Institutions Under Authoritarianism and Coup Attempts: 1950–2008

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II

Abstract

Why do autocrats allow legislatures, parties and elections? These nominally democratic institutions are thought to be fundamental pillars of democracies, yet they have been common features of authoritarian regimes in the post-World War II period. I argue that autocrats use these institutions to deter the threat of being overthrown by regime elites. More specifically, they contribute to co-optation of potential rivals by sharing power and spoils, gather information about the opposition and credibly reinforce the perception of the ruling clique's right to continued rule. Several recent studies have illustrated a relationship between institutions under authoritarianism and the longevity of authoritarian rule. However, although most scholars concede that regime elites are both the most pervasive threat to authoritarian rulers and the targets of co-optation strategies, studies of institutions under authoritarianism overwhelmingly focus on the diverse category of regime breakdowns. In order to account for this drawback of previous research, I turn my attention to coup attempts, a threat to incumbents that in most cases involves regime elites, and thus more precisely captures the core argument.

In accordance with previous research addressing regime longevity, I find that autocrats ruling with nominally democratic institutions are less likely to be subjected to both coup attempts and successful coups. The findings provide evidence for the proposed theoretical relationship in which authoritarian leaders credibly share their power with potential rivals in a legislature, a regime support party and display strength through elections. However, I find no evidence that institutional differences between autocracies with some variant of nominally democratic institutions in place differ in their propensity to be subjected to a coup attempt.

In sum, the results strengthen the claim that nominally democratic institutions under authoritarianism are effective tools for co-optation and deterrence of regime elites. It is clear that the institutional characteristics of autocracies matter for the propensity to be subjected to a coup attempt, and should therefore be further scrutinized, especially whether differences in institutional design matters. Moreover, the approach of this thesis underlines that disaggregating regime breakdown and concentrating on more homogenous events such as coup attempts is a fruitful endeavor in order to more accurately test complex theories.

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Chapter 1

Introduction

Why do autocrats allow legislatures, parties and elections? These nominally democratic institutions are thought to be fundamental pillars of democracies, yet they have been common features of authoritarian regimes in the post-World War II period. Previous research has provided two principal accounts for institutions under authoritarianism. First, that institutions are mere "window dressing" (e.g. Friedrich and Brzezinski in Gandhi and Przeworski 2007, 1292). In this view, institutions are not determined by any conditions under which they emerged, and they do not influence norms, beliefs or actions. In other words, neither do institutions play a mediating role in affecting outcomes, nor do they directly affect outcomes. Second, nominally democratic institutions are often seen as incompatible with the nature of the authoritarian state. The story goes that by gradually opening the door to a more pluralistic society, incumbents are allowing institutions that ultimately mean the end of their reign. There are essentially two possible outcomes of the "liberalization" of autocracies: either the supporters of a more repressive state will attempt a coup to stop the deterioration of the regime, or alternatively, the liberalizing policies result in a democratic transition because the masses are gradually becoming more involved (O'Donnell, Schmitter and Whitehead 1986). I argue, on the contrary, that autocrats use nominally democratic institutions to deter the threat of being overthrown by regime elites. More specifically, they contribute to co-optation of potential rivals by sharing power and spoils, gather information about the opposition and credibly reinforce the perception of the ruling clique's right to continued rule. Several recent studies have illustrated a relationship between institutions under authoritarianism and the longevity of authoritarian rule (e.g. Gandhi and Przeworski 2007, 2006; Geddes 2006, 2009; Magaloni and Kricheli 2010; Magaloni 2008, 2010; Reuter and Gandhi 2011; Svolik 2010; Wright 2008a,b, 2011). However, although most scholars concede that regime elites are both the most pervasive threat to authoritarian rulers and the targets of co-optation strategies, studies of institutions under authoritarianism overwhelmingly focus on the diverse category of regime breakdowns. In order to account for this drawback of previous research, I turn my attention to coup attempts, a threat to incumbents that in most cases involves regime elites, and thus more precisely captures the core argument.

1.1   Why Coup Attempts?

As urged by Gandhi and Lust-Okar (2009), this thesis provides insight into whether recent theories on why autocrats allow legislatures, parties and arrange elections are valid or not. Magaloni and Kricheli (2010, 126) also suggest that 'focusing on the strategies dictators follow to appease simultaneous threats to their stability from within the elites and from within the masses' is an important aspect missing from the current literature.

I propose that nominally democratic institutions help shape outcomes in authoritarian regimes. They contribute to co-optation and deterrence of potential rival *elites*, and thus lower the risk of coup attempts. I identify two mechanisms through which these institutions work. First, legislatures and parties establish a credible power-sharing relationship with the civilian and military elites. Legislatures and parties commit the ruling clique to not abuse their superior position by institutionalizing some power in the hands of a broadened group of elite citizens. By sharing power in a credible way, trust is established between the ruling clique and a larger number of influential elites in an environment normally characterized by secrecy and uncertainty. Moreover, legislators and party members are offered spoils and the possibility to advance in the ranks of the regime. During the 70-year long rule of Partido Revolucionario Institucional (PRI) in Mexico for instance, leadership rotation was institutionalized, and distinguished members of the party were allowed to run for office. These circumstances generated incentives for elites to work in the interest of the regime rather than attempting to overthrow it. Second, by arranging and convincingly "winning" elections, autocrats publicly display that they are "the only game in town". "Winning" elections by large margins communicate to both the elites and the masses that the current incumbents are near invincible. Such a display of the ruling clique's right to continued rule reinforces the perception that the regime is likely to last into the future. Moreover, elections can also help the ruling clique identify popular opposition candidates and then decide how to react. Potential rivals are thus deterred from attempting a coup against people who provide them with riches and influence.

Previous research on elite co-optation and deterrence has focused on regime breakdowns, a heterogenous group of events that can involve coups, revolutions, civil wars, democratization or mere changes to the institutional framework. The complexity of the events and numerous actors involved in regime breakdowns make it hard to know whether the outcome is driven by potential rivals within the regime elite or other actors such as the masses, foreign interventionists or rebel groups. By narrowing the focus to coup attempts, a form of anti-regime activity that is more closely connected to regime elites, be it civilian or military, the outcome group is not only more homogenous but also more in tune with the proposed theoretical mechanisms. In fact, the definition of a coup attempt involves that the attempted overthrow is performed by members of the state apparatus, most often *the elite*. Throughout the thesis, successful overthrows of the incumbent will be referred to as *coups*, while unsuccessful endeavors are labeled *unsuccessful coup*

attempts. More generally, a *coup attempt* 'includes illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive', whether successful or not (Powell and Thyne 2011, 252). Additionally, merely focusing on actual breakdowns is inaccurate, because a regime in which incumbents are continually subjected to unsuccessful coups is undoubtedly weaker than autocracies in which incumbents are not. By ignoring unsuccessful coups that do not result in a regime breakdown, valuable information is discarded.

If it is true that nominally democratic institutions are instrumental in deterring elites from attempting to overthrow the incumbent, they should decrease the chances of coup attempts. With this in mind, I expect that both successful and unsuccessful coups are functions of credible power-sharing and the strength incumbents are able to display through elections. With a legislature, a support party or parties and elections to back incumbents, the incentives should be greater for elites to join the regime instead of attempting to overthrow it.

1.2 Findings

The analysis provides evidence for the proposition that nominally democratic institutions under authoritarianism contribute to co-optation of potential rivals and deter them from attempting to overthrow the sitting incumbents. However, I find no evidence that institutional differences between autocracies with some variant of nominally democratic institutions in place differ in their propensity to be subjected to a coup attempt. Parties and elections may thus not be "necessary". Moreover, the predictive accuracy of coup attempts is improved in both in-sample and out-of-sample tests when including institutional variables. In addition, three in-depth cases provide both evidence for and illustrate weaknesses of the theoretical proposition and the methodical approach. Both Stroessner in Paraguay and Ben Ali in Tunisia credibly shared power through a legislature with parties and legitimized their right to continued rule by "winning" elections. Finally, the coup performed by the relatively low rank indigenous officer *Master Sergeant* Doe in Liberia illustrates that not all coup makers are elites that benefit from nominally democratic institutions. In other words, although focusing on the relatively homogenous group of coup attempts more accurately captures the core theoretical argument compared to the diverse category of regime breakdowns, it is not flawless.

Chapter 2

Theoretical Framework

2.1 Institutions Under Authoritarianism

Democracy, autocracy, conflict, regime breakdown and coups have been subjected to much scrutiny by political scientists. Underlining the importance of this research is the Arab uprising in 2011. The fall of long-lasting dictators in Tunisia, Egypt, Libya and Yemen, and the turmoil, especially in Syria, continues to rattle autocrats in the most undemocratic region of the world. In addition, the recent coup attempts in Mali, the Maldives and Guinea-Bissau illustrate that incumbent overthrows still is a prevalent phenomena.

The last large-scale upheaval in autocracies, *the third wave*, sparked optimism among researchers. During the third wave, scholars noted that a seemingly liberalizing trend was sweeping many repressive regimes, and it was taken as a sign that these regimes were in the process of transitioning. According to O'Donnell, Schmitter and Whitehead (1986), the "liberalization" of autocracies inherently destabilizes them. *Dictablandas* and *democraduras*, liberalized autocracies and limited democracies, had entered an institutional grey zone and the result would eventually be "something else". 'That something can be the instauration of a political democracy or the restoration of a new, and possibly more severe, form of authoritarian rule' (O'Donnell, Schmitter and Whitehead 1986, 3). Continued chaos, in which nobody manages to consolidate power, can also ensue. However, the post-Cold War period has shown that the "transitional phase" in many cases has been never-ending. As explained by Levitsky and Way (2002, 51), 'the post-Cold War world has been marked by the proliferation of hybrid political regimes. In different ways, and to varying degrees, polities ... combined democratic rules with authoritarian governance during the 1990s'. What emerged from many "liberalizing" policies, among them the introduction of nominally democratic institutions, was not democracy, but what has been labeled "hybrid regimes" (Diamond 2002) or "competitive authoritarianism" (Levitsky and Way 2002). Indeed, a plethora of scholars have reported evidence in contrast to the transitionist argument (Brumberg 2002; Levitsky and Way 2002; Cox 2009; Geddes 2006, 2009; Magaloni and Kricheli 2010; Magaloni 2008, 2010; Reuter and Gandhi 2011; Svolik 2010; Wright 2011). In their view, the transitionist

stance, and especially the linear model of democracy, in which "liberalizing" regimes supposedly head down a slippery slope to democracy, has proved to be severely limited. This is because "liberalized regimes", if institutionalized in particular ways, are exceptionally durable. Indeed, it seems that many autocrats utilize institutions to co-opt potential rivals. More specifically, nominally democratic institutions can generate incentives for elites to maintain the regime as opposed to forming rival factions and attempting to overthrow it. As noted by Brumberg (2002, 56), scholars expected that:

> the inherently unstable equilibrium of *dictablandas* would give way to a new equilibrium of competitive democracy. It is now clear, both within and far beyond the Middle East, that liberalized autocracy has proven far more durable than once imagined. The trademark mixture of guided pluralism, controlled elections, and selective repression in Egypt, Jordan, Morocco, Algeria, and Kuwait is not just a "survival strategy" adopted by authoritarian regimes, but rather a type of political system whose institutions, rules and logic defy any linear model of democratization.

Levitsky and Way (2002, 51) underline the same point by stating that it may be time 'to stop thinking of these cases [authoritarian regimes with nominally democratic institutions] in terms of transitions to democracy and to begin thinking about the specific types of regimes they actually are'. The rulers of many of these regimes are, however, not only averse to democratization, but to regime change in general. The aversion indicates that hybrids not necessarily move either in a nondemocratic or democratic direction, nor do they remain in chaos. In fact, 'in competitive authoritarian regimes, formal democratic institutions are widely viewed as the principal means of obtaining and exercising political authority' (Levitsky and Way 2002, 52). Certain combinations of democratic and autocratic characteristics may in fact be more stable than others, as opposed to the view that nominally democratic institutions in autocracies inherently destabilize them.

Indeed, the expectation of further democratization in "hybrid regimes" may have proved to be overly optimistic, and this realization sparked much needed attention in institutions under authoritarianism and their relation to regime longevity. Recently, scholars have started to work with 'types' of authoritarian regimes and propose that each type differs with regard to their chances of survival, propensities for democratization and the stability of subsequent regimes (Cheibub, Gandhi and Vreeland 2010; Cox 2009; Gandhi and Przeworski 2007, 2006; Gates et al. 2006; Geddes 2006, 2009; Hadenius and Teorell 2007, 2006; Levitsky and Way 2002; Magaloni and Kricheli 2010; Magaloni 2008, 2010; Reuter and Gandhi 2011; Svolik 2010; Wright 2008a,b, 2011; Wright and Escriba-Folch 2012). The focus on types of authoritarian regimes is fruitful, because in the same manner as democracies differ:

> so do contemporary authoritarian regimes, and if we are to understand the contemporary dynamics, causes, limits, and possibilities of regime change (including possible future democratization), we must understand the different, and in some respects

new, types of authoritarian rule (Diamond 2002, 33).

Overall, the common perceptions are that monarchies, one-party and hegemonic states are exceptionally stable, while military and especially non-dominant multiple party regimes are more prone to breakdown. For instance, Hadenius and Teorell (2006, 146) find that monarchies, 'regimes in which a person of royal descent has inherited the position of head of state in accordance with accepted practice or the constitution', is the type of autocracy with the longest average life span. On the other hand, electoral autocracies in which the incumbent party is non-dominant have the shortest average life span and most often transition into democracies. Moreover, in his analysis of the perils of presidentialism, Cheibub (2007) concludes that democracies following military dictatorships are more brittle than democracies following civilian authoritarian regimes. Thus, he argues that the reason presidential democracies break down more often than parliamentary democracies is that presidentialism, as a result of historical coincidence, tend to follow military dictatorships. He goes on to argue that there exists a military-presidential nexus, reflecting 'that military dictatorships appeared, remained, and/or recurred – in other words, endured – in countries that had adopted presidential institutions' (Cheibub 2007, 153-154). Furthermore, Gates et al. (2006, 893) state, in accordance with the transitionists, that 'both democratic and autocratic stability depend on self-enforcing equilibria, such that the maintenance of a polity's institutional structure is in the interest of political officials, whether through autocratic or democratic control'. Inconsistent regimes, which exhibit a blend of autocratic and democratic features, lack the self-enforcing equilibria of consistent democracies and autocracies, and will therefore either be pushed in the direction of a more purely autocratic or democratic polity, or simply remain in a continued circle of regime breakdowns.

I side with Gandhi and Lust-Okar (2009, 404) in that 'broad-stroke distinctions' may oversimplify the true patterns by disregarding the institutional heterogeneity of authoritarian regimes and its relation to regime stability. For instance, what is the specific institutional structure of an inconsistent regime, apart from the fact that it is not sufficiently constrained or free? Intuitively, one might interpret "inconsistent" to mean autocracies with nominally democratic institutions. However, the classification offers no explanation as to what the exact nature of the institutional design of the inconsistent regimes is. Another example of oversimplification is the label of "military regimes". First, scholars disagree on what a military regime is, and the definitions are often unclear. This imprecision leads to more subjective classifications of regimes. Hadenius and Teorell (2006, 146) follow Nordlinger (1977) and define military autocracies as 'states "in which military officers are major or predominant political actors by virtue of their actual or threatened use of force"'. Cheibub (2007, 162) on the other hand, classify all regimes in which the head of state currently is or have been a part of the state military prior to assuming power as military regimes. Indeed, 'even if he retired from service, shedding the uniform does not eliminate his military status'. These two definitions result in a large number of discrepancies when classifying regimes. In fact, 33 % of all military regimes by the latter standard are

classified as other regimes by the former, such as limited multi-party or one party autocracies. For instance, was Mubarak's Egypt a military regime, a multi-party regime or perhaps both? What about Ben Ali's Tunisia or Anastasio Somoza Debayle's rule in Nicaragua? Second, if military regimes are relatively brittle, then what explains the longevity of present-day Myanmar or Pinochet's Chile? I argue that by focusing on objectively and easily observed institutional differences, we might be able to expose the reasons for discrepancies in stability in a manner that expansive, unclear and more subjective regime typologies may not.

Although findings in the literature diverge, the examples of Hadenius and Teorell (2006), Cheibub (2007) and Gates et al. (2006) illustrate that the stability of autocracies, the stability of succeeding regimes and the propensity for democratization is influenced by institutional organization, and that specificity is needed to understand the mechanisms behind the observed patterns. Moreover, these three examples obliterate a common notion of the past, expressly that institutions in nondemocracies are nothing but "window dressing" (e.g. Friedrich and Brzezinski in Gandhi and Przeworski 2007, 1292). Such an argument implies both that institutions are not determined by any conditions under which they emerged, and that they do not influence conditions. In other words, neither do institutions play a mediating role in affecting outcomes, nor do they directly affect outcomes. If autocrats randomly dressed their windows, then no patterns would be found. In the next sections, I elaborate upon how certain institutions, namely legislatures, parties and elections can prolong autocratic rule.

2.2   Institutions Under Authoritarianism and Coup Attempts

How, specifically, are nominally democratic institutions expected to affect the risk of coup attempts in authoritarian regimes? In short, it is hypothesized that autocrats utilize support parties, elections and legislatures to co-opt potential rivals by sharing power and spoils, gather information about the opposition and credibly reinforce the perception of their right to continued rule (Cox 2009; Geddes 2006, 2009; Magaloni and Kricheli 2010; Magaloni 2008, 2010; Reuter and Gandhi 2011; Gandhi and Przeworski 2007; Svolik 2010; Wright 2011). The core of the argument is that these institutions compel potential rivals to invest in the regime, and thereby reduce the risk that these rivals engage in rebellion. I turn my attention to intra-regime power battles and inspect the effect of the existence of regime support parties, elections and legislatures on coup attempts by focusing on two intertwined arguments for why institutions in authoritarian regimes may help deter elites from attempting to overthrow the incumbent. *First*, it is crucial to establish a credible power-sharing relationship with potential rivals. The incumbents are expected to concede power to an assembly of regime elites, most commonly through the active use of a legislative body and/or a regime support party. *Second*, elections in which incumbents display strength are expected to prolong autocratic survival by legitimizing the rulers' continued right to rule and portray an image of invincibility. This invincibility in

turn deters the elite from attempting to overthrow the incumbent and compel them to invest in the regime.

The next section turns to an elaboration of the argument of credible power-sharing.

2.2.1 Credibly Sharing Power: a Legislature and a Support Party Platform

The theory of credible power-sharing in relation to authoritarian longevity and, by extension, the occurrence of coup attempts concerns two main groups of possible perpetrators. The *first group* of potential perpetrators are civilian elites, and the *second group* is the military. Authoritarian incumbents must commit to a power-sharing relationship with both groups of actors in order to secure themselves against possible attempts at overthrowing them. The reason is that their cooperation is likely to successfully bring down the incumbents in a coup. Primarily, co-opting non-military elites is vital because many coups, although carried out by military or para-military forces, are orchestrated by civilians. Accordingly, the complete military's support for the regime is of obvious importance. Although, as explained by Geddes (2009, 7), coups have been carried out by only a few people; 'at the extreme, the government of Liberia was overthrown in 1980 by 17 men led by a sergeant [and] ... many coups have been carried out with only a few hundred troops', most coups fail without a relatively unison military force backing it. For instance, the failed coup attempt in Senegal in 1962 was largely due to the fact that coup-plotter Mamadou Dia only had sporadic support by the military forces (Powell and Thyne 2011).

