribà-Folch, and Pilster, 2019). In more detail, military academies induce cohesive views in the officer corps and establish networks that facilitate coordination crucial for a coup against the government (Böhmelt, Escribà-Folch, and Pilster, 2019). The increased coup risk due to military academies is especially prominent in non-

democratic regimes since democracies have more tools to combat praetorian tendencies (Böhmelt, Escribà-Folch, and Pilster, 2019). Subsequently, it is necessary to examine whether the presence of a military academy neutralizes the effect of secret police on coup attempt since the secret police networks may be unable to penetrate these institutions thus offering vital opportunities for the organization and coordination of a coup against the government. To this end, I use Toronto's (2017) military academies count variable to control for the effect of military academies on coup attempt in autocracies. Consistent with previous research (Böhmelt, Escribà-Folch, and Pilster, 2019), military academies increase the probability of a coup attempt in autocracies. However, military academies do not nullify the effect of secret police on coup attempt. Once again, the secret police variable has a negative effect on coup attempt and is statistically significant at the 99% confidence level.

**Appendix Table 40.** Military Academies

| | Model A55 |
|---|---|
| Police | -1.196 |
| | (0.298)*** |
| Mil Academies | 0.262 |
| | (0.087)*** |
| Military Expenditure | 0.025 |
| | (0.123) |
| Change Mil Exp | 0.501 |
| | (0.381) |
| GDP per capita | -0.023 |
| | (0.159) |
| Change GDP per capita | -2.967 |
| | (0.939)*** |
| Military Personnel | -0.164 |
| | (0.152) |
| Instability | 0.114 |
| | (0.032)*** |
| Years Since Coup | -0.162 |
| | (0.062)*** |
| Years Since Coup$^2$ | 0.005 |
| | (0.003) |
| Years Since Coup$^3$ | -0.000 |
| | (0.000) |
| Constant | -1.668 |

| | |
|---|---|
| | (0.952)* |
| Obs. | 1,500 |
| Log Pseudo-Likelihood | -315.209 |
| Wald $c^2$ | 115.45 |
| Prob>$c^2$ | 0.000 |
| Time Period | 1951-2004 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Junior and Senior Officer Coups**

In these set of models, I assess the effect of secret police on coups carried out by different officer ranks. Using data on senior and junior coups from Albrecht and Eibl (2018), I distinguish between coups from the higher echelons of the military and those from the lower ranks. It is worth mentioning that the Albrecht and Eibl 2018 data set has information only for coups in the Middle East and North Africa. Therefore, the sample size is significantly lower in this set of models than the rest, dropping to as low as 537 observations when control variables are included. Consequently, it would be unwise to generalize the findings of these models since they focus on a very specific region of the world and the number of observations is low for a probit model. Nevertheless, the effect of secret police on junior coups is negative and statistically significant even after the inclusion of control variables. To the contrary, the effect of secret police on coups by the senior military leadership is insignificant, although the same is true for the control variables. Hence, it appears that secret police in the Middle East and Maghreb region tend to be more effective at decreasing the probability of a coup attempt by junior officers than senior ones. It will be interesting to see whether this distinction holds true outside of the Middle East when more data on coup d'état by officer rank becomes available. At the meantime, the findings suggest that the effect of the coup proofing operations of the

secret police in the Middle East and Maghreb region is more pronounced on junior than senior officer coups.

**Appendix Table 41.** Junior and Senior Coups

| | Junior Coup | Junior Coup | Senior Coup | Senior Coup |
|---|---|---|---|---|
| Secret Police | -0.733 | -0.796 | -0.222 | -0.034 |
| | (0.178)*** | (0.372)** | (0.143) | (0.492) |
| Military Expenditure | | -0.116 | | -0.204 |
| | | (0.120) | | (0.137) |
| Change Mil Exp | | 0.782 | | -0.707 |
| | | (0.128)*** | | (1.216) |
| GDP per capita | | -0.055 | | -0.215 |
| | | (0.180) | | (0.242) |
| Change GDP per | | 0.274 | | -0.335 |
| | | (0.509) | | (0.578) |
| Years Since Coup | -0.025 | -0.049 | -0.009 | 0.072 |
| | (0.011)** | (0.019)** | (0.013) | (0.027)*** |
| Years Since Coup$^2$ | 0.000 | 0.000 | 0.000 | -0.000 |
| | (0.000) | (0.000)* | (0.000) | (0.000)** |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 | 0.000 |
| | (0.000) | (0.000) | (0.000) | (0.000)** |
| Constant | -1.108 | 0.180 | -1.903 | -0.459 |
| | (0.208)*** | (1.063) | (0.293) | (1.357) |
| Obs. | 893 | 537 | 893 | 537 |
| Log Likelihood | -164.836 | -68.67 | -85.86 | -32.614 |
| Wald $c^2$ | 28.90 | 173.64 | 3.57 | 20.64 |
| Prob>$c^2$ | 0.000 | 0.000 | 0.467 | 0.000 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Additional Counterbalancing Variables**