Establishing a credible power-sharing relationship with both non-military and military elites is mainly done through the successful use of a support party and/or legislatures. As Boix and Svolik (2010, 29-30) acknowledges, 'some institutions in dictatorships – such as parties, legislatures, or ruling councils - alleviate commitment and monitoring problems caused by the secrecy in authoritarian governance and thereby lead to more stable ruling coalitions', in fact, dictators who institutionalize 'are less likely to lose office violently'. In other words, following the logic posed by Gates et al. (2006), autocracies that are structured in ways that compel potential rivals to work in the interest of the regime, rather than rebelling against it, will be more stable than other autocratic regimes. Magaloni (2008, 1) reaches the same conclusion, when she argues that 'if dictators cannot commit to not abusing their "loyal friends" – those who choose to invest in the existing autocratic institutions rather than in forming subversive coalitions – they will be in permanent danger of being overthrown, both by members of the ruling elite and by outside rivals'. The underlying assumption for the following arguments is that authoritarian rulers are interested in prolonging their stay in power (see e.g. Bueno de Mesquita et al. 2004; Magaloni and Kricheli 2010; Magaloni 2008). This means that the existence or establishment of seemingly democratic institutions in autocracies is a way of securing their stay in office, not, in the lingo of transitionists, a process of actual liberalization (Brumberg 2002; Levitsky and Way 2002).

Institutionalizing is important, considering that the alternative to co-opting and bargain-

ing with elites is oftentimes severe repression. Violent autocrats endanger their position as rulers because 'if autocrats rely too much on terror, repression, and intimidation to sustain their rule, they become more vulnerable to agency and moral-hazard problems on the part of their own security apparatus, upon which their ability to survive ultimately depends' (Magaloni and Kricheli 2010, 126). The sole dependence upon military repression then, exposes the regime to two threats. First, the threat of the military refusing to carry out the violent missions assigned to them, and secondly, for civilian elites – who have nothing to lose because of their marginal-ization – to conspire against the violent regime incumbents with the support of disillusioned military leaders. Gandhi and Przeworski (2007, 1281) underline the same point in that 'auto-crats may certainly use force to impose cooperation and to eliminate threats of rebellion. But the use of force is costly and may not always be effective ... As a result, the ruler may find it useful to rely on other strategies to elicit cooperation and avert rebellion'. This is because even though a limited number of ostensible threats in society may be silenced by repression, it is not likely that more subtle and complex possible threat groups are effectively deterred by violence, such as the bureaucracy or the universities. In line with Magaloni's argument, it is likely that the military will agree to limited repression, but not killing of the embittered masses. A recent example of how the military turned their backs on the incumbent is Mubarak's downfall in Egypt in 2011. When ordered to strike down the upheaval at any cost, the military refused and took the protesters' side, effectively removing one of the longest-sitting autocrats from power. At the same time, Mubarak's 30-year long rule is an excellent example of how institutions can enhance the longevity of nondemocracies, as the regime held elections and allowed multiple parties in the legislature, thereby effectively usurping potential regime rivals. The Egypt example also introduces a limiting aspect of the credible power-sharing strategy: even though institutions may prolong autocrats' stay in office, the strategy is not impervious. The link between insti-tutionalizing and survival is mainly related to elite challengers, not necessarily mass protests. The moment there is a mass uprising, as the ones observed in Egypt, Libya and Yemen and the current one in Syria, proper institutions are helpless in detaining the protesters, who likely do not gain much from the existence of parties, legislatures or elections. In this text, I solely concentrate on the threat against the ruling clique that emerges from within the state apparatus.

Gandhi and Przeworski (2007) claim that potential rivals can be co-opted by being offered a seat in the legislative body and thereby have a say in the regime's policy-making and access to economic benefits. This broadens the basis of support for the incumbent to include the polity's most influential people, who are also the most likely rivals. An autocrat's survival in office, just like politicians' in democracies, is likely to depend on 'the ability to navigate among various political forces and to build coalitions' (Gandhi and Przeworski 2007, 1280). They find that seemingly democratic institutions exist for systematic reasons. Of particular interest to the research question, monarchs and military leaders are less likely to rely upon nominally democratic institutions because they can rely upon already existing connections, namely family

ties and the military. Civilian dictators, however, must create a platform to secure their stay in power, and they are likely to depend upon a regime support party and legislatures in order to do so. As noted earlier, Gandhi and Przeworski (2007) do not investigate whether military rulers or monarchs who depend on both nominally democratic institutions and their military foes are more stable than those who merely rely upon non-civilian connections. However, the observation that 'overinstitutionalizing does appear to provide some benefits for rulers', in that they on average survive longer in power than those who, in their terminology, only "optimally institutionalize" may indicate such a pattern (Gandhi and Przeworski 2007, 1290). In this case, "overinstitutionalizing", although not defined, can be interpreted to mean the existence of legislatures, a regime party or parties in monarchies or military regimes.

Magaloni (2008) builds upon and criticizes Gandhi and Przeworski (2007) in two manners. First, by introducing the concept of trust. She argues that since autocrats are not constrained by institutions in the same way as democratic incumbents, the existence of these institutions will not provide a rival with security that policy demands will be respected. According to Gandhi and Przeworski, a legislative seat is a valuable power base. However, due to the relative autonomy of the executive power in autocracies, 'policy-making power cannot be credibly granted through legislative seats per se' (Magaloni 2008, 5). This contention is supported by Geddes (2006, 9), who stresses that 'in many authoritarian regimes legislatures have little if any influence on policy'. According to this view, the only way for incumbents to credibly promise influence is to give up 'absolute power to select members of the ruling coalition into positions of power by delegating this authority to the ruling party' (Magaloni 2008, 9). If legislative offices, government positions and prospects of advancements are 'guaranteed' for elites through a regime-friendly party membership, this will help facilitate credibility of offices offered or held. As explained by Magaloni (2008, 2):

> By giving up his absolute powers to select members of the ruling clique into government positions, the dictator can more credibly guarantee a share of power and the spoils of office over the long run to those who invest in the existing institutions rather than in subversive coalitions. The credibility of the power-sharing deal crucially depends on the party's ability to effectively control access to political positions and on the fact that the party can be expected to last into the future. A dictator will possess an interest to uphold a system of credible power-sharing with his ruling clique to make his life less vulnerable to conspiracies, military coups, and violent rebellions.

Put differently, the mere existence of a legislature may not be sufficient. A platform where the regime supporters are granted some, if limited, power in relation to the incumbents will solidify their commitment to the regime. According to Magaloni (2008), Boix and Svolik (2010) and Geddes (2006), the regime party is the most common platform to fill the power-sharing

void. However, it is not made sufficiently clear why regime supporters in a legislature without parties cannot credibly be granted the same powers, and hence validates inspecting the effect of a legislature independent of the existence of parties. This inspection is further warranted by the admission that there is risk associated with the existence of parties. Specifically, through leading a support party, officials may become influential and well-organized figures and decide to attempt an overthrow of the current top power holders. This was the case in the Nasser's ouster of Naguib in Egypt in 1954. Two years after jointly bringing down the monarchy lead by Faruq I, Nasser, trusted leader of the official party, the Revolutionary Command Council, managed to oust the sitting Naguib (for details, see Geddes 2006). This is part of the ruling clique's dilemma, to risk launching a powerful rival by allowing a strong support party, or to rule with a more narrow platform. Also, for similar reasons, there are several liabilities involved in allowing more than one party. Potentially, this is essentially allowing multiple possible launching pads for rivals risking that the number of powerful elites multiplies. In addition, opening for multiple parties increases the likelihood that one or more of these parties are independent of the regime.

Secondly, both Magaloni (2008) and Geddes (2006) underline that institutionalizing is not primarily a tool for deterring the masses, but for co-optation of possible elite rivals. Although one of the functions of being a party official is to convince the masses of its supremacy, 'many authoritarian parties have disappointed their creators precisely because they have failed to deliver benefits to citizens and thus build support for the regime. Party officials, rather than linking the masses to the center via the exchange of benefits for support, have instead used party offices to enrich themselves, thus alienating citizens from the party that claims to serve their interests' (Geddes 2006, 9). However, even though party representatives may estrange citizens, they are believed to enhance the tenure of autocrats. This is due to the general consensus that the most serious threats to regime stability are not posed by the masses, but by regime allies, who in turn then are the main targets of co-optation through the benefits of their membership in the support party. As explained above, in order to account for the emphasis on *elite* co-optation and deterrence, my contention is that testing the theoretical framework by inspecting coup attempts is more accurate, because the degree of elite involvement in regime breakdowns vary greatly.

By offering potential rivals a progressive route to more influence, increased spoils and subsequently having the chance of running for office through party membership then, rivals are tempted to invest their time in the regime rather than plotting coups. The general idea is that the higher in the hierarchy a potential rival moves, the more invested and less likely he or she is to attempt to overthrow the incumbents. This contention is affirmed by Gandhi and Przeworski (2006, 1283) when they conclude that 'the party offers individuals willing to collaborate with the regime a vehicle for advancing their careers within a stable system of patronage'. In some regimes this effect is amplified by the fact that the highest office is accessible without having to resort to a coup, as is common in communist regimes. It is clear that by easing the problems of commitment, the existence of a legislature and a support party or parties, should decrease the

chances of a coup attempt. Hence, the hypotheses become:

H_1: Autocracies with a legislature are less likely to be subjected to a coup attempt.

H_2: Autocracies allowing a legislature with at least one party are less likely to be subjected to a coup attempt.

Hypothesis 2 implies that the effect of one party and multiple parties in the legislature is the same. However, if allowing parties is potentially hazardous, then it is possible that more parties complicates the effects of credible power-sharing, especially if one of the additional parties in the legislature is independent of the regime. In other words, the effect may differ between autocracies with one party in the legislature and multiple party autocracies. I therefore disaggregate H_2 into two parts:

H_{2a}: Autocracies allowing a legislature with one party are less likely to be subjected to a coup attempt.

H_{2b}: Autocracies allowing a legislature with more than one party are less likely to be subjected to a coup attempt.

Moreover, the claim is not only that autocrats relying on parties are less prone to coup attempts, but also that 'the creation of a support party increases the risk that a coup attempt will fail because such parties increase the number of citizens who have something to lose from the ouster of the dictator and build some degree of organizational structure through which citizens can be mobilized into streets protests if needed' (Geddes 2006, 11). In other words, the potential loss of spoils and opportunities suffered by co-opted civilian or military regime elites in the aftermath of a successful coup motivates them to intervene on behalf of the sitting incumbents in the event of an attempt. Hence, I hypothesize that:

H_3: Autocracies with nominally democratic institutions are less likely to be overthrown when subjected to a coup attempt.

2.2.2 Credibly Reinforcing the Right to Continued Rule: Elections

As explained above, a credible power-sharing relationship between the ruling clique and elites may be the reason for a link between a support party or parties, regime survival and, by consequence, attempts at overthrowing the incumbent. Magaloni (2008) exemplifies the stabilizing effects of credible power-sharing by referring to monarchies who pass the throne on to relatives, and effectively entice family members to invest in the regime because of a promise of increased

benefits down the road. In Saudi-Arabia, the throne is not handed from father to son, but from brother to brother, thereby including more family members in a credible power-sharing relationship. In non-monarchic autocracies however, parties serve a similar function by providing members a route to power. For instance, the PRI's almost 70-year long rule included numerous changes in leadership proving that party autocracies can handle leadership succession. From 1946 until the regime fell in 2000, the Mexican regime changed ruler every sixth year. Underlining that even though Mexico's institutional structure was exceptional, leadership succession in party-reliant autocracies is not. In fact, according to Magaloni (2008, 10–11):

> 'most party dictatorships have been able to handle leadership succession. This is not only true for communist dictatorships in China, the USSR, and most of Eastern Europe, but also for a large number of cases in Africa and Asia, where dictatorial political parties have been able to pass power, at least once but sometimes more times, to a successor following the deaths or retirements of their founding dictators'.

The Soviet Union had 9 different leaders during its almost 70-year existence. Similarly, the Botswanan ruling party BDP has survived four leadership changes since 1966.

It is crucial to note, however, that the existence of a legislature and a support party or parties may not be sufficient to deter elites from coup attempts. The commonality between the Mexican PRI prior to 2000, the Soviet Communist Party and the BDP is their monopoly on power positions. In other words, the regime party's actual strength might be equally important, both in terms of electoral support and legislative seats. The reasoning for this is fairly straightforward. If regime elites suspect that the sitting incumbent is weak, in terms of legislative seats, or unpopular, in terms of share of votes, they will be inclined to attempt an overthrow of the regime rather than support it. This argument is related to whether or not elites can expect the regime to last. A ruling clique without the support of the elite, or whose fate rests in the hands of the elite, cannot guarantee longevity. Projecting that the incumbent is invincible on a regular basis is likely to deter an attempt at overthrowing the sitting executive. As underlined by Magaloni (2008, 10):

> As long as the autocratic party holds the monopoly of power positions and remains the 'only game in town', there will be strong incentives for the rank-and-file to join the ruling party, perform their services, and remain loyal over the long run.

Indeed, as important as a legislature and support party or parties are believed to be, certain conditions may need to be met in order for incumbents to reap the benefits. Accepting the importance of remaining the only game in town, we would expect that regimes in which the support party win elections by a landslide, and hence controls the majority of legislative seats are unlikely to be subjected to coup attempts.

The importance of displaying strength through elections is both connected to the information elections provide incumbents and the signaling effect it has on potential regime opposition. The line of reasoning, closely connected with credible power-sharing, is explained succinctly by Wright (2011, 9–10):

> ... winning elections by large margins signals incumbent party strength. Large victory margins provide common information to elites that the probability of electoral victory outside the incumbent party is low. Parties that can demonstrate electoral dominance thus deter investment in the opposition, both among activists and particularly elites. In the face of an invincible party, elites will not defect to the opposition.

In other words, displaying strength through elections signals to potential rivals that joining the regime is wise as opposed to attempting to overthrow it. Being part of a support party that is seemingly invincible and in which spoils and regime positions are divided between members is a lot more compelling than taking the risk of attempting to overthrow it. Additionally, being a part of the regime elite is an effective strategy, not only in order to progressively claim higher positions and reap economic benefits as time passes, but also to observe whether the support party platform fades in the future, and a potentially successful coup is more likely. Not joining will certainly deprive a potential rival of the former, and most likely the latter possibility as well, since regime elites are more informed about the regime's coherence. I am not suggesting that elections under authoritarianism are free and fair in the democratic sense, but that they nonetheless help shape the perception of the incumbent's staying power. Wright (2011) finds evidence for electoral spending cycles in authoritarian regimes, suggesting that autocrats make an effort to buy political support and display their dominance on the political arena. As an example, the Mexican PRI was renowned for their grand electoral campaigns throughout their 70-year long uninterrupted rule in which they promoted their 'presidential' candidates. The recent development in Russia, where support for Putin is declining for the first time since he entered national politics, may be attributed to the complete lack of an electoral campaign and the United Russia party's arrogance regarding their supreme position in Russian politics. Moreover, elections might, as suggested by Collier and Hoeffler (2005, 8-9) legitimize the government because its power is founded upon 'means that society accepts'. Indeed, an elected autocrat, no matter how flawed the election process, is likely to be considered more legitimate than a recent coup maker.

Lastly, elections are thought to provide the regime with valuable information about popular support and popular opposition candidates. Through elections, the potential threats can be identified and silenced or co-opted before they become too powerful. Additionally, the information revealed through elections is important for both the incumbent and the elites when bargaining for spoils and influence. Cox (2009) claims that incumbents hold elections in order to increase their bargaining position vis-á-vis opposition elites. The breakdown of a bargain

increases the likelihood that opposition elites will attempt to overthrow the regime. However, a regime that can display their staying power and seem invincible is less likely to be opposed in spite of bargain breakdowns because the ruling clique has demonstrated their dominance. In line with Geddes (1999) and Hadenius and Teorell (2006) the threshold for invincibility (or dominance) is set to 67 % of the legislative seats in regimes that hold elections. Hence, the hypotheses becomes:

H_4: Autocrats that display strength through elections are less likely to be subjected to a coup attempt.

By the same logic as explained regarding Hypothesis 2, I further distinguish between autocracies with one party in the legislature and multiple party autocracies to check for possibly asymmetric effects. Due to the fact that most regimes allowing only one party in the legislature arrange elections, Hypothesis 2a picks up near the exact same information as the equivalent disaggregation of Hypothesis 3. This implies the introduction of one new hypothesis:

H_{4b}: Multiple party autocracies in which incumbents win elections by a landslide are less likely to be subjected to a coup attempt.

2.2.3   Coup Makers and the Creation of a Support Party Platform

In order to fully comprehend both the advantages and limitations of elections, a support party/parties and a legislature it is vital to consider the risks and consequences of a coup attempt. As stated by Geddes (2006, 13):

> Coups are always risky. Plots can be infiltrated by the secret service and plotters arrested. Communication and coordination are big problems for conspirators, and many attempted military uprisings have failed either because one garrison has risen too early, giving the government warning and a chance to defeat the uprising peace-meal, or because parts of the military expected to join and control key installations, roads or bridges, fail to get the signal to begin operations. Unpredictable accidents occur. Coup leaders can be killed in plane crashes while returning from exile.

What then, are the consequences of a coup attempt for both the perpetrators and the targets? First, in addition to the fact that coups always are risky, the institutionalization of autocratic rule and demonstration of mass support is assumed to influence risk in two ways, (i) reduce the chances of a coup attempt and (ii) decrease the chances of being overthrown in a coup.

Second, and perhaps most importantly to incumbents, regime supporters and coup makers, a coup attempt is a manifestation of separation in the ruling factions that will have severe

consequences both if the coup makers are detained or successful. In fact, 'the whole regime is weakened by this display of disunity, regardless of which side wins' (Geddes 2006, 12). In other words, for the incumbents, the reduction of the chances that a coup is successful is not satisfactory, because the crucial picture of the invincible regime will diminish even in the face of unsuccessful attempts, no matter how many of its former supporters rebelled. When the curtain drops, the chances of further rebellion might skyrocket – possibly leading to subsequent coup attempts, mass upheaval or even civil war. If successful, the power relations are unclear and the stabilizing effect of credible power-sharing is compromised or gone. The uncertainty regarding the future will likely spark uneasiness and lead to factionalization within the former regime elite. New relations must be established and trust re-established. Additionally, as underlined by Collier and Hoeffler (2005, 8-9), 'the type of government with the least claim to legitimacy is evidently one that has itself recently come to power through a coup'. Coup makers' governments have not come to power through semi-legitimate means, as can be claimed by autocrats arranging unfair, counterfeit elections or ruling cliques that have been legitimized through tradition, such as in China or North Korea. Indeed, narrating a story of legitimacy is a problem for coup makers, since a coup is inherently illegitimate. The implications of this line of reasoning are that coup attempts should breed additional coup attempts and that coup-initiated autocracies should be more likely to be subjected to future coup attempts, especially in the immediate aftermath of the seizure of power. Indeed, there exists a "coup trap" (Londregan and Poole 1990; Collier and Hoeffler 2005). This expectation is further strengthened by the findings of Goemans, Gleditsch and Chiozza (2009, 10-11), namely that:

> 'leader-specific characteristics beyond time in office – such as the manner in which leaders attain office, or the number of their previous spells in office – has a strong influence on subsequent events and behavior. For example, a leader who came to power irregularly is over three times more likely to lose power in an irregular manner.

The discussion above leads me to the following hypotheses:

H_5: Coup-initiated autocracies are more likely to be subjected to coup attempts.

Why are coup-initiated autocracies interesting beyond being a control variable? I follow Geddes (2009) and argue that if coup-initiated autocracies are more likely to be subjected to coup attempts, then, in accordance with the arguments of credible power-sharing, the creation of a regime support party platform in the national legislature should decrease the risk of coup attempts in these regimes. Put differently, coup makers who establish an arena for credible power sharing after coming to power, effectively co-opt potential rivals and broaden the base of the regime. A regime party acts as a vehicle to lower the incentives for counter-coups by establishing trust, sharing spoils and enables the possibility of promotions as outlined above. For example,

one year after Hafez al-Assad came to power in Syria, he established the Arab Socialist Ba'ath Party in a national legislature to represent the new clique of power holders. His son, Bashar al-Assad, still rules in Syria with the continued support of the Ba'ath Party. Moreover, the party should represent a clean break with the former rulers. This helps in narrating a story of legitimacy for the coup makers, as it delegitimizes the previous ruling clique and simultaneously brings an alternative to the table. Additionally, in already existing parties there is likely to exist opposition, especially if the party was governing before the coup. Thus, relying upon existing parties is less effective for coup makers. Stated as a testable hypothesis this becomes:

H_6: Coup-initiated autocracies in which incumbents create a support party platform in the legislature are less likely to be subjected to coup attempts than incumbents in coup-initiated autocracies that do not allow parties or rely upon already existing parties.

Next, I turn to an elaboration on the research design.

Chapter 3

Research Design

Below, I develop a quantitative research design in order to test the proposition that nominally democratic institutions in autocracies are instrumental in deterring regime elites from attempting to overthrow the ruling clique, and that coup makers are often themselves couped. First, I discuss the sources of the data and why country years is an appropriate unit of analysis. Second, a range of operationalizations of the concepts discussed above is presented. Third, a set of control variables drawn from earlier research on coups and regime change will be introduced to evaluate the real effect of the institutional design of autocracies on coup attempts. Fourth, I discuss possible omitted variable bias. Finally, I present the statistical model.

3.1 Dataset and Unit of Analysis

The unit of analysis is autocratic country years, meaning that democracies are excluded from the core analysis. There are two main reasons for the choice to analyze only autocracies, one theoretical and one methodological. The theoretical reason is simple: I am interested in modeling differences between autocracies. The methodological argument is inspired by Achen (2005) and Schrodt (2010). To focus on autocracies only is consistent with the idea of separating the observations into a meaningful subset coherently reflecting the theoretical framework. Thus, instead of estimating large and overly complicated models as a result of the analysis being performed on unnecessarily heterogenous observations, all models are as minimalistic as possible. This makes interpretation of the estimates easier and avoids so-called "garbage-can" regressions. As explained by Achen (2005, 337), ever so often in statistical modeling 'the result is a long list of independent variables, a jumbled bag of nearly unrelated observations, and often a hopelessly bad specification with meaningless (but statistically significant with many asterisks!) results'. Admittedly, a minimalistic approach opens for the possibility of omitted variable bias. As a remedy, I perform a series of robustness tests to make sure that the results of my core models are not affected by my approach.

This leaves a dataset consisting of 4396 observations with 267 coup attempts of which 138

are successful. Every country year runs from January 1st–December 31st from 1950, the establishment or independence of the country until it ceases to exist, or until 2008. Events that happen in year y are recorded as changes in year y_{+1}. For example, if regime x breaks down at any date in 1950, the newly-established regime z is coded from January 1st in 1951. Although it would certainly be preferable to analyze country days, mainly because some countries experience multiple coup attempts in the same year, accurately dated information on institutional change regarding legislatures, parties and elections is not currently available and would require coding and data compilation that is well beyond the scope of this thesis. In order to deal with the problem of multiple coup attempts in one country year, I have coded as follows: one coup if there were multiple coups in a country year; and one coup if there were one successful coup and one unsuccessful coup attempt in a country year.[12] Moreover, country years is the prevalent unit of analysis in the democratization literature and a viable one for the obvious reason that I am looking to explain attempts at overthrowing country specific governments.

The data set has been compiled from a number of frequently used and reliable data. The coup data provided by Powell and Thyne (2011) are heavily based on previously released information and accepted rules for distinguishing coup attempts from other attempts at overthrowing the incumbent. Moreover, the data on institutions, nature of regimes and economic development has been gathered from Przeworski et al. (1996), Przeworski et al. (2000), Cheibub, Gandhi and Vreeland (2010), Marshall, Gurr and Jaggers (2010), Vanhanen (2000), Maddison (2006) and Teorell et al. (2011). All sources are common in the democratization literature. The data from Vanhanen (2000) has been extended until 2008 to enhance the temporal coverage.

Missing data issues are virtually non-existent. There are no missing data points in the updated dataset for institutions (Cheibub, Gandhi and Vreeland 2010), and all other data sources cover almost all countries in the world with populations above 500,000. A notable exception is Zimbabwe, which has missing values on the first 15 years of the country's existence. In all of the 15 years missing, Zimbabwe was an institutionalized autocracy, and was not subjected to any coup attempts. However, missing only 15 observations out of almost 4400 total should not affect the results.

3.2   Operationalizing Elusive Concepts

Operationalizing the theoretical concepts introduced in the previous chapter in order to empirically test them in a quantitative model is a hazardous task. The abstract nature of the most central concepts inherent to the theoretical framework is undoubtedly one of the key reasons for the diverging results and prevalent confusion in the democratization and conflict literature. I

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[1]These observations are listed in Appendix 1.

[2]An implication may be that results are more conservative than they would have been with more accurate data.

will attempt to secure the robustness and transparency of my results in several manners. First, the regime type classifications will solely be coded using easily observable, transparent criteria, and lastly, based on a simple aggregation method as advised by Cheibub, Gandhi and Vreeland (2010). Second, a number of alternative operationalizations of the concepts, statistical tests and model specifications will be employed to ensure the validity and robustness of the findings. Third, in the next section I discuss possible selection problems related to the dependent variable. Finally, all variables included in the analysis are either directly linked to the theoretical argument and concepts, or included because of their predictive power in earlier research on coup attempts and democratization.

Next, I turn to the operationalization of my dependent variables: coup attempts and successful coups.

3.2.1   Unravelling the Coup d'État: Targets, Perpetrators, Tactics, Rumors, Success and Failure

As mentioned in the introduction, throughout the thesis, successful overthrows of the incumbent are referred to as *coups*, while unsuccessful endeavors are labeled *unsuccessful coup attempts*. Additionally, a *coup attempt* 'includes illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive', whether successful or not (Powell and Thyne 2011, 252).

I utilize Powell and Thyne's data for coup attempts, which emerges from a discussion of various aspects of coups that analysts have previously used to decode the phenomenon. They review five criteria in order to identify all valid coup attempts from 1950-2010. *First and foremost*, the target must be the chief executive. *Second*, the perpetrators may be 'any elite who is part of the state apparatus. These can include non-civilian members of the military and security services, or civilian members of government' (Powell and Thyne 2011, 250-251). The emphasis on *elite* perpetrators is, as underlined above, related to the core contribution of this thesis. This criterion avoids conflating coups with events such as civil wars, revolutions, popular movements, foreign interventions, democratization or institutional changes, all of which can, but need not, be orchestrated by elite actors. Thus, focusing on coup attempts more accurately captures the argument of elite co-optation. *Third*, to differentiate coups from political pressure, outbreaks of violence or even civil war, the tactics must be of illegal nature, but need not involve bloodshed. *Fourth*, there must be an actual and overt attempt at seizing power. This aspect is closely related to failed coups, as the identification of failed attempts to seize power is not always as clear cut as the identification of successful ones. To pinpoint a change in the executive office as a consequence of illegal activity is normally unproblematic. In the opposite case, one is often left with plots and rumors. Therefore, coup attempts must be overt, meaning that there was a visible movement to claim power, and actual in the sense that the event is not claimed ex post (for instance in order to persecute someone). *Fifth*, unrelated to the definition of a coup

per se, a distinction is made between successful and unsuccessful coups. All coups in which the coup makers hold onto power for 7 days or more are coded as successful.

To summarize, a coup occurred if the chief executive was overtly and illegally overthrown by any elite who is part of the state apparatus. A failed attempt was made if criteria 1-4 are met, but the chief executive managed to stay in power. In the main models and robustness tests then, I arrive at two dichotomous dependent variables identifying:

- Coup attempts.

- Successful coups only.

There is one notable problem with the operationalization of coup attempts described above. As already mentioned, it is unclear whether all unsuccessful coups can be positively identified due to uncertainty surrounding the events and possible rumors leaked by the ruling clique or the opposition in order to achieve a political goal. Also, language concerns restrain Powell and Thyne (2011) to major news sources that likely do not throughly cover as detailed information as more local news sources. This is especially true for time distant events. The same logic can be applied to successful coups. They are not necessarily as easily observed as proposed by the authors. Since many major decisions are taken in the inner sanctums of the regime, a lot of secrecy and uncertainty revolves around these decisions and the true course of events. Another reason to expect that some coups might not escape the inner circles of the regime is that the problem of secrecy is not constricted to autocracies. Although the norm is transparency, it is sometimes difficult determining the dynamics of intra-party politics in democracies, especially in cases surrounded by controversy. These potential drawbacks of the data quality may lead to biased results since it is possible that many more coup attempts than reported by the data have been performed. Moreover, it is impossible to know whether coup attempts are more easily observed in regimes with nominally democratic institutions or not. Intuitively, it would seem that coup attempts in regimes with a more narrow power base would be harder to "spot". However, transparency and institutions may not be interlinked, exemplified by the closed nature of North Korea. In North Korea, there exists a legislature, a party and elections are arranged, but information about events for outsiders is severely constrained nonetheless. Aware of these potential caveats, I accept that there is little I can do to redeem the possible drawbacks of the data beyond recognizing them and be mindful when making inferences.

How do we know what the nature of a regime is? The next sections turns to a discussion on how to operationally identify autocracies, and the regimes relevant to the hypotheses.

3.2.2   Identifying Autocracies

The defining traits of democracies and autocracies are much debated by scholars of democratization. In most cases, autocracy is defined as *not a democracy*. For instance, as explained by Bobbio (1989, 134), 'the term "democracy" has always been used to designate one of the forms of government, or rather one of the ways in which political power can be exercised. Specifically,

it designates that form of government in which political power is exercised by the people'. In this example, an autocracy is a form of government in which political power is not exercised by the people. Recent research has shown that this crude approach has severe shortcomings. Although it is certainly true that all regimes that are not democracies, are nondemocracies, treating all of these regimes as one group may have masked important differences between them in relation to duration, economic performance and hence, perhaps the occurrence of coup attempts. However, before distinguishing between different kinds of autocracies, it is vital to differentiate them from democracies.

I utilize the autocracy-democracy dichotomy first introduced in Przeworski et al. (1996) that provides a procedural, minimalist conception of democracy (Cheibub, Gandhi and Vreeland 2010). In line with Cheibub (2007, 26-27), I argue that it 'is superior on several grounds – most importantly that it provides a nonarbitrary and entirely reproducible way of distinguishing democracies from dictatorships'.[3] Indeed, it is based on clear-cut rules for the presence of certain institutions for classifying regimes. As explained by Przeworski et al. (1996, 4):

> Democracy, for us, is thus a regime in which some governmental offices are filled as a consequence of contested elections. This definition has two parts: 'offices' and 'contestation' ... What is essential to consider a regime as democratic is that two kinds of offices are filled, directly or indirectly, by elections – the chief executive office and the seats in the effective legislative body – and that the office holders are responsible only to the electors, not to any non-elected powers.

An autocracy then, is any regime not fulfilling these criteria. In other words, either governmental offices are not filled through elections, or these elections do not meet the criteria of contestation, meaning that all citizens have the right to run for office or vote for any candidate they like.

Contestation is decided by three features. First, *ex ante uncertainty* entails that there is a chance that at least one of the current incumbents can lose office. The last four elections in Russia are examples of violations of this rule, since it was obvious to any observer that the United Russia Party would win the elections, and that Vladimir Putin in 2000, 2004 and 2012 and Dmitry Medvedev in 2008 undoubtedly would assume the presidential office. Second, *ex-post irreversibility* means that the final result is irreversible and valid, in the sense that the winner of the election is allowed to take office. The 2010 elections in Côte d'Ivoire, postponed since 2005, violates this rule, given that sitting President Laurent Gbagbo refused to leave office after suffering an election defeat against opposition leader Alassane Ouattara. Only after five months of battles between Gbagbo- and Outtara-friendly soldiers was Gbagbo captured

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[3]Acknowledging the lack of consensus regarding what separates autocracies and democracies in the literature, I re-estimate the analysis with a dichotomization of the Polity scale (Marshall, Gurr and Jaggers 2010) in Chapter 5 to show that the results are not dependent upon choice of operationalization.

and forced to step down. Third, *repeatability* ensures that the winning party does not rewrite the rules in their favor and disallow contestation in the future. In other words, 'all political outcomes must be temporary: Losers do not forfeit the right to compete in the future, to negotiate again, to influence legislation, to pressure the bureaucracy, or to seek recourse in courts' (Przeworski et al. 1996, 6). Furthermore, similar to the transfer of power test identified by Beetham (1999, 70), it is necessary that the governing party loses an election and willingly steps down. Indeed, 'democracy is a system in which parties lose elections' (Przeworski (1991) in Przeworski et al. 1996, 5). In other words, a regime is considered autocratic until an incumbent party has lost office after governing. This rule means that countries such as Botswana, where BDP has ruled uninterrupted since 1969, and South Africa, where the ANC has governed since the end of Apartheid, both countries that by many observers' standards allow frequent, free and fair elections, are labeled as dictatorships. Put differently, as explained in Przeworski et al. (1996, 10–13), all ambiguous cases are considered to be dictatorships, favoring false negatives (Type II errors). An inspection of the 882 country years in question show that their Polity score ranges from -9 to +9 (Marshall, Gurr and Jaggers 2010). Moreover, only 173 observations score +6 and higher on the Polity score. Such a small number of observations are unlikely to significantly alter the results, and I therefore conclude that possible false negatives is not a problem.[4]

Now that I have identified how to differentiate between autocracies and democracies, I turn to operationally distinguish between different kinds of nondemocracies. More specifically, I identify the kinds of autocracies that I propose are less likely to be subjected to coup attempts, namely the ones with a legislature, party/parties and elections.

3.2.3   Main Independent Variables

Many attempts have been made to classify different authoritarian regimes (Diamond 2002; Gandhi and Przeworski 2007; Gates et al. 2006; Geddes 2006; Hadenius and Teorell 2007, 2006; Levitsky and Way 2002; Magaloni 2010; Reuter and Gandhi 2011; Wright 2008*a,b*). However, many classifications are muddy or too general to test the research question at hand. Take, for example, the categorizations provided by Gates et al. (2006) and Cheibub (2007). As mentioned above, the first is unclear about the exact nature of "inconsistent regimes". For instance: what is the specific institutional structure of these regimes, apart from the fact that they are not sufficiently constrained or free? Intuitively, one might interpret "inconsistent" to mean autocracies with nominally democratic institutions. Moreover, the latter classification merely focuses on the processes in the inner sanctums of the regime completely disregarding what external support the regime may or may not have. According to this typology, 'monarchs rely on family and kin networks ... military rulers confine key potential rivals from the armed forces within juntas;

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[4]In Table 1 in Appendix 2 I demonstrate that my conclusion is correct by estimating the core models without these 173 observations. The results remain unchanged.

and civilian dictators usually create a smaller body within a regime party, a political bureau'
(Cheibub 2007, 161). All of these statements may be true, but it does not explain why some
monarchic and military ruling cliques hold elections and allow legislatures and parties, nor why
some civilian cliques do not. In order to test hypotheses 1,2 and 4 then, whether nominally
democratic institutions in autocracies are instruments for co-optation and deterrence, I build
upon previous classifications to isolate autocracies exhibiting the desired criteria into three fo-
cus variables. All three are constructed from the dataset introduced in Przeworski et al. (1996)
and extended by Cheibub, Gandhi and Vreeland (2010). In addition, I utilized the extended
Vanhanen (2000) data to identify parties that hold 2/3 or more of the legislative seats.

Legislative body in autocracy is a dichotomous variable identifying autocracies in which
there exists a non-elective or elective legislature that is not unconstitutionally closed. This vari-
able disregards the existence of parties or elections.

Legislative body w/at least one party is a dichotomous variable identifying autocracies
in which there exists a non-elective or elective legislature with one or multiple parties that is
not unconstitutionally closed.

Ruling party displays strength is a dichotomous variable identifying autocracies in which
there exists an elected legislature with one or multiple parties and the incumbent party holds
2/3 or more of the legislative seats.

Using the same sources, I create four new binomial variables that classify whether the legislature
contains one or multiple parties in order to test Hypothesis 2a, 2b and 4b. Finally, I include
three more variables:

Coup-initiated autocracies is a dichotomous variable identifying all autocratic country-
years in which the ruling clique came to power in a coup. An autocracy is identified as coup-
initiated even if the rulers change the institutional design, but not if changes are made to the
inner sanctums of the regime, since the fundamental nature of the regime and the incumbents
then changes. For instance, today's Syria and Rwanda are coup-initiated, on account of the way
Hafez al-Assad and Paul Kagame came to power in 1971 and 1994 respectively. Moreover, the
military nature of both the Syrian and Rwandan ruling cliques has not changed since assuming
power. This variable is constructed from the coup data provided by Powell and Thyne (2011)
and the institutions data in Cheibub, Gandhi and Vreeland (2010).

Creation of one party in autocracy and **creation of multiple parties in autocracy**
are two dichotomous variables identifying whether autocratic incumbents established a legisla-

ture with *one* or *multiple* parties. If a formal party platform is established in the legislature in
an autocracy, the variables takes the value 1 in all subsequent years until there is a change in
either a) the inner sanctum of the autocracy or b) the party structure of the autocracy.

By creating an interaction term between coup-initiated autocracies and the creation of one or
multiple support parties I test Hypothesis 6, whether coup makers that establish a support party
platform are less likely to be subjected to a coup attempt.

3.2.4   Control Variables

In addition to the main independent variables, the core models include four variables that have
previously proved to have predictive power in the coup and democratization literature and that
corrects for time-dependent observations. Table 3.1 reports descriptive statistics for all variables
in the core models.