In the following models, I further control for the effect of counterbalancing paramilitaries on coup risk and their different coup proofing functions compared to the secret police. Specifically, models A56-58 include the three De Bruin (2018) counterbalancing variables that capture the number of counterweights against the regular military present in a country. The

counterbalancing variables consist of a counterweight count variable, the logged count number of counterweights, and a dummy variable that is assigned a value of 1 if a new counterweight was established in a country that year. Regarding the count counterweight variable, 974 (32.71%) country-years do not have counterweights, 1,008 (33.85%) have at least one counterweight, 722 (24.24%) have two counterweights, and 222 (7,34%) have three counterweights. Both variables are not correlated with the secret police variable since they have a collinearity degree of 0.222 and 0.195 respectively. Furthermore, in the dummy iteration of the counterweight variable, a new counterbalancing institution is established in 96 (3.22%) of cases and the rest receive a value of 0. Mirroring De Bruin's (2018) findings, the count counterweight variables have no effect on the occurrence of a coup attempt whereas the establishment of a new counterweight is found to increase coup risk. On the other hand, the effect of the secret police variable on coup risk is positive and statistically significant across the three models. Therefore, once again the evidence indicate that secret police operate in a distinct manner from other paramilitaries and they decrease coup risk unlike their counterparts. Secret police intervene in a coup's planning stage with their intelligence operations while other paramilitaries act as a deterrent through brute force. This might also explain why paramilitaries do not affect the occurrence of a coup but its outcome since they are combat-oriented and can counterbalance the regular army with their military means if the latter moves against the government. To the contrary, the intelligence operations of the secret police are tailored to impede the organization of a coup and if the armed forces successfully overcome these disruption efforts, then the organization is not expected to affect the coup outcome.

**Appendix Table 42.** Additional Counterbalancing Variables

| | Model A56 | Model A57 | Model A58 |
|---|---|---|---|
| Secret Police | -0.977 | -0.987 | -0.962 |
| | (0.423)** | (0.424)** | (0.420)** |
| Military Expenditure | -0.162 | -0.168 | -0.130 |
| | (0.079)** | (0.082)** | (0.079) |
| Change Mil Exp | -0.169 | -0.176 | -0.077 |
| | (0.357) | (0.359) | (0.345) |
| GDP per capita | 0.039 | 0.041 | 0.012 |
| | (0.162) | (0.160) | (0.160) |
| Change GDP per capita | -0.296 | -0.294 | -0.126 |
| | (1.389) | (1.376) | (1.110) |
| Military Personnel | -0.010 | 0.004 | -0.029 |
| | (0.129) | (0.133) | (0.134) |
| Instability | 0.098 | 0.099 | 0.094 |
| | (0.042)** | (0.042)** | (0.041)** |
| Counterweight Count | 0.098 | | |
| | (0.105) | | |
| Counterweight Logged | | 0.252 | |
| | | (0.262) | |
| New Counterweight | | | 1.270 |
| | | | (0.480)*** |
| Years Since Coup | -0.121 | -0.121 | -0.110 |
| | (0.067)* | (0.067)* | (0.068) |
| Years Since Coup$^2$ | 0.006 | 0.005 | 0.005 |
| | (0.004) | (0.004) | (0.004) |
| Years Since Coup$^3$ | -0.000 | -0.000 | -0.000 |
| | (0.000) | (0.000) | (0.000) |
| Constant | -1.521 | -1.606 | -1.394 |
| | (1.113) | (1.104) | (1.118) |
| Obs. | 1,260 | 1,260 | 1,260 |
| Log Pseudo Likelihood | -294.786 | -294.637 | -292.376 |
| Wald $c^2$ | 52.53 | 53.13 | 92.63 |
| Prob>$c^2$ | 0.000 | 0.000 | 0.000 |
| Time Period | 1960-2010 | 1960-2010 | 1960-2010 |

*Note:* Table entries are coefficients; standard errors in parentheses; * significant at 10 percent, ** significant at 5 percent, *** significant at 1 percent.