First, simultaneously taking into account that time-series observations are not independent
of each other, and the importance of regime consolidation (Goemans, Gleditsch and Chiozza
2009, 10-11), I construct a regime duration variable from the data in Cheibub, Gandhi and
Vreeland (2010). I define a *regime* as the institutional framework of a state. Furthermore, a
regime transition is defined as any event that altered this institutional structure, either through
a coup, the breakdown or establishment of democracy, or institutional reforms. By changes to
the institutional framework in an autocracy, I refer to the establishment or abolishment of a
legislature and/or changes in the party structure of the legislature. The party structure of the
legislature is threefold, either no parties, one party or multiple parties exist. Moving from one
category to another constitutes a change. Moreover, regime transition can also be a change
in the *inner sanctums* of the autocracy. The inner sanctums of autocracies are, as described
by Cheibub (2007), defined by the type of autocrat. A military leader relies on his ties to
the military, a monarch relies upon family relations, while civilian autocrats must create new
platforms of support, be it a clique of elites or a formal party. Moreover, regime consolidation
is an elusive concept, and arguably impossible to "observe". I refer to regime consolidation as
what Schedler (2001) terms "backward-looking", meaning that consolidation is a function of past
stability. In other words, the longer-lasting the institutional constellation, the more consolidated
it is. Tying this to Collier and Hoeffler (2005), the regime will ultimately be legitimized through
tradition, or rather, as a function of its durability. Long-lasting regimes should thus be less
likely to be attempted overthrown. Regime duration is a count variable that equals 1 in the
year after a regime transition.

Second, lagged level of economic development and lagged economic growth from Maddison
(2006) is added to the models. Since Lipset (1959) argued that level of economic development
increased the chances of a country being democratic, many scholars have affirmed the claims
(e.g. Diamond 1992; Przeworski and Limongi 1997; Przeworski et al. 2000; Boix and Stokes
2003; Hadenius and Teorell 2005). In the coup literature, the evidence is more inconclusive.

Table 3.1: Descriptive statistics of variables in core models: Autocracies only

Variable	Mean	Std. Dev.	Min.	Max.	N
Coup attempt	0.061	0.239	0	1	4396
Legislative body in autocracy	0.74	0.439	0	1	4396
Legislative body w/at least one party	0.677	0.468	0	1	4396
Ruling party displays strength	0.549	0.498	0	1	4396
One-party autocracy	0.342	0.474	0	1	4396
Multiparty autocracy	0.335	0.472	0	1	4396
One-party autocracy displaying strength	0.33	0.47	0	1	4396
Multiparty autocracy displaying strength	0.223	0.416	0	1	4396
Coup-initiated regime	0.367	0.482	0	1	4396
Creation of one party in autocracy	0.229	0.42	0	1	4396
Creation of multiple parties in autocracy	0.105	0.307	0	1	4396
Regime duration	9.593	9.298	1	58	4396
Logged GDP per capita	7.546	0.9	5.333	10.667	4396
GDP growth	4.188	6.941	-62.901	77.414	4396
Previous coup attempt	0.544	0.498	0	1	4396

Some studies indicate that high GDP per capita decreases the chances of coups, others find that it increases and yet others find no effect (Belkin and Schofer 2003). This confusion is not surprising, when one considers that most research on the occurrence of coups have been both spatially and temporally constrained. Only by estimating the effects with a comprehensive data set containing coup attempts over an extended time period is it possible to say something about the general pattern. Focusing on one continent, one or two decades or only a selection of the countries in the world increase the chances of biased results. The analysis corrects this problem and estimates the effect of economic level of development on a comprehensive dataset by adding a log-transformed variable of GDP per capita. Additionally, Przeworski and Limongi (1997) find that economic crises increase the probability of regime breakdown. It is easy to imagine that coup plotters are more likely to conspire, and have an easier job mobilizing other elites, the military, and potentially the masses if the country is in a recession rather than booming.

Third, I include a dummy variable for coup history constructed from Powell and Thyne (2011). This variable takes the value 1 if a government in the country at any point since 1950 has been attempted overthrown. Since coups cluster in both time and space, this variable should further correct for time-dependent observations. Arguably, it also captures a coup trap effect that is substantively different from the one modeled by the coup-initiated autocracies dummy, since it includes both successful coups and unsuccessful attempts at overthrowing the incumbents.

3.3 Omitted Variable Bias

As noted above, the core models are intentionally minimalistic in order to avoid the inclusion of irrelevant variables. As explained by King, Keohane and Verba (1994, 182-183), a cautious "include everything" approach can be very costly because 'even if the control variable has no causal effect on the dependent variable, the more correlated the main explanatory variable is with the irrelevant control variable, the less efficient is the estimate of the main causal effect'. However, more efficient models should also be approached with caution because there is a possibility of excluding variables that influence both the independent variable and the main explanatory variable. In that case, the results would be biased. For instance, not including coup history as a control variable may bias the results because coup makers or incumbents that are attempted overthrown may try to concentrate power to a limited group by shutting down the legislature and banning parties in order to regain control and get rid of potential rivals. This is along the lines of the argument by Kuran (1989, 66), that 'major revolutions tend to be followed by massive campaigns of repression and indoctrination whose targets include many of the revolutionaries themselves'. In other words, coup history may affect both the institutional design of autocracies and the probability of coup attempts. The question in relation to this specific analysis thus becomes: is the effect of nominally democratic institutions endogenous? If institutions under authoritarianism matter, then they influence outcomes by generating incentives for potential rivals to support the regime as explained by the theoretical framework. If institutions are endogenous however, 'their form and their functioning depend on the conditions under which they emerge and endure' (Przeworski 2004, 527). In that case institutions do not affect outcomes, rather, they are mere symptoms of some independent variable(s) exogenous to a regime's institutional design.

Facing possible endogeneity, the only remedy is prudent testing of my assumptions. After the core analyses, I therefore perform a number of model diagnostics and robustness tests in order to ensure, to the extent possible, that the results are not biased. Notably, in addition to inspecting the assumptions of the statistical model, I take an in-depth look at three coups that the core models do a poor job at predicting and attempt to identify structural factors that may influence both institutional design and coup attempts. Similarly, bias may be caused by idiosyncrasies in the data set. For instance, Africa is often cited as one of the most coup-prone regions in the world. Additionally, some decades see more coup attempts than others. If the results are driven by region- or time-specific anomalies they are not generalizable. I also estimate country fixed-effects models in order to allow a unique intercept for each country.[5] In sum, six additional variables, region, decade, logged total military budget, exclusion of ethnic groups, infant mortality rate and civil liberties are discussed below and added to the core models to ensure the validity of the findings presented by the core models.

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[5]I elaborate upon country fixed-effects in Chapter 5.

3.4   Statistical Model

Given that the dependent variables *coup attempt* and *successful coup* are both binary – measuring a discrete outcome – whether or not there have been attempts, unsuccessful or successful, at overthrowing the incumbent, all models presented below are logistic regressions. The basic model is specified as:

$$Pr(y_i = 1) = logit^{-1}(X_i\beta) \tag{3.1}$$

in which $Pr(y_i = 1)$ denotes the probability of an outcome (e.g. coup attempt) and the linear predictors are contained in $X_i\beta$ (Gelman and Hill 2007, 79-80). The function $logit^{-1}(x) = \frac{e^x}{1+e^x}$ transforms values into probabilities ranging from 0–1. I report all estimates as odds ratios.[6] Moreover, all models are fitted with standard errors clustered by country to correct for time dependence of observations (Long and Freese 2006, 86-87). In other words, the models reports the probability of being subjected to a coup attempt, given a regime's institutional design, duration, history of coup attempts and economic situation.

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[6]Interpretation is as follows: odds ratios below 1 decrease the chances of outcome while odds ratios above 1 increase the chances of outcome happening *relative* to the previous value of variable x. For instance, an odds ratio of 1.50 means that for each increase in x, the chances of the outcome increases by 50 %. The 95 % confidence intervals are displayed in brackets illustrating the uncertainty of the odds ratio.

Chapter 4

Results

I will in the following present the results of the empirical analysis. In all tables and figures below, successful overthrows of the incumbent will be referred to as *coups*, while unsuccessful endeavors are labeled *unsuccessful coup attempts*. A *coup attempt* includes both successful and unsuccessful overthrows. In order to ensure that the data supports the theoretical assumptions and that the main findings in the multivariate analysis are not driven by the inclusion of multiple independent variables, I first present descriptive statistics providing evidence for the theoretical framework. This is in line with Achen (2005, 338), suggesting that 'the research habits of the [quantitative] profession need greater emphasis on classic skills that generated so much of what we know in quantitative social science: plots, crosstabs and just plain looking at data'. These simple, basic methods are very powerful tools to observe and uncover trends in the data, and helps avoiding inferential errors. Second, I turn to the multivariate regression analysis. Third, I evaluate the models' performance. Finally, I take an in-depth look at the three coups with the lowest predicted probability according to my preferred model, namely Liberia 1980, Tunisia 1987 and Paraguay 1989 in order to both validate the mechanisms of the theoretical framework and identify possibly omitted structural variables for a first robustness test of the results.

4.1   Descriptive Statistics

I first address the frequency of coup attempts and institutional design of regimes in the 1950–2008 period. Figure 4.1 shows the proportion of the world's independent states subjected to coup attempts in the period.[1] The graph reveals that coup attempts were most prevalent in the 50's and 60's before steadily declining from the mid-70's. Since 2000, the number of coup attempts a year has been below 4 compared to 15 in the peak year 1966. In Figure 4.2 I have plotted the percentage of regimes according to institutional design. It shows how the number of autocracies without legislatures increase following the period with the highest frequency of attempted overthrows, peaking in the mid-70's at nearly 30 % and declining until

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[1]From 1950–2008 the number of states in the world has more than doubled, from 81 to 192.

Figure 4.1: Coup Attempts and Successful Coups 1950–2008
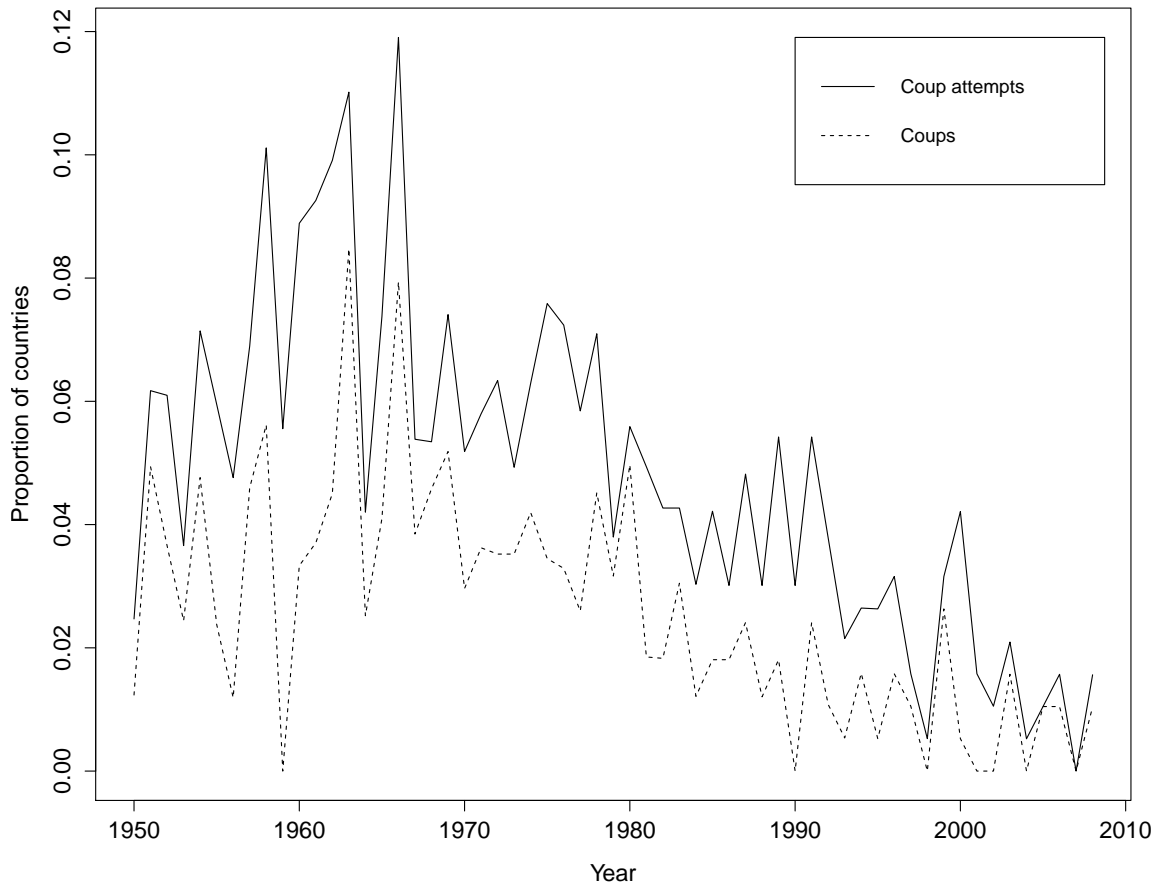
regimes without nominally democratic institutions only make out 4 % in 2008. The trend for democracies is exactly opposite, decreasing in the most coup-prone period, and increasing since the start of the third wave of democratization. In the same period, the percentage of autocracies with nominally democratic institutions is relatively stable with peaks in the mid-60's and mid-80's. In 2008, these regimes make out about 35 % of all sovereign states. Also, Figure 4.2 shows that since the end of the Cold War, the number of autocracies with nominally democratic institutions have been stable. This illustrates the pattern identified by Brumberg (2002), in which autocracies that adopted seemingly democratic features during the third wave continued to be ruled nondemocratically. Additionally, contrary to many reflections (see e.g. Levitsky and Way 2002; Diamond 2002; O'Donnell, Schmitter and Whitehead 1986), these "hybrid regimes" are not "new", but have been a prevalent type of autocracy since 1950. Today, nearly all autocrats rule regimes with some sort of nominally democratic institution in place, and coup attempts are rare.

Table 4.1 provides preliminary evidence for $H_1, H_2, H_{2a}, H_{2b}, H_4$ and H_{4b}, namely that autocracies with nominally democratic institutions are less likely than other autocracies to be attempted overthrown. The table reports the percentage of country years in which there were

Figure 4.2: Institutional Design of Regimes 1950–2008
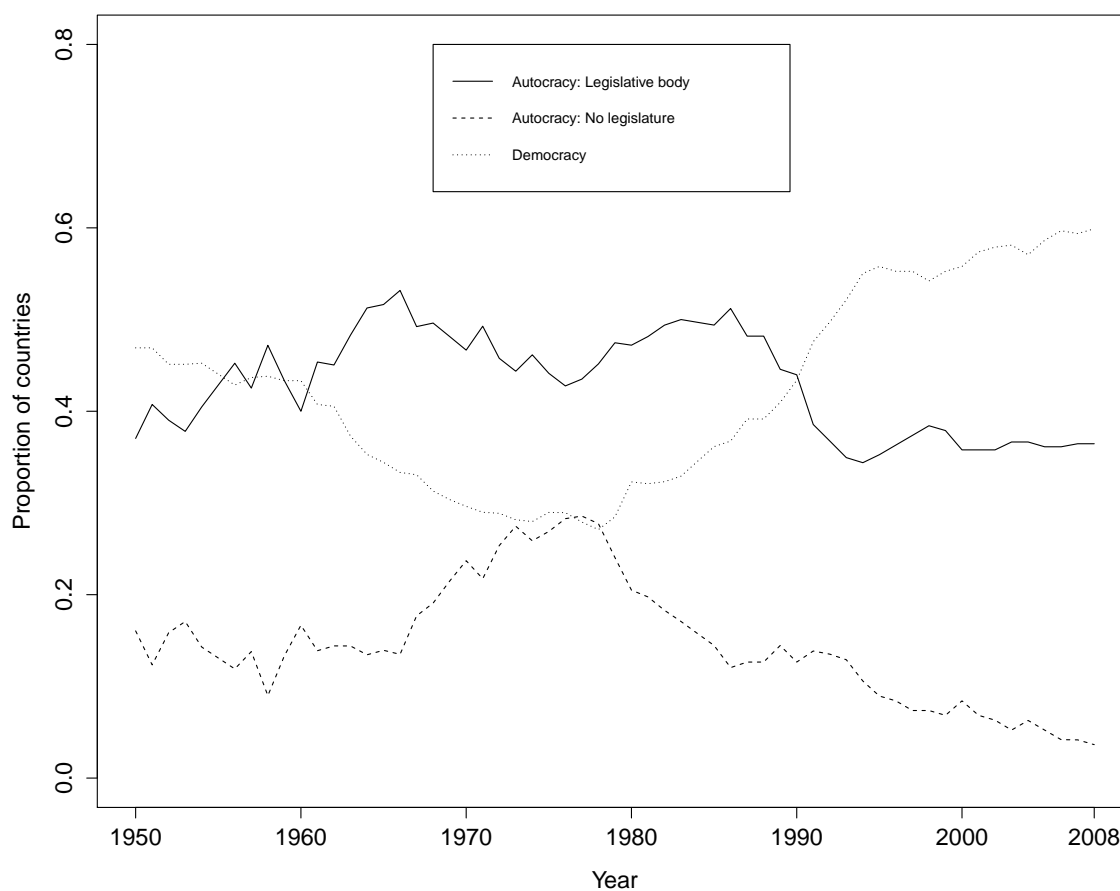
no coup attempts, unsuccessful attempts, and successful coups by categories of institutional design corresponding to the hypotheses. 11.4 % of country years in autocracies without any form of nominally democratic institutions are attempted couped, while the same number for autocracies with legislatures is 4.2 %. Moreover, autocracies without parties have recorded a higher percentage of coup attempted country years than autocracies with parties. That is true whether there exists one or multiple parties in the legislature. Also, autocracies displaying strength through elections are less frequently attempted overthrown than autocracies that do not. Democracies seem to be the least prone to coup attempts, with coup attempts in only 3.3 % of all country years. Table 4.1 also reveals that nominally democratic institutions do not lower the chances of an attempted overthrow being successful. The observed frequency of successful coups compared to unsuccessful attempts is close to 50–50 in all regimes. That means that although institutions under authoritarianism might co-opt and deter possible rivals from attempting an overthrow, these rivals are not likely to intervene on behalf of the incumbent if a coup is attempted. In other words, these numbers do not support H_3.[2] As discussed above however, Powell and Thyne

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[2]Multivariate logistic models (not reported) affirm this finding.

Table 4.1: Institutional Features and Coup Attempts: Democracies Included (%)

Institutional Feature	No coup	Unsuccessful coup	Coup
Autocracy: No legislature	88.6	5.3	6.1
Autocracy: Legislature	95.8	2.1	2.1
Autocracy: No parties	90.9	4.2	4.9
Autocracy: One party	95.5	2.2	2.3
Autocracy: Multiple party	95.3	2.5	2.2
Not displaying strength	91.7	4.0	4.3
Displaying strength: One party	95.5	2.1	2.3
Displaying strength: Multiple party	96.0	1.9	2.0
Democracy	96.7	1.5	1.8
Total	95.0	2.4	2.6

Numbers are row percentages of country years. For instance, there were no coup attempts in 88.6 %, unsuccessful coups in 5.3 % and successful coups in 6.1 % of the country years classified as "Autocracy: No legislature".

(2011) concede that unsuccessful coups might be harder to identify than successful coups. Put differently, the "true" frequency of unsuccessful coups may be underrepresented in the dataset relative to successful coups and that could have an impact on H_3. Unfortunately, there is no way of knowing how the unobserved coup attempts would be distributed among the regime type categories in Table 4.1.

In Table 4.2 I illustrate the same information with logistic regressions. The independent variables are *coup attempts* – including both successful and unsuccessful coups – and successful *coups* only. As mentioned above, all models report estimates as odds ratios. Specifically, the estimate for "legislative body in autocracy" in Model Base 1 shows that, on average, the incumbents in these regimes are 65 % less likely to be attempted overthrown than incumbents in autocracies without nominally democratic institutions. As revealed in Table 4.2, the estimates in all ten models are below 1 and significant, strengthening the preliminary evidence for the theoretical framework.

Next, I turn to the multivariate analysis.

4.2   Multivariate Logistic Regression Results

This section presents the findings of twelve models. I proceed by first presenting the results testing H_1, H_2 and H_4, whether autocracies with a legislature, autocracies with at least one party in the legislature and incumbents displaying strength through elections are less likely than other autocracies to be subjected to coup attempts. Also, according to H_5, coup-initiated

Table 4.2: Logistic regressions – Basemodel

	(Base 1)	(Base 2)	(Base 3)	(Base 4)	(Base 5)	(Base 6)	(Base 7)	(Base 8)	(Base 9)	(Base 10)
	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup
Legislative body in autocracy	0.342***	0.337***								
	[0.242,0.484]	[0.219,0.518]								
Legislative body w/at least one party			0.486***	0.464***						
			[0.343,0.689]	[0.306,0.703]						
Ruling party displays strength					0.495***	0.534**				
					[0.351,0.697]	[0.339,0.840]				
One-party autocracy							0.474***	0.466**		
							[0.318,0.707]	[0.284,0.767]		
Multiparty autocracy							0.499**	0.462**		
							[0.315,0.790]	[0.285,0.748]		
One-party autocracy displaying strength									0.518***	0.543*
									[0.350,0.765]	[0.332,0.888]
Multiparty autocracy displaying strength									0.457**	0.495*
									[0.274,0.764]	[0.274,0.897]
Observations	4396	4396	4396	4396	4396	4396	4396	4396	4396	4396

Exponentiated coefficients; 95% confidence intervals in brackets

$+ p < 0.10$, $* p < 0.05$, $** p < 0.01$, $*** p < 0.001$

Table 4.3: Estimated odds of coup attempts and successful coups, all autocracies 1950–2008 (1)

	(1)	(2)	(3)	(4)	(5)	(6)
	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup
Legislative body in autocracy	0.554***	0.480***				
	[0.398,0.770]	[0.316,0.728]				
Legislative body w/at least one party			0.682*	0.596**		
			[0.500,0.930]	[0.409,0.868]		
Ruling party displays strength					0.690*	0.680[+]
					[0.510,0.933]	[0.452,1.023]
Coup-initiated autocracy	1.215	1.578	1.294	1.704[+]	1.331	1.786*
	[0.815,1.811]	[0.891,2.792]	[0.867,1.931]	[0.963,3.012]	[0.896,1.975]	[1.013,3.148]
Regime duration	0.930***	0.955*	0.923***	0.948**	0.925***	0.948**
	[0.901,0.959]	[0.921,0.990]	[0.895,0.952]	[0.913,0.984]	[0.897,0.954]	[0.914,0.984]
Logged GDP per capita (t-1)	0.806*	0.771*	0.801*	0.766*	0.802*	0.768*
	[0.675,0.962]	[0.605,0.984]	[0.666,0.965]	[0.598,0.982]	[0.666,0.966]	[0.597,0.988]
GDP growth (t-1)	0.993	0.992	0.993	0.991	0.993	0.992
	[0.974,1.013]	[0.969,1.015]	[0.974,1.013]	[0.969,1.015]	[0.974,1.013]	[0.969,1.016]
Previous coup attempt	1.658*	1.072	1.722*	1.112	1.695*	1.119
	[1.064,2.584]	[0.590,1.948]	[1.105,2.685]	[0.616,2.009]	[1.089,2.638]	[0.621,2.018]
Observations	4396	4396	4396	4396	4396	4396
Pseudo R^2	0.083	0.062	0.078	0.057	0.078	0.054
LL0	-1006.643	-613.456	-1006.643	-613.456	-1006.643	-613.456
LL	-923.458	-575.150	-928.138	-578.389	-928.400	-580.151

Logistic regressions; Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

autocracies should be more likely to experience coup attempts. Second, I turn my attention to the disaggregated hypotheses, H_{2a}, H_{2b} and H_{4b}, and inspect whether the effects are similar for one-party and multiple party autocracies. The final two models evaluates H_6, namely whether coup makers establishing a support party platform are less likely to be attempted overthrown. All models include controls for regime duration, logged GDP per capita, GDP growth and previous coup attempt.

The results in Table 4.3 suggest that autocracies with nominally democratic institutions are less likely to be subjected to both coup attempts and successful coups and hence provides evidence in support of H_1, H_2 and H_4. With the exception of Model 6, the odds ratios for autocracies with a legislative body, a legislative body with at least one party and autocracies displaying strength through elections are all below 1 and significant at the 0.05 level. Following the theoretical framework, these institutions generate incentives for potential rivals to join and support the regime by credibly sharing power and portraying that the current ruling clique represents "the only game in town". Conversely, potential rivals in autocracies without these institutions in place are more likely to be excluded from decision making, the possibility of advancing in the regime and benefiting from regime spoils. Because of their relative marginalization they are thus more likely to organize rebellion and stage coup attempts.

However, the support for H_2 and H_4 come with one important caveat. Interestingly, the effect for "legislative body in autocracy" is the strongest, indicating that although parties may be utilized to credibly share power with the elite, they are not necessarily vital. The logistic regressions in Table 2 in Appendix 2 reveal that there is no difference in the propensity to be subjected to a coup attempt based on the party structure in autocracies with a national legislature.[3] In other words, autocracies with legislatures that do not allow parties are not more likely to be attempted overthrown than autocracies that allow one or multiple parties. Additionally, Table 2 in Appendix 2 shows that the same is true for the argument that displaying strength through elections is vital for deterring the elites. Ruling cliques arranging elections and confidently winning them are undoubtedly less likely to be attempted overthrown than autocracies without nominally democratic institutions in place, but not less inclined than other institutionalized autocracies.[4] Indeed, there is no evidence that institutional differences between autocracies with some variant of nominally democratic institutions in place differ in their propensity to be subjected to coup attempts. However, almost 90 % of autocracies with legislatures also allow official parties, making it hazardous to draw inferences regarding the importance of parties in a legislature compared to no parties.[5] Nonetheless, the position argued by Magaloni (2008) and Geddes (2006), that legislatures on their own are not sufficient and that parties are crucial, is not supported by the data.

More substantively, using the CLARIFY-package (King, Tomz and Wittenberg 2000)[6], the expected probability of a coup attempt is 4.3 % in Model 1.[7] Moreover, with all the other independent variables at their means, the simulated probability of a coup attempt in an autocracy without nominally democratic institutions is 6.6 %, while it is 3.7 % for autocracies with any kind of nominally democratic institution. In other words, the model predicts a 43 % drop in the risk of being attempted overthrown for autocrats ruling with legislatures. Figure 4.3 is a box plot of the simulated probabilities. The rectangles are bordered at the 25th and 75th quartile and the whiskers are extended to the smallest and largest value within 1.5 times the 25th or 75th quartile. The dots are outside (extreme) values. The graph illustrates the drop in probability of a coup attempt for autocracies with nominally democratic institutions, while simultaneously showing the uncertainty of estimates. Notably, the lowest predicted probabilities of autocra-

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[3]The regressions in Table 2 in Appendix 2 estimate the probability of coup attempts and coups in autocracies allowing a national legislature. The four models correspond to Model 3-6 excluding all autocracies without nominally democratic institutions in place.

[4]These include autocracies with a no party legislature and one or multiple party autocracies not displaying strength through elections.

[5]Examples of autocracies with no party legislatures are Libya, Kuwait and Bhutan.

[6]CLARIFY is a widely used program to calculate quantities of substantive interest to the scholar. For example, in logistic models, the coefficients or odds ratios are hard to interpret substantively. Moreover, the uncertainty of the estimates is often ignored or forgotten. Using CLARIFY, it is possible to calculate the substantive impact (the simulated probability) of y if x changes from 0 to 1.

[7]The expected probability is $Pr(y = 1)$ with all variables at their means.

Figure 4.3: Model 1 – Box plot of simulated probabilities of coup attempt in autocracies with and without a legislature.
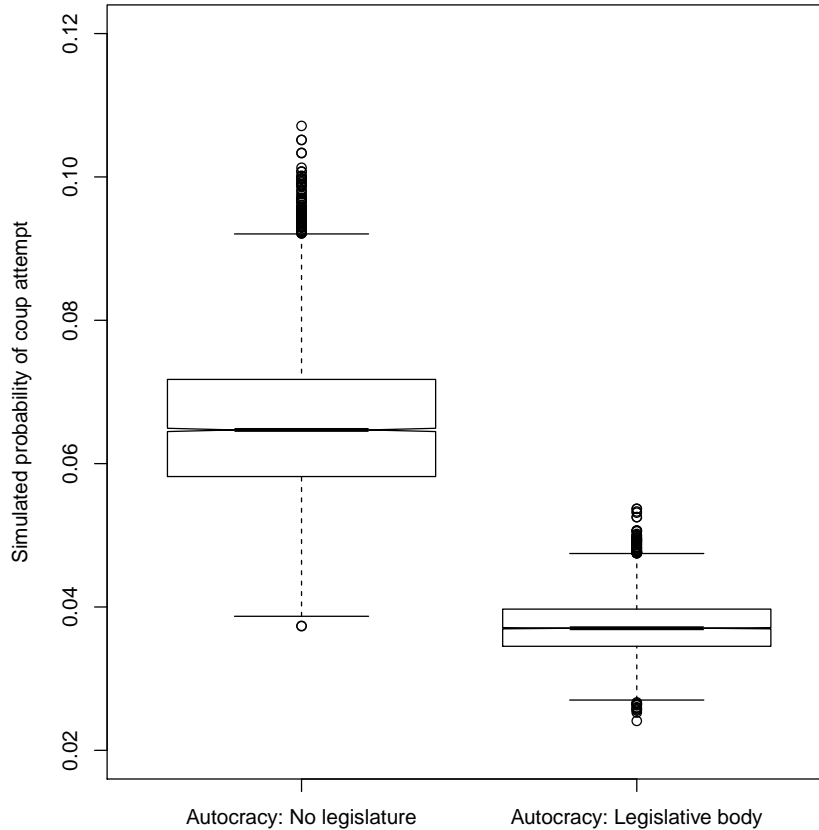
cies without legislatures are aligned with the average probability of autocracies with nominally democratic institutions in place. Also, it seems that the predicted values in institutionalized autocracies are less divergent, while autocracies without these institutions are assigned both very high (11 %) and low (lower than 4 %) probabilities. However, these are extreme values. In all the box plots presented, I have included *notches*. The notches are the barely visible dents in the center of the boxes of Figure 4.3, 4.4 and 4.5. Since the notches do not overlap in any of the figures it is likely that the medians of the calculated probabilities are significantly different from each other (Chambers et al. 1983).

The odds ratios indicate that evidence for H_5 is tentative. Coup-initiated autocracies are not necessarily more likely to be attempted overthrown. Only the estimates in Models 4 and 6 are significant at .1 level. Seen in conjunction with Model 1,3 and 5, estimating the probability of coup attempts, the results might indicate that coup attempts against coup-initiated autocracies are more often successful than in other regimes. This finding is aligned with the expectation that coup-initiated autocracies are more brittle than other regimes, likely due to the initial chaos, reorganizing, loss of material, manpower and legitimacy in the immediate aftermath of

Table 4.4: Estimated odds of coup attempts and successful coups, all autocracies 1950–2008 (2)

	(7)	(8)	(9)	(10)
	Coup attempt	Coup	Coup attempt	Coup
One-party autocracy	0.705*	0.603*		
	[0.507,0.982]	[0.393,0.926]		
Multiparty autocracy	0.662+	0.590*		
	[0.435,1.009]	[0.375,0.926]		
One-party autocracy displaying strength			0.764+	0.704+
			[0.560,1.044]	[0.465,1.067]
Multiparty autocracy displaying strength			0.583*	0.607+
			[0.360,0.945]	[0.348,1.060]
Coup-initiated autocracy	1.291	1.702+	1.327	1.778*
	[0.863,1.932]	[0.962,3.013]	[0.893,1.973]	[1.009,3.133]
Regime duration	0.923***	0.948**	0.924***	0.948**
	[0.895,0.951]	[0.914,0.983]	[0.896,0.952]	[0.914,0.983]
Logged GDP per capita (t-1)	0.804*	0.767*	0.809*	0.771*
	[0.667,0.969]	[0.598,0.983]	[0.670,0.978]	[0.598,0.995]
GDP growth (t-1)	0.993	0.992	0.994	0.992
	[0.974,1.013]	[0.968,1.015]	[0.974,1.014]	[0.969,1.016]
Previous coup attempt	1.732*	1.114	1.721*	1.126
	[1.107,2.710]	[0.615,2.020]	[1.106,2.678]	[0.624,2.034]
Observations	4396	4396	4396	4396
Pseudo R^2	0.078	0.057	0.079	0.055
LL0	-1006.643	-613.456	-1006.643	-613.456
LL	-928.077	-578.384	-927.298	-579.681

Logistic regressions; Exponentiated coefficients; 95% confidence intervals in brackets

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

overthrows (see e.g. Geddes 2009; Collier and Hoeffler 2005). Interestingly, the estimates for the variable identifying countries that have previously been subjected to a coup attempt are higher than 1 and significant in Models 1,3 and 5. There is thus reason to believe that both previous successful and unsuccessful coups heighten the risk of subsequent coup attempts. In other words, attempts at overthrowing the regime are destabilizing events whether the coup makers succeed or not. All else equal, a country without a history of coup attempts have a 3.3 % simulated risk of a coup attempt, while the risk is 5.4 % for countries with a history of coup attempts.

Unsurprisingly, the odds ratios for regime duration and level of economic development are significant and below 1. Indeed, consolidated and rich regimes are less likely to experience coup attempts. In Model 1, the simulated probability of a coup attempt in an autocracy without nominally democratic institutions, the mean GDP per capita income of autocracies, 1800 USD, that was altered 5 years ago and in which the incumbents have previously been attempted overthrown is about 11 %. In an institutionalized autocracy that was altered 10 years ago with the mean income and a history of coup attempts, the simulated risk of a coup attempt is more than half as likely, at 4.6 %. Moreover, doubling GDP per capita from 1800 to 3600 USD decreases the simulated probability of a coup attempt in autocracies with .5 % from 4.3 % to

Figure 4.4: Model 8 – Box plot of simulated probabilities of coup over party structure in autocracies.
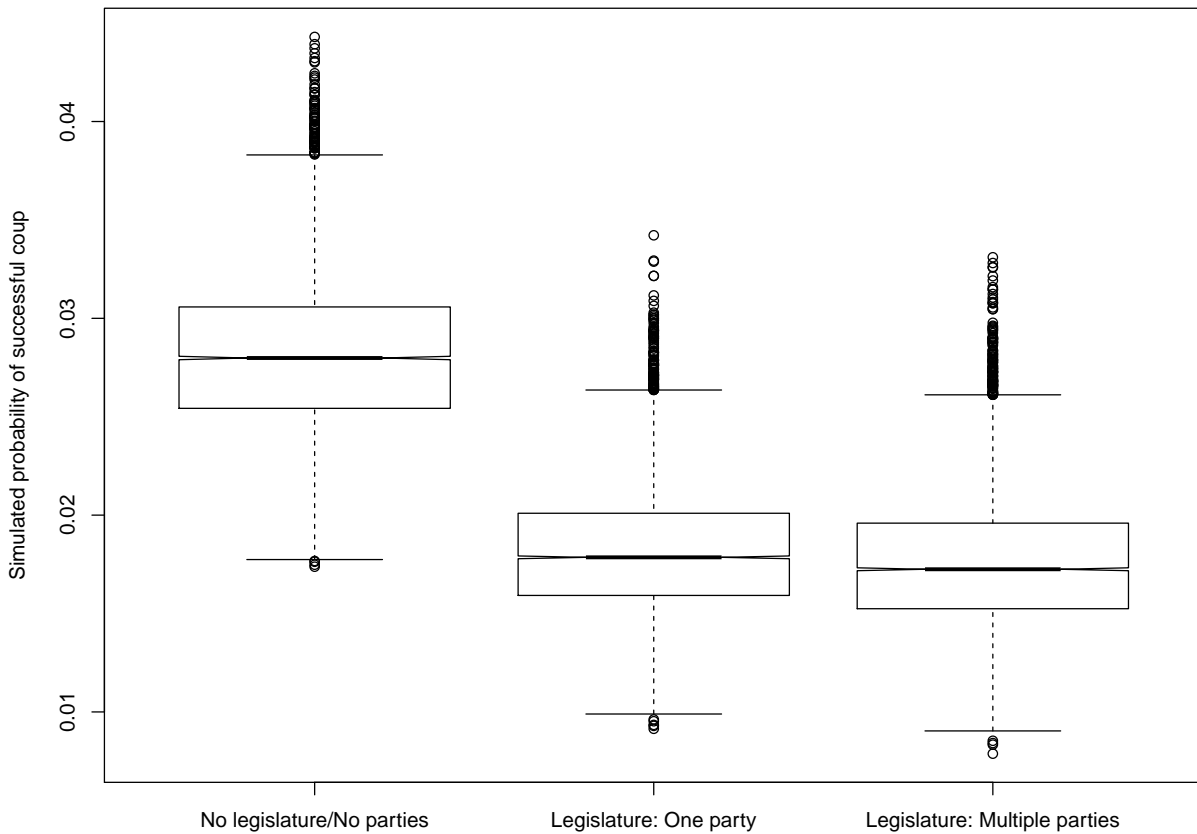
3.8 %. Finally, economic growth does not seem to affect the probability of neither attempted nor actual overthrows.

Table 4.4, evaluating the disaggregated hypotheses H_{2a}, H_{2b} and H_{4b}, whether both one-party and multiparty autocracies are less likely than no-party autocracies to be subjected to attempted overthrows, reveal patterns very similar to the ones in Models 1-6. Estimates are in the expected direction and all are significant at the .1 level. Both autocracies with one party and multiple parties seem to effectively contribute to co-opting potential rivals and deterring them from performing both attempted and actual overthrows. However, since the discussion above indicates that there is no difference in the propensity to be subjected to a coup attempt in autocracies with some variant of nominally democratic institutions, I have also estimated the models in Table 4.4 including a dummy for no-party autocracies with a legislature. By doing so, I estimate the effect of no, one and multiple parties in a legislature compared to autocracies without any form of nominally democratic institutions. The results are displayed in Table 3 in Appendix 2 and the estimates for no-party, one-party and multiple party autocracies are all

Table 4.5: Estimated odds of coup attempts and successful coups, all autocracies 1950–2008 (3)

|	(1) Coup attempt	(2) Coup
Creation of one party in autocracy	1.249	1.097
	[0.697,2.236]	[0.487,2.472]
Coup-initiated autocracy	1.815**	2.337*
	[1.161,2.839]	[1.130,4.835]
Coup-intitiated * Creation of one party	0.401*	0.364*
	[0.186,0.866]	[0.135,0.985]
Creation of multiple parties in autocracy	0.509	0.545
	[0.225,1.151]	[0.181,1.644]
Coup-initiated * Creation of multiple parties	1.184	1.123
	[0.373,3.755]	[0.286,4.411]
Regime duration	0.926***	0.951**
	[0.899,0.954]	[0.918,0.986]
Logged GDP per capita (t-1)	0.792*	0.750*
	[0.655,0.959]	[0.581,0.970]
GDP growth (t-1)	0.994	0.993
	[0.975,1.013]	[0.971,1.016]
Previous coup attempt	1.808**	1.286
	[1.169,2.796]	[0.663,2.494]
Observations	4396	4396
Pseudo R^2	0.084	0.062
LL0	-1006.643	-613.456
LL	-921.845	-575.710

Logistic regressions; Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, [*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$

significant below 1 and further illustrate that parties are not necessarily vital to credibly share power. H_{2a}, H_{2b} and H_{4b} are thus confirmed with the same caveat as H_2 and H_4.