**Secret Police Organizations**

The list below includes all the secret police organizations that are registered in the original secret police variable. For the purposes of this variable, I used, to the best of my efforts, the

available literature on secret police organizations. I include the literature that I used for the creation of the variable in the appendix references below. I register an internal security organization as secret police if it was referred by one of the authors as such and if the organization fulfilled certain criteria. I used as criteria for the secret police those that were most commonly used in the literature. To be more precise, an internal security organization was listed as secret police if the organization performed the role of a political police force, if it operated in secrecy and the identity of its members was secret, if it used intelligence operations and violent policing practices, and if it acted independently from other internal security agencies, like the regular police. After I applied these criteria in the literature, I ended up with 54 authoritarian regimes that have established a secret police organization at least once between 1950 and 2018. Finally, I recognize that regional experts and other academics may have excellent suggestions of security agencies that could be classified as secret police and I am looking forward to hearing for any agency that I might have missed and should be on the list.

**Appendix Table 43.** List of Secret Police Organizations

| Country | Years | Organization |
|---|---|---|
| Cuba | 1952-1957 | Bureau for the Repression of Communist Activities |
| | 1961-2018 | State Security |
| Dominican Republic | 1957-1962 | Military Intelligence Service |
| Mexico | 1947-1985 | Federal Security Directorate |
| Nicaragua | 1980-1989 | Directorate of State Security |
| Venezuela | 2009-2018 | Bolivarian Intelligence Service, DIM/DISIP |
| Brazil | 1964-1984 | DOI/CODI |
| Paraguay | 1954-1989 | Technical Division for the Repression of Communism |
| Chile | 1973-1990 | DINA/CNI |

| | | |
|---|---|---|
| Argentine | 1976-1982 | Battalion 601 |
| Uruguay | 1973-1984 | Anti-Subversive Activities Co-Ordination Organization |
| Spain | 1941-1977 | Political-Social Brigade |
| Portugal | 1945-1974 | PIDE/Directorate-General of Security |
| East Germany | 1950-1989 | Stasi |
| Poland | 1945-1989 | UBP/SB |
| Hungary | 1948-1956 | State Security Department |
| Czechoslovakia | 1945-1989 | State Security/StB |
| Albania | 1946-1991 | Directorate of State Security |
| Yugoslavia | 1946-2002 | State Security Administration/State Security Service |
| Greece | 1967-1974 | Greek Military Police-Special Investigative Unit |
| Bulgaria | 1947-1989 | Committee for State Security |
| Romania | 1948-1989 | Department of State Security |
| USSR/Russia | 1934-1991 | NKVD/MGB/KGB |
| | 1995-2018 | FSB |
| Belarus | 1991-2018 | State Security Committee |
| Nigeria | 1976-2018 | Nigerian Security Organization/State Security Service |
| Chad | 1982-1990 | Directorate of Documentation and Security |
| Congo | 1960-2018 | Directorate for State Security |
| Democratic Rep of Congo | 1969-1997 | CND/AND |
| Uganda | 1971-1979 | State Research Bureau |
| Somalia | 1970-1991 | Hangash |
| Ethiopia | 1975-1991 | Public Security-Central Investigation Unit |
| Angola | 1975-1979 | Directorate of Information and Security |
| Mozambique | 1975-1991 | National Service of Popular Security/SNASP |
| Zimbabwe | 1980-2017 | Central Intelligence Organization |

| | | |
|---|---|---|
| South Africa | 1969-1980 | Bureau of State Security |
| Algeria | 1990-2015 | Department of Intelligence and Security |
| Sudan | 1999-2018 | National Intelligence and Security Service |
| Iran | 1957-1979 | Savak |
| | 1984-2018 | Ministry of Intelligence |
| Iraq | 1973-2003 | Mukhabarat |
| Egypt | 1954-2018 | Mabahith Amn El Dawla |
| Syria | 1969-2018 | Political Security Directorate/ Mukhabarat |
| Jordan | 1952-2018 | General Intelligence Directorate/Mukhabarat |
| Saudi Arabia | 1924-2018 | Mabahith |
| Afghanistan | 1978-1992 | KHAD |
| | 2002-2018 | NDS |
| Turkmenistan | 1991-2018 | Ministry for National Security |
| Tajikistan | 1991-2018 | State Committee for National Security |
| Uzbekistan | 1991-2018 | National Security Service |
| Kazakhstan | 1992-2018 | National Security Committee |
| China | 1983-2018 | Ministry of State Security, Office 610 |
| Mongolia | 1936-1991 | Internal Security Directorate |
| Taiwan | 1950-1992 | Sigurimi |
| North Korea | 1973-2018 | Ministry of State Security |
| South Korea | 1961-1987 | KCIA |
| North Vietnam/Vietnam | 1945-2018 | People's Public Security |
| Cambodia | 1975-1978 | Santebal |
| Philippines | 1972-1986 | National Intelligence and Security Authority/METROCOM |