Moving to simulated probabilities, in Model 8, the expected probability of a successful coup is 2.4 %. The simulated risk of being overthrown for incumbents in autocracies allowing no legislature or a no-party legislature is 2.8 %, while the probability is about 1.8 % for one-party and multiparty nondemocracies. Figure 4.4 box plots the simulated probabilities and shows that the values are more overlapping than in Figure 4.3 and that the predicted values in all three categories are similarly dispersed. Some of the overlap is likely due to the fact that the no legislature/no parties category includes no-party autocracies credibly sharing power utilizing a legislature. In sum, the co-optation effects are very similar *regardless of party structure in autocracies with a legislature*. The estimates for coup-initiated autocracies and the control

Figure 4.5: Model 12 – Box plot of simulated probabilities of coup attempt over creation of a one party support platform in coup-initiated autocracies.
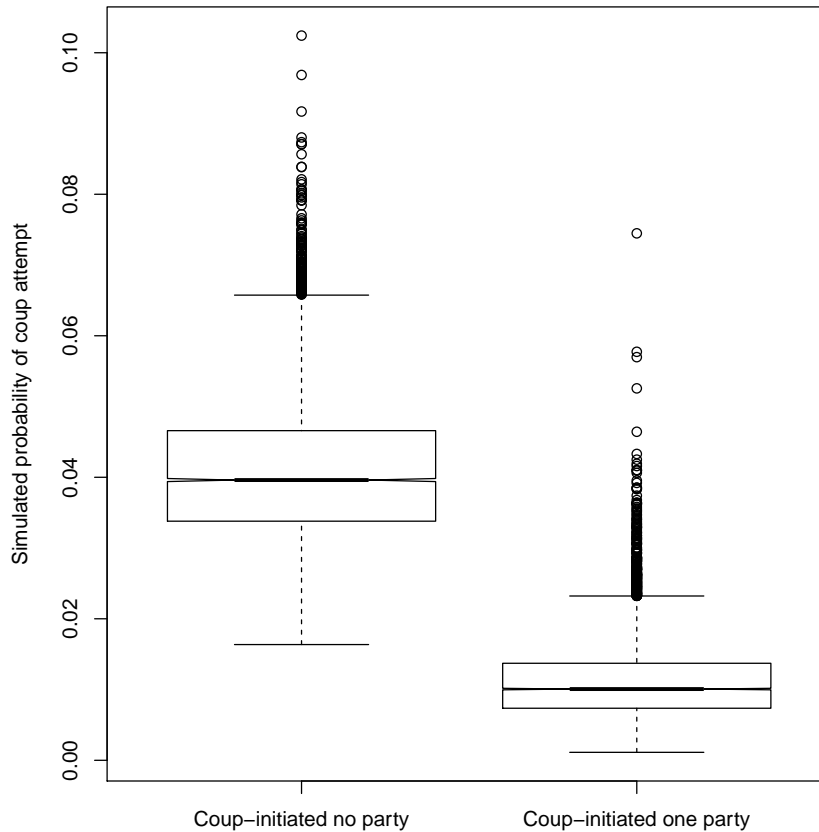
variables are similar to the ones in Models 1-6.

Table 4.5 turns to H_6, namely whether coup makers establishing a support party platform are less likely to be attempted overthrown. The model provides several insights. First, coup-initiated autocracies in which incumbents do not create a support party platform are more likely to both be subjected to coup attempts and to be overthrown. As in the previous models, the effect seems to be stronger for successful coups. Second, coup-initiated autocracies that establish a one-party platform are less likely to be subjected to illegal attempts at overthrowing the incumbent. This might explain the tentative results in Model 1-10, where both coup-initiated autocracies creating and not creating parties were assessed jointly. Third, the "positive" effects of party creation is restricted to one party in coup-initiated autocracies. Incumbents in autocracies that are not coup-initiated and establish a one party support platform are not less likely to be attempted overthrown. In fact, the estimate is in the opposite direction but insignificant. The most likely reason is that changes to the institutional framework often are related to threats to the regime. For instance, Hegre et al. (2001) find that regime changes are associated with civil war onsets. Moreover, allowing more parties does not seem to have an effect on the probability of being

subjected to coup attempts. The sign for the interaction term is even in the opposite direction of what would be expected. Indeed, it seems that there is risk involved if coup makers opens up for multiple parties in a national legislature, but that the establishment of a one-party regime effectively co-opts and deters the potential rivals as argued in the theoretical framework. Finally, the estimate for opening for multiple parties in regimes that are not coup-initiated is negative but insignificant.[8] In sum, the findings are ambiguous regarding the creation of a support party platform.

Regardless, failure to broaden the base of the regime and credibly share power seems exceptionally hazardous to coup makers. Figure 4.5 box plots the simulated probabilities for Model 12. The mean simulated probability of a coup makers that does not create a party support base in a national legislature being displaced through a coup is 4 %, while the probability for coup-initiated autocracies that establish a one party regime is 1.1 %.

In sum, the multivariate analyses find evidence for the theoretical proposition that autocracies with nominally democratic institutions are less likely to be both attempted overthrown and successfully couped. This is true for autocracies allowing both one party and multiple parties in national legislatures. H_1, H_2, H_{2a}, H_{2b}, H_4 and H_{4b} are thus all supported by the analysis. However, the analysis identifies caveats regarding H_2, H_{2a}, H_{2b}, H_4 and H_{4b}. First, authoritarian regimes with one or multiple parties are not less likely to be attempted overthrown than autocracies with a no-party legislature. Similarly, autocracies with at least a legislature are not more coup prone than autocrats displaying strength through elections. Moreover, the support for H_5 is tentative, likely because there is a difference in the likelihood of coup attempts in coup-initiated autocracies conditional on whether the incumbents rely on a support party base. Indeed, I find that coup makers who establish a one-party regime are less likely to be attempted overthrown, while opening up for multiple parties has no effect. H_6 is thus partially supported. Finally, I find no support for the hypothesized heightened probability of a coup attempt failing in institutionalized autocracies, and therefore reject H_3.

4.2.1 Assessing Model Performance

I will in the following evaluate the models' predictive performance. Although a variable may be significant in a regression analysis, it may be poor at predicting the correct outcome. In order to test the predictive performance of institutions under authoritarianism on coup attempts, I compare Model 1 above with Model 1 without the dummy for legislative body in autocracy in a series of model performance tests. I label the latter Model 1*. First, I compare the log-likelihood and the in-sample receiver operating characteristic curve (ROC-curve) of each model. Second, I do out-of-sample predictions on random countries in the dataset. And finally, I present a separation plot for Model 1, attempting to identify the events the model poorly predicts. All

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[8]I exclude creation of multiple parties in autocracy from the robustness tests, since the estimates are insignificant.

Table 4.6: Comparing Model 1* and Model 1

| | (Model 1*) | (Model 1) |
	Coup attempt	Coup attempt
Legislative body in autocracy		0.554***
		[0.398,0.770]
Coup-initiated autocracy	1.387	1.215
	[0.924,2.082]	[0.815,1.811]
Regime duration	0.921***	0.930***
	[0.892,0.950]	[0.901,0.959]
Logged GDP per capita (t-1)	0.805*	0.806*
	[0.661,0.979]	[0.675,0.962]
GDP growth (t-1)	0.994	0.993
	[0.974,1.014]	[0.974,1.013]
Previous coup attempt	1.823**	1.658*
	[1.175,2.829]	[1.064,2.584]
Observations	4396	4396
Pseudo R^2	0.074	0.083
LL0	-1006.643	-1006.643
LL	-932.102	-923.458

Logistic regressions; Exponentiated coefficients; 95% confidence intervals in brackets

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

three assessments will be discussed in detail below. Note that the goal of this section and the thesis as a whole is not to comprehensively model the determinants of coup attempts, but to evaluate the performance of indicators of the theory of elite deterrence. For better-performing models there are many variables I could include, and I return to the inclusion of potentially relevant independent variables in below, when addressing model diagnostics and robustness.

As explained by Ward, Greenhill and Bakke (2010), the ROC-curve plots the rate of predicted true positives against the rate of predicted false positives for all thresholds of predicted values. The area under the ROC-curve (the AUC) thus offers a visual and intuitive way of comparing the predictive power of two models. A model that perfectly predicts every outcome would have an AUC-value of 1, while flipping a coin would eventually take the value .5. The change in the log-likelihood in Table 4.6 from Model 1* to Model 1, from -932 to -923, reflects the same information displayed in Graph 4.6. The dummy variable identifying autocracies with nominally democratic institutions moderately enhances the in-sample predictive accuracy of the model. In the ROC-curve, the AUC increases by .01. Comparing the two ROC-curves using the ROCCOMP program provided by Cleves (2002) shows that the increase is significant. Put differently, the AUC increase indicates that the dummy variable improves the in-sample predictive accuracy of which regimes will be attempted overthrown.

Table 4.7 presents out-of-sample predictions for the two models. To illustrate the out-

Figure 4.6: ROC-curve: Model 1* and Model 1
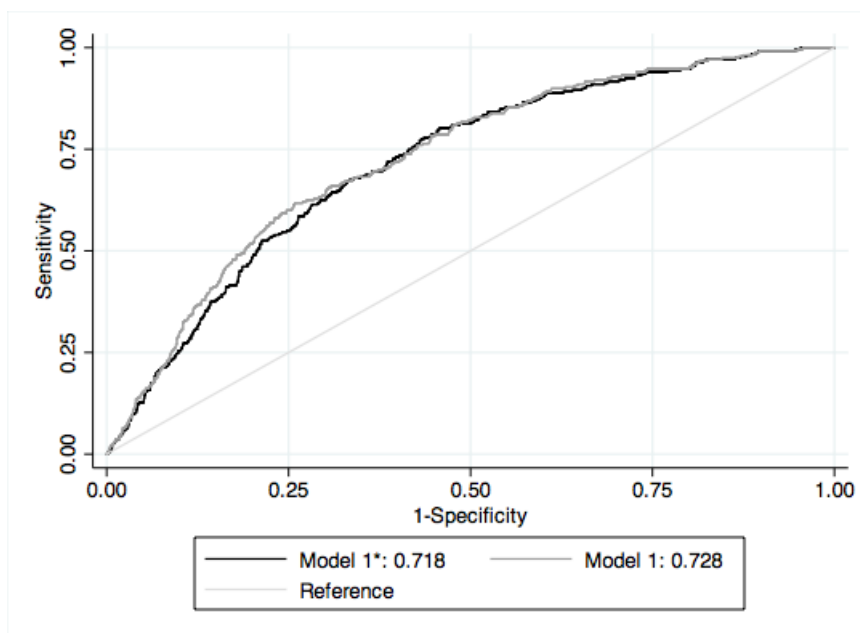
of-sample prediction procedure, imagine that the population of countries in a small dataset consists of Myanmar, Libya, North Korea and China from 1950–2008. I then randomly divide these four countries into part 'A' and part 'B' such that the entire time-series for each country is contained in each part (i.e. part 'A': Myanmar (1950–2008) and North Korea (1950–2008) and part 'B': Libya (1950–2008) and China (1950–2008)). I then estimate the model on part 'A' and predict on part 'B'. In the actual out-of-sample prediction, part 'B' consists of approximately 2200 autocratic country-years of which governments were subjected to coup attempts in 120–160 of them. I repeat this process ten times for Model 1* and Model 1. By repeating the process I make sure that the result of the out-of-sample prediction is not biased by a lucky or unlucky draw of countries. Thus, the numbers reported in Table 4.7 are *the mean percentages of these ten out-of-sample predictions of coup attempts compared with observed coup attempts.* Since the outcome variable is binary, I construct cutoff thresholds of predicted probabilities to identify 'correctly' predicted coup attempts. The reason is that no coup attempts are perfectly predicted (100 % chance of coup attempt). This is especially true when modeling rare events, where predicted probabilities of .5 are quite rare.[9] In my preferred model, the highest predicted probability of a coup is .26. I therefore operate with cutoff points at p=.2, p=.15 and p=.1 respectively. By looking at three different thresholds, I can evaluate whether the out-of-sample predictive accuracy is consistent. Moreover, the main reason for estimating on each country's entire time-series instead of estimating on the early temporal part of the dataset (i.e. 1950-

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[9]This is unsurprising. A situation in which a coup attempt is more likely than no coup attempt in a given year is highly unlikely.

Table 4.7: Out-of-sample predictions – Model 1* and Model 1

	False positives			True positives		
p-cutoff	p >=.1	p >= .15	p >= .2	p >= .1	p >= .15	p >= .2
Model 1*	21.5 %	3.5 %	.1 %	43 %	7.6 %	0 %
Model 1	19.3 %	6.8 %	.84 %	46.5 %	17.2 %	1.4 %
	Negatives			Positives		
Model 1* % correct	95.4 %	94 %	93.8 %	11.7 %	11.2 %	0 %
Model 1 % correct	95.8 %	94.5 %	93.8 %	13.9 %	14.6 %	9.2 %

1990) and then attempting to forecast (i.e. 1991-2008) is that coup attempts tend to cluster in both time and space, making the out-of-sample prediction a function of each country's past. The extreme case in point is Bolivia, that experienced 19 coup attempts from 1950 to 1984. Put differently, the out-of-sample prediction method described above demands more from the institution dummy than a temporal prediction.

The column "false positives" displays the percentage of autocratic country years in which the model predicted an attempted overthrow when there was none, while the "true positives" column shows the percentage of actual coup attempts predicted by the models. For instance, at the .1 threshold for Model 1* 21.5 % of country years are incorrectly classified as coup attempts while 43 % of the observed attempted overthrows in the data set are correctly predicted. Moreover, the "negatives" and "positives" columns refer to how many of the predicted non-events and events that are correctly classified. As displayed in Table 4.7 for example, at the .1 threshold, coups were attempted in 11.7 % of the country years that Model 1* predicted there would be a coup attempt. Moreover, there were no coup attempts in 95.4 % of the country years that the same model predicted no coup attempt.

Starting by comparing false positives, Table 4.7 shows that Model 1 predicts fewer false positives at the .1 and .2 thresholds, but nearly twice as many at the .15 cutoff. However, Model 1 also predicts more true positives than Model 1* at all thresholds, similarly more than doubling the number of correctly identified at the .15 cutoff. Notice that Model 1* does not predict any true positives at the highest threshold. In other words, my preferred model better predicts actual coup attempts and, with the exception of the .15 threshold, predicts a lower percentage of false positives. Comparing the percentage of predictions correctly classified reveals that both models get most negative values right (93.8–95.8 %), which is what would be expected when attempting to predict rare events. In addition, Model 1 seems to be better at predicting the occurrence of coup attempts. The percentage of the predicted positives that were correctly classified is higher at all thresholds, +2.2 %, +3.4 % and +9.2 % higher respectively.[10] In sum, the legislative body

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[10]The latter number is disproportionately high because of very few false and true positives at the p>=.2 threshold.

Figure 4.7: Separation plot Model 1. Above: First coup attempts. Below: Subsequent coup attempts

in autocracy dummy increases the out-of-sample predictive accuracy of the model.

Finally, I present separation plots, showing how the observed coup attempts (the vertical lines) are distributed among the predicted probabilities from Model 1 (Greenhill, Ward and Sacks 2011). In a separation plot, the observations are sorted by predicted probability. Hence, the farther to the right the observed events are, the better the model predicts the events. I use the separation plots to identify events that the model predicts poorly and attempt to verify the underlying mechanisms outlined in Chapter 2 by in-depth case analysis. To do this I have separated first events from subsequent events. There are two main reasons for the choice to do so. First, there are a lot fewer first coup attempts than subsequent attempted overthrows (61 vs 206). Second, since coups breed coups, in the terminology of Londregan and Poole (1990), a 'coup trap' should be identified by the model making subsequent events better predicted than first events.

As is shown in the upper separation plot in Figure 4.7, the first coup attempts are scattered quite evenly, and none of the events are assigned particularly high predicted probabilities of happening. The interval is .5 % – 9 %, which means that none of the first events are correctly identified by Model 1 according to the conventional thresholds utilized in the out-of-sample test. This is a common occurrence in conflict research, in which one of the best predictors of future conflict is past conflict. As expressed by Gleditsch and Nordås (2007): 'unfortunately, the precision in conflict prediction remains at the stage where meteorology was decades ago: the best prediction for tomorrow's weather was the weather today'. The best predicted first events identified by the model are Angola (1977), Iran (1973) and Madagascar (1974), all newly established regimes without nominally democratic institutions in place and level of development below average. Among unexpected first events are the successful coups in Liberia and Tunisia in 1980 and 1987. Both were relatively prosperous, institutionalized and long-lived autocracies.

In the bottom plot, a different pattern emerges. Subsequent events are indeed much better predicted. Almost all events are clustered in the far right end of the plot. The most unexpected

subsequent coup attempts include the successful coup against Stroessner in Paraguay in 1989, a fairly prosperous and long-lived authoritarian regime with 26 years since the last alteration of the institutional design. Others are the unsuccessful attempt to overthrow the oil-rich and long-lived regime of Muammar al-Qaddaffi in 1993 and the successful displacement of Duvalier in Haiti in 1986. Among subsequent events that the model predicts well are the unsuccessful attempts to overthrow Conte in Guinea in 1985, Strasser in Sierra Leone in 1995 and Malloum in Chad in 1976. All of these were young, poor autocracies without nominally democratic institutions and a history of coup attempts.

In the following I take an in-depth look at the three successful overthrows that the model does the worst job of predicting, namely the coups against Stroessner in Paraguay, Tolbert in Liberia and Bourgiba in Tunisia. There are two main reasons for the choice of cases. First, since all three were stable authoritarian regimes with nominally democratic institutions, then the processes of elite co-optation and deterrence should be identifiable and further validate the theoretical framework. Moreover, the Tunisian coup maker Ben Ali was not toppled until 2011. Hence, his actions after coming to power should fit the theoretical framework. Second, since these cases are unexpected, a closer inspection may shed light on structural factors that might correlate with both institutions under authoritarianism and coup attempts. I can then add proxies for these to the core models as a first robustness test.