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# 5 Conclusions and Contribution

As I write this section, resurgent military regimes in Myanmar and Sudan continue to repress pro-democracy protests, once again accentuating the timeless threat of coups d'état to government survival and underscoring the importance of studying coups and civil-military relations in general. In order to fulfil this objective, the study highlights the previously unrecognized influence of conscription and secret police on civil-military relations. Specifically, the study furthers our understanding on civil-military relations by examining two essential aspects of the field: public support for the armed forces and coup risk.

To briefly summarize the thesis' key findings, conscription is found to increase public support for the armed forces in European democracies and the probability of a coup attempt in anocracies. Therefore, the study draws attention to the fact that conscription not only affects the military apparatus itself due to the constant influx of cheap labor. It also has a profound impact on a state's overall civil-military relations since it affects how the military interacts with society and the political system altogether. Conscription influences society's stance towards its armed forces and improves the ties between society and the military thus increasing public trust to the armed forces. Essentially, the study's main takeaway with regards to conscription is that the interaction between a society and its armed forces differs when the military is conscription-based compared to an all-volunteer one. The increased links between society and its armed forces due to conscription are consequently found to increase public support for the armed forces in democracies and coup risk in anocracies.

To the contrary, autocracies with secret police are found to be less likely to experience a coup attempt compared to autocracies without secret police. Unlike conscription, secret police organizations are exogenous to the armed forces and are used by autocrats to assert their control over society and the military apparatus through elaborated intelligence operations. The study stresses the need to further disaggregate paramilitary organizations. The secret police's

prominent position in the autocratic regime and its potent intelligence capabilities highlight the existence of distinct types of paramilitary organizations with unique operational traits that all work to ensure regime survival.

Accordingly, I have put into use extensive, large-n data sets, such as the Autocratic Breakdown and Regime Transitions data set by Geddes, Wright, and Frantz (2014), the Eurobarometer (2005), or the Military Balance data set (2019), to properly assess and generalize the relevant hypotheses. However, the study's contribution to the literature on civil-military relations is not limited to its findings. Instead, I expanded existing data widely used in the research on conscription. Notably, I expanded Toronto's conscription variable based on information from the CIA Factbook data (2021) on conscription. Additionally, utilizing the rich body of literature on security agencies, I constructed a new large-n variable on secret police organizations to disaggregate secret police from other paramilitaries and evaluate the coup-proofing capacity of secret police organizations in autocracies.

Overall, the thesis offers a systematic examination of the study on civil-military relations, especially on coup d'état, and underlines the decisive yet previously unrecognized influence of conscription and secret police on civil-military relations. In what follows, I will briefly go through each chapter's key findings in addition to suggesting avenues for future research before speculating on the implications of data limitations. Finally, I will present the thesis' concluding remarks and main takeaways.

In chapter one, my co-authors and I presented substantial evidence that public trust toward the armed forces is higher in European countries with conscription compared to those with an all-volunteer army. We argued that this is done directly; personal involvement with the armed forces tends to be linked to more support for the military and conscription increases the social reach of the armed forces, as well as indirectly; a spill-over effect from conscripts to their social circle. The findings have important policy implications with regards to the military's ability to

influence the defence budget or military operations abroad. Despite the study's significant contribution to the civil-military relations literature, future research on the relationship between conscription and public support for the armed forces is very much desirable. In more detail, qualitative research based on case studies would better highlight how the direct or indirect pathways introduced in this study lead increase public support for the armed forces in states with conscription. Likewise, data limitations restrict the study's scope, but future researchers could incorporate non-European democracies in the analysis with additional data collection efforts. Future data collection efforts may also overcome the issue of the binary nature of the conscription variable. The study does include models with non-binary estimators of compulsory military service, however, more information on the number of conscripts in the armed forces, duration of service, quality of training, selective recruitment, or the existence of alternative forms of service would greatly benefit not only this study, but the entire academic literature on conscription. In particular, more advanced measurements of conscription would add significant nuance on the operationalization of conscription and academics would be able to study in more depth how conscription affects civil-military relations thus offering more elaborated policy recommendations.