4.2.2   Unexpected overthrows: Paraguay 1989, Liberia 1980 and Tunisia 1987

Befittingly, Roett (1989, 124) opens with the following take on Stroessner's downfall:

> Contrary to most predictions, General Alfredo Stroessner's 35-year rule as dictator of land-locked Paraguay ended abruptly in a violent coup d'etat. The world had become so accustomed to the taciturn and repressive ruler that it was generally assumed he would escape the fate of his fellow despots in the western hemisphere – Anastazio Somoza in Nicaragua, Rafael Trujillo in the Dominican Republic, Augusto Pinochet in Chile – and leave office at a moment of his own choosing or die in bed with his boots on.

Stroessnismo, the recipe that allowed the Paraguayan autocrat to rule together with his support party, the Colorados, from 1954–1989, largely follows the pattern of the theoretical framework outlined in this thesis. He first established personal authority over all the major institutions, hired his support party colleagues as government ministers and awarded seats in the legislature to significant members of society from other parties than his own. Additionally, his followers benefited from the growing drug trafficking and 'with the passing years, the general grew more popular, on the evidence of his uncontested reelection every few years as president of the republic' (Roett 1989, 128). Indeed, Stroessner credibly shared power with potential rivals, displayed

strength through regular elections and shared spoils with party members and representatives in the legislature.

In the 1980s however, Roett (1989) underlines that economic growth slowed, the public deficit grew, inflation followed and U.S. aid declined.[11] More importantly, tensions and uncertainty dominated the inner sanctums of the regime. The Colorado party split into two rivaling factions. Stroessner was aging and hospitalized, leaving elites doubting the regime's durability with the general as president. In the power struggles that emerged, coup maker General Andrés Rodríguez, a loyalist since Stroessner came to power in 1954, was attempted demoted by the Colorado party. At this point, Roett (1989, 138) notes that 'there is no evidence that Stroessner was part of, or fully informed about the deliberations under way. His recent illness and his apparent abdication of every day decisions to the small group in the palace had removed him from effective control over the regime'. In other words, the long-sitting general had effectively vacated the presidential office when Rodríguez, with the backing of the military, made a move against the ruling clique and assumed power February 2., 1989.

What the Stroessner case indicates, is that intra-regime politics is of grave importance to autocrats' survival in office. Similarly, the steps taken by Ben Ali in Tunisia after overthrowing Bourgiba in 1987 further strengthens the belief in the theoretical framework. Resembling Stroessner's last year in office, Ware (1988, 589) perceives that 'Bourgiba took less and less note of the magnitude of the problems besetting the nation. Hence he furnished ample opportunity for sycophants to surround him'. However, what ultimately paved the way for Ben Ali's rise to power was when the courts favored the Islamist movement (MTI) in a trial initiated by Bourgiba in which the regime claimed that the MTI were violent revolutionaries. The president's power was largely illegitimized by this loss and Prime Minister Ben Ali removed him from office by having him declared unfit to meet the obligations of his office. This bold move was made possible by his close and trusting relationship with the military. Moreover, Ben Ali, who remained in power until 2011, quickly started co-opting potential rivals. He embraced the outlawed (but powerful) Islamist movement and the regional Arab brothers, he constituted a new government consisting of mainly military foes and several important members of Bourgiba's government. In other words, Ben Ali successfully broadened the basis of support by acquiring the support of both domestic and regional Islamist movements and offering high rank political offices to both civilian and military potential rivals.

Finally, the unseating of Tolbert in Liberia in 1980 highlights a notable weakness of the theoretical framework and the coding procedures of coup attempts, namely that coup makers do not always belong to the elite benefiting from nominally democratic institutions. The indigenous coup maker *Master Sergeant* Doe violently overthrew the ruling Americo-Liberian True Whig Party (TWP) after over 100 years in power. Indeed, although coups more accurately capture

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[11]However, the results of the core models reveal that economic growth does not affect the likelihood of coup attempts.

the core argument of the *elite* co-optation and deterrence, the Liberian overthrow illustrates that the assumption is not necessarily always correct. Moreover, the case illustrates that ethnic grievances may lead to attempted overthrows. Although Tolbert in the 70's attempted to reform the exclusionary politics of the ruling minority by removing laws on selective property rights and allowing indigenous groups' participation in politics, Okolo (1981) underlines ethnic grievances as the most important motivation for the coup. Indeed, he emphasizes that 'the reform efforts proved insufficient to allay the hostility engendered by over a century of Americo-Liberian and TWP monopoly of power' (Okolo 1981, 150). The months preceding the coup witnessed many signs of the regime's crumbling power, soldiers defected and joined the masses in uprisings, unpopular reforms were reverted to stagger further protests and the scheduled election in 1980 was postponed due to uncertainty surrounding Tolbert's continued rule. However, Okolo (1981, 154) underlines that the reasons stated by Doe for the overthrow were not dissimilar from those cited for other coups, namely 'government neglect of the Liberian poor, rampant corruption, illegal searches and seizures, detentions and convictions without trial, a high rate of unemployment, the skyrocketing cost of living and an appalling health situation'.

What can be learned from these three cases? First and foremost, *Stroessnismo* and the Tunisian case provide further validity to the theoretical framework, showing how autocrats ruling for decades organize the state and compel potential rivals to join the regime. Both Stroessner and Ben Ali credibly shared their power with potential rivals and arranged elections to demonstrate their invincibility. The Liberian case, on the contrary, illustrates that coup makers need not always belong to the elite affected by legislatures, parties and elections. The indigenous lower rank officer Doe was discriminated against based on his ethnicity along with 98.5 % of the population (see data provided by Cederman, Wimmer and Min 2010). This finding highlights the importance of more specific coding rules and the inclusion of information on coup leaders in future data on overthrows. Second, in addition to the fact that coups are rare events, and thus almost always unexpected, there are many decisions and events that are too elusive to model in a global aggregated design. Splits in the ruling factions, rearrangement of military commanders leading to a powerful general's grievances and the sitting president's health in the Stroessner case, public humiliation and a powerful prime minister with the support of the military in the Tunisian coup and degree of military defections during riots in the Liberian overthrow. Most triggering factors of coups are unexpected up until the moment they happen. Similar to war, the coup attempt may indeed be in the error term (Gartzke 1999). In other words, although it is possible to identify high risk and low risk countries, unexpected events may lead to coup attempts in low risk autocracies such as Stroessner's Paraguay, Bourgiba's Tunisia and Tolbert's Liberia. Many of these events may be unobservable to both participating actors and scholars ex ante. Interestingly, triggering events are related to institutions under authoritarianism and intra-regime politics as exemplified by the attempted demotion of Rodríguez in Paraguay for instance. Quantitative micro-studies similar to those performed by Lyall (2010) and Weidmann

Table 4.8: Logistic regressions – Model 1 with case indicators included

	(C1) Coup attempt	(C2) Coup attempt	(C3) Coup attempt	(C4) Coup attempt
Legislative body in autocracy	0.622*	0.550***	0.483***	0.591*
	[0.432,0.894]	[0.385,0.785]	[0.320,0.729]	[0.370,0.945]
Coup-initiated regime	1.359	1.274	1.396	1.511
	[0.895,2.064]	[0.829,1.959]	[0.909,2.144]	[0.880,2.594]
Regime duration	0.925***	0.952**	0.974+	0.973+
	[0.895,0.957]	[0.924,0.980]	[0.949,1.001]	[0.943,1.003]
Logged GDP per capita (t-1)	0.871	1.056	0.519***	0.742+
	[0.717,1.058]	[0.830,1.345]	[0.404,0.667]	[0.532,1.036]
GDP growth (t-1)	0.994	0.991	0.997	0.998
	[0.974,1.013]	[0.970,1.012]	[0.967,1.028]	[0.966,1.030]
Previous coup attempt	1.532+	1.410	1.339	1.113
	[0.983,2.389]	[0.858,2.318]	[0.734,2.442]	[0.579,2.138]
Size of largest excluded group (in %)	2.138*			1.391
	[1.049,4.361]			[0.558,3.467]
Infant mortality rate (ln)		2.365***		2.008**
		[1.625,3.441]		[1.247,3.234]
Civil liberties			0.814*	0.809*
			[0.695,0.953]	[0.679,0.965]
Observations	3990	3766	2884	2427
Pseudo R^2	0.085	0.098	0.098	0.096
LL0	-934.520	-852.116	-583.655	-512.676
LL	-855.190	-769.024	-526.356	-463.305

Exponentiated coefficients; 95% confidence intervals in brackets

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

(2011), or global date specific studies, might illuminate our understanding of institutions under authoritarianism, intra-regime politics, military-civilian dynamics and coup triggers, and thus perhaps ultimately improve our predictive models. Third, all cases also contain statements about structural factors rocking the foundation of these autocracies. Most frequently, the economic situation is referred to, both in terms of level of development and growth as already included in the core models, but also regarding inflation and unemployment rates. However, it is unclear how inflation and unemployment influence both coup attempts and the institutional design of autocracies. Moreover, corruption is often mentioned, but is likely to have ambiguous effects. Although often cited as an ex ante reason for an overthrow, regime spoils, as exemplified by the Paraguayan case, enrich the elite and likely generate further incentives for regime support. However, civil and political liberties, atrocious health conditions, and, vital in the Liberian coup, ethnic discrimination are all indicators that can be modeled quantitatively and might correlate with both the institutional arrangement of autocracies and coup attempts. For instance, civil liberties might result in demands for representation and implementation of representative bodies.

Moreover, better living conditions could be argued to shift focus from survival mode to "modern" values, including demands for freedom, representation and self-fulfillment.

In Table 4.8 I include size of largest excluded group from the Ethnic Power Relations data set (Cederman, Wimmer and Min 2010), logged infant mortality rate (World Bank 2010) and civil liberties (Freedom House 2010) to the core logistic regressions. Because of the varying temporal and spatial coverage of the variables I have included one model with each of the variables separately and lastly included them all in one. The odds ratio for "legislative body in autocracy" is below 1 and significant in all four models. In other words, none of the variables influence the findings reported in the core models regarding nominally democratic institutions under authoritarianism. Moreover, size of largest excluded group is significant and positive as reported in Model C1, meaning that the larger the percentage of the excluded population, the higher the chances of a coup attempt. However, the improvement in predictive accuracy with relation to Liberia 1980 is a moderate 0.5 % increase. This is notable because Liberia is assigned the highest value of exclusion observed in the data set. Additionally, ethnic exclusion is not significant in Model C4. In Model C2 and C4, the logged infant mortality rate is above 1 and significant, indicating that health conditions may indeed be a concern as many coup makers claim ex ante. However, the interpretation of the infant mortality rate is ambiguous, as it can can also be a proxy for level of development. GDP per capita and infant mortality is correlated at -.73, and the former changes sign in the model C2, indicating that they indeed proxy much of the same processes. Confusingly, a lower degree of civil liberties (1 = most free, 7 = least free) decreases the chances of a coup attempt in Model C3 and C4, contradicting the claim by Okolo (1981) that coup makers often attempt to overthrow repressive regimes to liberate the population.[12]

4.3   Summary: Results

An inspection of descriptive statistics and the results of the multivariate analysis indicate that autocrats ruling with nominally democratic institutions are less likely to be attempted overthrown. This provides evidence for both mechanisms theorized in Chapter 2. In autocracies, the ruling clique can co-opt potential rivals by credibly sharing power through a national legislature and a support party platform, and deter regime elites from attempting a coup by projecting strength in elections. However, it remains unclear whether a party platform in addition to a legislative body is vital for a credible power-sharing relationship. Similarly, autocrats arranging elections and winning them confidently are not less likely to be attempted overthrown than autocrats allowing a legislature filled with non-elective partisan or non-partisan members. Moreover, coup makers can create a one party support platform in the aftermath of a coup to secure their grip on power and effectively co-opt potential counter-coup rivals. The results hold for two

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[12]The results are similar with the Freedom House political rights indicator and if a squared term is included.

different operationalizations of coups and across six operationalizations of institutionalization of autocracies. Finally, I find no evidence that coup attempts are more likely to succeed in autocracies without nominally democratic institutions.

A further inspection of the predictive accuracy of the models provides two key insights. First, the dichotomous variable identifying autocracies with a legislative body in the preferred model improves the predictive accuracy of coups both in-sample and out-of-sample. Graphing the ROC-curve in-sample shows that the AUC is significantly increased and, overall, the percentage of true positives increases while the percentage of false positives simultaneously decreases in the out-of-sample prediction. Second, no first coups are satisfactorily predicted by the preferred model demonstrating how elusive these events are. Subsequent events, on the other hand, are much better predicted, indicating that the model identifies what scholars have labeled a "coup trap" (Londregan and Poole 1990; Collier and Hoeffler 2005). Coups seem to breed coups and trap countries in a spiral of attempted overthrows.

An inspection of three cases poorly predicted by the preferred model finds both evidence for and objections to the theoretical propositions of this paper. Stroessner in Paraguay and Ben Ali in Tunisia maneuvered the regime elites in manners very similar to the ones depicted in Chapter 2. The Liberian coup in 1980, on the other hand, illustrates that low rank officers that are unlikely to gain much from nominally democratic institutions can be coup leaders. This means that although focusing on coups is more accurate regarding the theories of elite co-optation and deterrence, the approach is not flawless. Coup attempts, although a more homogenous group than regime breakdowns, can involve a number of different actors. Another likely explanation of the model's poor predictive accuracy in these cases is that the triggering factors are ex ante unidentifiable or difficult to model in a global aggregated study. Quantitative micro-studies on particular events might however illuminate our understanding of institutions under authoritarianism, intra-regime politics, military-civilian dynamics and coup triggers, and thus perhaps ultimately improve our predictive models. Also, identifying the coup leaders, their characteristics and tactics could positively contribute to the literature.

Lastly, possible structural factors identified through an inspection of the three cases were utilized as a first test of the robustness of the relationship between institutions under authoritarianism and coup attempts. The results hold when including size of largest excluded group, logged infant mortality rate and the Freedom House civil liberties index. In the next chapter, I turn to more extensive robustness tests and model diagnostics.

Chapter 5

Model Robustness and Diagnostics

In order to make sure that the results of the core models presented above are not due to model (mis)specification, influential observations, omission of relevant variables, idiosyncratic parts of the dataset or the choice of operationalization of autocracies (and consequentially regime type), I perform a series of model robustness and diagnostics tests. In order to be valid, the results should be "robust" (stable) to model adjustments. It should be noted that the twelve models specified above represent twelve model specifications that provide evidence for the theory of elite deterrence and co-optation. Specifically, Models 1-12 use six different operationalizations of the authoritarian regimes expected to be the least likely to be attempted overthrown, and two different operationalizations of the independent variable, namely both coup attempts and successful coups. Regardless of operationalization of both institutional structure and coup attempts, all results are significant and thus provides strong evidence for the theoretically proposed relationship between institutions under authoritarianism and coup attempts. All additional tests are performed on Models 1-12, and I report the results for Models 1,2, 7, 8 11 and 12 since they correspond to the results of the other models.[1]

5.1   Model Specification

When specifying a statistical model, a number of underlying assumptions are made. It is crucial to be certain that these underlying assumptions do not affect the results of the analysis. One of the assumptions made when specifying a logistic model is that the relationship between the independent variables and logistic form of the dependent variable is linear. In order to check that the assumed functional form of the relationship between the variables is viable, I perform a "linktest" (Xiao Chen and Wells N.d.). Specifically, the "linktest" utilizes the predicted values and the squared predicted values from the original model in a new model. If the predicted values are significantly related to Y, and the squared predicted values are not, then the model is assumed to have proper fit. The results from the "linktest" indicate that all models estimated

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[1]In the one case where the results do not correspond, additional results are referred to in Appendix 2.

at coup attempts are correctly specified. In other words, the predicted values are significant while the squared predicted values are not. The results are more uncertain when modeling successful coups, however, indicating that the logistic link function may be inappropriate in Models 2,4,6,8,10 and 12. Further testing shows that omitting the logged GDP per capita improves the fit of the models dramatically. For instance, in Model 2, the coefficient of the predicted values is -.60 with a p-value of .59. After fitting the model without GDP per capita the predicted values coefficient changes to 2.22 with a p-value of .02. Presumably, these numbers indicate that expecting a linear relationship between logged income per citizen and the logistic form of coups is unsuitable.[2] The omission of GDP per capita does not affect any of the substantive findings estimated by the models.

In sum, the fit for models estimated on coup attempts is satisfactory, while the fit for the successful coup models is not. In all likelihood, this is because the assumed relationship between GDP per capita and successful coups is inappropriate. However, GDP per capita is not the variable of interest and the results remain unchanged when excluding the variable. Therefore, although I concede that a non-linear model may be more appropriate for optimizing fit, I conclude that it is unlikely to change the core findings of the models.

5.2 Influential Observations

Another way to assess the fit of the core models is to look at the residuals. Cases that do not fit the predicted outcome of the models have large residuals, while well predicted observations have small residuals (Long and Freese 2006, 145-153). The former observations are *outliers*, and possibly influential observations. Hence, it is crucial to ensure that outliers are not driving the results. I follow Pregibon (1981) and calculate 'the effect of removing the ith observation on the entire vector $\hat{\beta}$, which is the counterpart to Cook's distance for the linear regression model' (Long and Freese 2006, 151). I regard an outlier as potentially influential if Pregibon's Cook statistic is higher than .1. This leaves me with 10 outliers in Model 1. Naturally, these are all coup attempts that the models do not predict well, among them Liberia 1980 and Tunisia 1987 as the separation plot indicated. Estimating any of the models without all of them does not alter the results and I therefore conclude that influential observations do not drive the results of the analysis.

5.3 Omitted Variable Bias

As mentioned above, following Achen (2005) and Schrodt (2010), the models specified above are intentionally minimalistic. This means that I made a number of choices regarding which

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[2]I attempted to fit the model including a squared GDP per capita term, modeling an inverted U-shaped relationship (see e.g. Hegre et al. 2001). However, it did not improve the "linktest".

Table 5.1: Continent by coup attempts: Autocracies only

Continent	No coup	Coup attempt	Coup	Total
Africa	1,866	72	68	2,006
Americas	454	27	37	518
Asia	1,366	27	31	1,424
Europe	443	3	2	448
Total	4,129	129	138	4,396

variables to include in the core models, possibly excluding variables that might significantly change the results of the analysis. In this section I account for omitted variables bias in two ways. First, I include three additional variables in Models 1,2, 7, 8 11 and 12 to further test the robustness of the core findings. Second, I estimate country fixed effects models in order to allow each country in the dataset to have different intercepts.

The first new variable I include, military expenditure, is theoretically relevant. The variable has been collected from the national capabilities data set version v 3.02 (Singer, Bremer and Stuckey 1972). I include it following Collier and Hoeffler (2005, 2006, 2007), finding that strong militaries might extort the state by threatening a coup d'etat if the state does not redistribute a large proportion of the GDP to the military. As explained in Collier and Hoeffler (2006, 3), the military 'is both a defender of the government against external threats and internal rebellions, and itself a source of threat'. If the generals are not satisfied with their payroll and the resources made available to them, they have the power to attempt an overthrow of the incumbents. Moreover, regarding institutional design, it might be argued that a state that spends vast amounts on the military must increase taxes. Increased taxes may produce pressure from the elites for representation and policy influence resulting in the establishment of nominally democratic institutions. Hence, military spending might be argued to both affect the dependent variable and the main explanatory variables, resulting in omitted variable bias. Moreover, in addition to the minimalist argument, another reason why I chose to exclude the variable from the core analysis was because of its limited temporal coverage, 1950–2000.