Regarding the second chapter, I claim that conscription increases the probability of coup attempt in anocracies, especially when compared to non-anocracies, and the empirical analysis along with several robustness checks confirms this thesis. The findings do not dispute the democratizing effect of conscription in democracies or the importance of conscription as a national security policy but highlight a previously unobserved negative side effect of conscription in anocratic regimes. This is a significant finding since in the third decade of the 21st century numerous democracies and anocracies around the world plan to re-establish conscription or increase the duration of service to combat growing threats in the international system. Similar to the previous chapter, the current unavailability of data on conscription

practices around the world creates numerous avenues for future research. Toronto's binary operationalization of conscription is very useful, but large-n studies and data collection efforts on the number of conscripts in the national armed forces, duration of service, or quality of training would help us better understand the role of conscription in the armed forces and apply existing theoretical concepts to non-European states. Additionally, qualitative studies that examine how members of social and ethnic groups cluster within the armed forces during their compulsory military service would give us valuable information on social and ethnic dynamics in the military and how these affect its operations and internal competition. Finally, the literature on coup d'état would greatly benefit from a large-n data set on coup d'état by officer rank. Albrecht and Eibl (2018) data set on senior and junior coups is unique and certainly useful but its regional focus on the Middle East and Maghreb limits our ability to generalize findings. It would be beneficial for the study of coups to have a large-n data set on coup attempts based on officer rank to examine whether the effect of the explanatory variables varies between senior and junior coup attempts. Such a development would greatly improve the validity of our findings and accuracy of policy suggestions.

In the third and final chapter, I argue that secret police in autocratic regimes decrease the probability of a coup attempt by the armed forces. Secret police decrease the willingness and opportunity of military officers to execute a coup d'état in autocracies by intervening in the coup's preparation stage. Secret police officers penetrate the military apparatus and establish spy networks and surveillance operations to limit the opportunities of military officers to go undetected while planning a coup. Additionally, the threat of detection and sanction by the secret police decreases the willingness of individual army offices to participate in plots against the government or even associate themselves with dissent. Using smaller-n studies, I constructed a new variable on secret police organization with data from 1950 to 2018 and

present substantial evidence that autocracies with secret police are less likely to experience a coup compared to autocracies without secret police.

Consequently, the chapter contributes considerably to the literature on authoritarian stability as major autocratic states, like Iran, still use the secret police to pacify the internal political system. Autocrats are then free to enforce their political agenda without strong opposition or they may invest in the state's military capabilities without fearing a coup since the secret police keep the military in check. Besides monitoring military officers, the secret police are also involved with political repression, violence against civilians, and overall perpetrate considerable human rights violations. Exactly because the secret police have an integral part in political repression in autocracies, it is imperative for future researchers to study rigorously how different secret police organizations operate, how they affect mass repression levels, what kind of training do secret police officers receive, and which autocratic regimes are more likely to establish secret police. A shortcoming of this study is that due to data limitations I was unable to measure the size of the informant network of each secret police organization or to quantify the effect of extreme violent acts of repression, like civilian disappearances or torture, on the willingness of military officers or other dissidents to plot against the government. Future studies must double down on the link between secret police organizations and state repression in autocracies, especially with information on the size of informant networks or spies per citizen, to investigate whether autocracies with secret police organizations are more likely to repress the population or the presence of secret police leads to a shift towards silent repression.

Subsequently, the study illuminates the previously unrecognized influence of conscription on civil-military relations. Particularly, the study highlights the positive effect of conscription on public opinion for the armed forces in European democracies and calls attention to the increased coup risk in anocracies when conscription is present. Simultaneously, the study introduces a new variable on secret police organizations to set them apart from other

paramilitary forces and to examine how their specific operations affect autocratic survival. As such, secret police were found to employ distinct coup-proofing operations compared to conventional paramilitaries and coup risk was lower in autocracies with secret police compared to others, even when controlling for other paramilitaries. Therefore, the study makes a significant contribution to the civil-military relations literature by demonstrating that the disaggregation of core features of the security apparatus, like conscription or paramilitary organizations, can give unique insight on how and under which circumstances these features affect civil-military relations.

As a final note, the study also suggests many avenues for future research as the literature on civil-military relations continues to expand to accommodate old and new security challenges. On that account, I sincerely hope that this thesis attests to the fact that the re-evaluation or further examination of essential features of civil-military relations, say conscription, may provide valuable insight on major security issues, like a military coup.

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