Furthermore, region and decade dummies are included to account for possible dependent observations and idiosyncrasies in the data set. Remember that the possibility of dependent variables was modeled by including regime duration, the coup history dummy and by clustering errors on countries in the core models. I have also clustered the errors by regime type, and the results remain unchanged. By including decade- and region-specific dummies, I further control for unmodeled events. For instance, coup attempts are rare occurrences in the 2000's, while they proliferated in the 50's, 60's and 70's. Including dummies for each decade is an attempt at modeling characteristics specific to these decades that might affect the results of the statistical

Table 5.2: Robustness 1: Military spending, region and decade added to core models

	(R1)	(R2)	(R7)	(R8)	(R11)	(R12)
	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup
Legislative body in autocracy	0.602*	0.525*				
	[0.407,0.890]	[0.318,0.865]				
One-party autocracy			0.705[+]	0.599*		
			[0.484,1.028]	[0.366,0.981]		
Multiparty autocracy			0.702	0.696		
			[0.431,1.142]	[0.398,1.220]		
Coup-initiated autocracy	0.927	1.036	0.959	1.081	1.345	1.569
	[0.568,1.514]	[0.523,2.055]	[0.589,1.559]	[0.547,2.136]	[0.786,2.302]	[0.756,3.258]
Creation of one party in autocracy					1.460	1.510
					[0.802,2.660]	[0.695,3.279]
Coup-initiated * Creation of one party					0.357*	0.304*
					[0.158,0.802]	[0.118,0.783]
Regime duration	0.948***	0.982	0.942***	0.975	0.944***	0.976
	[0.918,0.978]	[0.945,1.020]	[0.913,0.971]	[0.940,1.011]	[0.916,0.972]	[0.942,1.012]
Logged GDP per capita (t-1)	0.893	0.800	0.887	0.797	0.873	0.786
	[0.713,1.118]	[0.562,1.138]	[0.705,1.117]	[0.554,1.146]	[0.688,1.108]	[0.540,1.146]
GDP growth (t-1)	0.994	0.990	0.994	0.990	0.993	0.990
	[0.972,1.015]	[0.962,1.019]	[0.972,1.016]	[0.962,1.019]	[0.972,1.015]	[0.962,1.019]
Previous coup attempt	2.218**	1.729	2.291**	1.800[+]	2.394**	1.961*
	[1.256,3.917]	[0.868,3.443]	[1.296,4.049]	[0.908,3.570]	[1.370,4.184]	[1.000,3.843]
Logged military spending (t-1)	0.890*	0.865*	0.895*	0.870*	0.885*	0.860*
	[0.808,0.979]	[0.772,0.970]	[0.812,0.987]	[0.777,0.975]	[0.803,0.975]	[0.765,0.968]
Africa	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)
Americas	1.563[+]	1.927*	1.567[+]	1.873*	1.537	1.878[+]
	[0.949,2.572]	[1.035,3.588]	[0.962,2.553]	[1.003,3.499]	[0.906,2.609]	[0.951,3.711]
Asia	0.929	1.049	0.905	0.995	0.962	1.110
	[0.561,1.536]	[0.594,1.854]	[0.547,1.498]	[0.566,1.750]	[0.585,1.583]	[0.642,1.922]
Europe	0.498	0.399	0.485	0.389	0.510	0.406
	[0.136,1.829]	[0.094,1.699]	[0.130,1.805]	[0.089,1.691]	[0.138,1.876]	[0.095,1.745]
1950's	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)
1960's	0.865	1.057	0.866	1.046	0.842	1.006
	[0.534,1.401]	[0.570,1.959]	[0.538,1.394]	[0.580,1.888]	[0.528,1.341]	[0.557,1.817]
1970's	0.813	0.846	0.843	0.877	0.836	0.863
	[0.524,1.263]	[0.441,1.624]	[0.542,1.309]	[0.468,1.645]	[0.546,1.281]	[0.472,1.576]
1980's	0.603[+]	0.635	0.614	0.654	0.614[+]	0.645
	[0.339,1.071]	[0.289,1.395]	[0.342,1.103]	[0.299,1.433]	[0.347,1.089]	[0.299,1.393]
1990's	0.570[+]	0.444[+]	0.565[+]	0.428[+]	0.548*	0.418*
	[0.314,1.032]	[0.188,1.050]	[0.311,1.028]	[0.180,1.020]	[0.309,0.971]	[0.185,0.947]
2000's	0.711	(omitted)	0.703	(omitted)	0.640	(omitted)
	[0.235,2.157]		[0.234,2.114]		[0.215,1.905]	
Observations	3657	3581	3657	3581	3657	3581
Pseudo R^2	0.101	0.094	0.098	0.090	0.102	0.093
LL0	-890.952	-558.673	-890.952	-558.673	-890.952	-558.673
LL	-800.673	-506.194	-803.295	-508.462	-800.242	-506.689

Logistic regressions; Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

analysis. Also, as shown in Table 5.1, African and Latin-American autocracies have experienced disproportionately many coup attempts as compared to other regions. Europe, by contrast, is by far the least coup-prone region.[3] The regional-specific differences indicate that failure to model them might lead to biased estimates.

As can be seen in Table 5.2, the core findings are robust to the inclusion of military expenditure, region and decade variables. First, note that the number of observations drops from 4396 to 3657 and 3581 due to the fact that the military expenditure variable is limited to 1950–2000.[4] Starting at Model R1 and R2, the estimates show that autocracies with a legislative body are less likely to be both attempted and actually overthrown through a coup further confirming H_1. The same is true of H_2 and H_4. As an exception, autocracies displaying strength through elections lose significance in the model estimated on successful coups.[5] In Model R7 and R8, however, the estimates are significant for one-party autocracies but not for multiparty autocracies (p-value of .15 and .20), indicating that the evidence for H_{2b}, and hence H_{4b}, is tentative. This might be due to a risk involved in opening up for multiple parties, a risk that is contained in one-party autocracies. More parties may indeed mean less control and an increased number of possible coup plotters. However, the estimates are negative and in no-man's-land with regard to level of significance, making both confirmation or rejection difficult. H_{2a}, that one-party autocracies are less likely to be attempted overthrown, is however still supported. Moreover, Models R11 and R12 support H_6 while H_5 is rejected in all robustness tests. Indeed, coup makers that create a support party platform are less likely to be attempted overthrown. Coup-initiated autocracies however, do not seem to be more likely to be attempted couped in any of the robustness tests.

Concerning the controls, durable regimes are less likely to be attempted overthrown in Model R1, R7 and R11, while coup attempts are more likely in countries with a history of overthrows in all but Model R2. Furthermore, GDP per capita and GDP growth are not significant in either of the models. Finally, the more money devoted to the military, the less likely a coup attempt is. This finding in is line with the argument put forth by Collier and Hoeffler (2007), that the military can be bribed into supporting the current ruling clique.

The fixed effects estimation, as mentioned above, allows a unique intercept for each country. In essence, it includes dummy variables for each country in the data set. This effectively removes all countries that do not vary on the variables included in the models (Kennedy 2008, 283). Since many autocracies are not subjected to coup attempts and/or do not change the institutional framework during the inspected time period, the number of observations is therefore drastically reduced. The number of observations drops from 4396 to 2948 in the models estimated on coup attempts and 2280 in the models estimated on successful coups. Thus, these models estimate the effect of two different institutional arrangements in the same country at different points

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[3]Since no countries in Oceania are autocratic in the period, the region is omitted from Table 5.1.

[4]The results are the same with and without this variable, as can be seen in Table 4 in Appendix 2.

[5]The results are displayed in Table 5 in Appendix 2.

Table 5.3: Logistic regressions – Country fixed-effects

	(FE1)	(FE2)	(FE3)	(FE4)	(FE5)	(FE6)
	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup
Legislative body in autocracy	0.673*	0.466**				
	[0.481,0.942]	[0.291,0.747]				
One-party autocracy			0.690[+]	0.541*		
			[0.461,1.032]	[0.303,0.967]		
Multiparty autocracy			0.848	0.600[+]		
			[0.585,1.229]	[0.358,1.007]		
Coup-initiated autocracy	1.001	0.355**	1.082	0.402**	1.578[+]	0.582
	[0.620,1.619]	[0.181,0.697]	[0.673,1.738]	[0.207,0.783]	[0.925,2.692]	[0.286,1.186]
Creation of one party in autocracy					1.385	0.751
					[0.767,2.503]	[0.317,1.777]
Coup-intiated * Creation of one party					0.374**	0.406[+]
					[0.181,0.771]	[0.142,1.164]
Regime duration	0.974[+]	1.032	0.972[+]	1.025	0.974[+]	1.033[+]
	[0.947,1.003]	[0.994,1.073]	[0.945,1.001]	[0.987,1.065]	[0.947,1.003]	[0.994,1.072]
Logged GDP per capita (t-1)	0.505*	0.676	0.488**	0.647	0.473**	0.626
	[0.300,0.851]	[0.323,1.417]	[0.290,0.822]	[0.311,1.344]	[0.281,0.794]	[0.304,1.288]
GDP growth (t-1)	1.001	0.997	1.001	0.997	1.001	0.998
	[0.982,1.021]	[0.970,1.025]	[0.982,1.021]	[0.969,1.026]	[0.982,1.021]	[0.970,1.026]
Previous coup attempt	0.694	0.775	0.675	0.779	0.655[+]	0.875
	[0.431,1.117]	[0.377,1.595]	[0.416,1.095]	[0.373,1.628]	[0.399,1.077]	[0.422,1.812]
Observations	2948	2280	2948	2280	2948	2280
LL0	-706.296	-406.350	-706.296	-406.350	-706.296	-406.350
LL	-692.833	-391.741	-693.841	-393.920	-690.012	-388.826

Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

in time. In other words, "fixing" the effects by country is an attempt at removing country-specific differences. Fixed effects estimation is therefore often referred to as within-group effects estimation, as opposed to between-group estimation (Rabe-Hesketh and Skrondal 2008). The procedure is analogous to including region and decade dummies.

Table 5.3 shows that the core results hold. Autocracies with a legislative body are less likely than other autocracies to be both attempted and successfully overthrown. Moreover, similar to Table 5.2, estimates are more uncertain when disaggregating on number of parties in the legislature. Both estimates for one party autocracies are significant at the .1 level, while only the estimate in Model FE4 is significant for multiple party autocracies. In other words, in the fixed effects model, multiple party autocracies are not less likely than no-party autocracies with or without a legislature to be attempted overthrown, but they are less likely to be successfully unseated. The estimates for coup-initiated autocracies vary from model to model. In fact, estimates are below 1 and significant in Model FE2 and FE4, and above 1 and significant in Model FE5. The former results contradict the core analysis in which the results indicated that coup-initiated autocracies have a higher probability of being successfully overthrown. Most

likely, these results illustrate the fact that some countries are continually subjected to coups and drive the results in the core analysis. When fixing the effect for each country, unobserved country-specific reasons for the cycle of overthrows are eliminated. Syria, Bolivia, Benin, Burkina Faso and Haiti all experienced 5 or more successful coups between 1950–2008. These countries are subjected to 23 % of the successful coups in autocracies in the period and therefore possibly drive the effect of coup-initiated regimes on successful coups in the core analysis.[6] In the models estimating the probability of coup attempts, however, the results are similar to those in the core regressions. Moreover, Model FE5 and FE6 show once again that coup-initiated autocracies in which the ruling clique establishes a one party support platform are less likely to be subjected to both coup attempts and successful coups.

In sum, although two of the models, FE2 and FE4, contradict the finding that coup-initiated autocracies are more likely to be subjected to a coup, the core findings are robust and not likely to be the result of omitted variable bias. Incumbents in autocracies ruling with nominally democratic institutions are indeed less likely to be attempted overthrown.

5.4 Alternative Operationalization of Autocracy

In the conflict and democratization literature there is currently no consensus regarding the defining traits of autocracies and democracies. Hence, there are several different operationalizations available to scholars. Robust findings should not be affected by choice of operationalization. In order to ensure that the results of the core models are robust I created a second data set with all operationalizations based on a dichotomization of the Polity scale.

The Polity index is a continuous measure of autocracies and democracies provided by Marshall, Gurr and Jaggers (2010). It classifies countries on a scale from -10 to +10, where -10 is a closed and tightly controlled autocracy like Saudi Arabia (1950–2008) or Haiti (1971–1976). +10 represents a liberal democracy such as present-day Sweden or New Zealand. The conception of democracy is funded upon an effort to incorporate additional aspects beyond the minimalistic ACLP dichotomization. Instead of solely considering whether the legislative and executive branches are filled through competitive elections, the Polity index also focuses on institutional constraints and participation rates, which no doubt adds vital information about the nature of regimes.

Many research questions in the democratization literature, like the one asked in this thesis, concern whether a country is autocratic or not. Whereas the ACLP dichotomization considers regimes to be types (autocracies or democracies), the Polity index treats regimes like variations on a theme (3 out of 21 or 15 out of 21). In order to investigate the research question at hand then, it is necessary to dichotomize the scale. As shown in Figure 5.1 the scale is clearly bimodal. Only 17 % of the regimes from 1950-2008 scored between -4 and +4. The fact that the scale is

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[6]Syria, Bolivia, Benin, Burkina Faso and Haiti make up 32 of 138 successful coups in autocracies 1950–2008.

Figure 5.1: Polity Scale Histogram 1950–2008
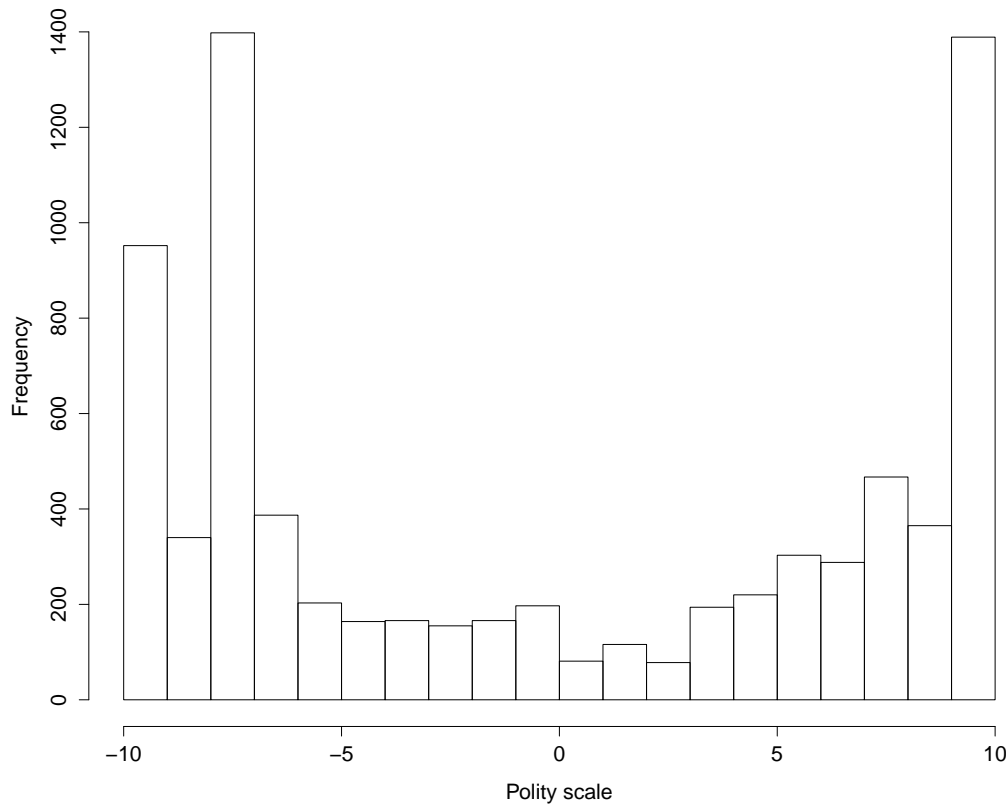
bimodal makes choosing a cut off point easier, and less controversial. I will be using the most common one, setting the bar for being classified as a democracy at a relatively high level, coding all regimes scoring +5 and below as autocracies (Bogaards 2011, 7). Although the cutoff point is arbitrary and therefore may be criticized (Cheibub, Gandhi and Vreeland 2010; Bogaards 2011), there are three notable advantages to this approach. First, it classifies most of the more ambiguous and often controversial cases in the middle of the scale as autocracies. Secondly, as mentioned above, by dichotomizing the Polity scale in addition to utilizing the classification provided by Przeworski et al. (2000), I can test the robustness of the findings with a measure of regimes that incorporates other vital aspects of democracy in addition to whether elite selection is contested. Finally, with regard to the theories of elite co-optation and deterrence, all previous analyses that I am aware of rest upon the ACLP classification. That may be problematic if a Polity dichotomization yields different results.

Figure 5.2 illustrates the discrepancies between the original ACLP and the Polity index in two ambiguous cases, Botswana and Mexico. While the two measures converge around the time when Vicente Fox won the Mexican 2000 election, Botswana remains an autocracy in the eyes of the minimalists due to the continued rule of BDP. By contrast, Botswana scores relatively high on the Polity index (6-8) and thus most scholars preferring it would consider

Figure 5.2: Democracies or Autocracies?
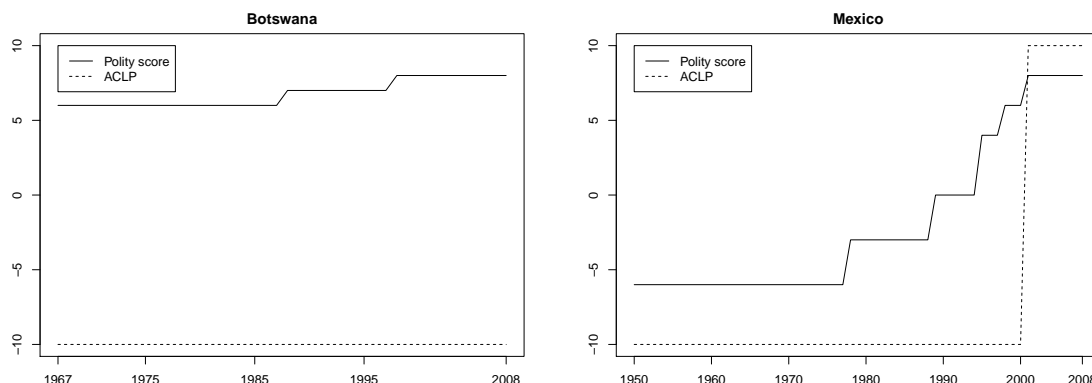
Botswana democratic. Although Pemstein, Meserve and Melton (2010) found that the two different measurements of democracy are mostly in accordance, there are, as illustrated in Table 5.4, numerous ambiguous regimes like the Botswanan that continue to be controversial. In fact, the dichotomizations differ on 754 country years. 415 autocratic country years according to the Polity dichotomization are coded as democratic country years by ACLP. Conversely, 339 country years coded as autocracies by ACLP are coded as democracies by the Polity dichotomization. This evidence further suggests checking for robustness with an alternative operationalization.

Table 5.5 displays the results using the Polity dichotomization. The core findings are indeed robust. Autocracies with nominally democratic institutions are less likely to be attempted overthrown in Model Polity 1,2,7 and 8. However, although the estimates for coup-initiated autocracies and coup-initiated autocracies creating a support party platform are in the expected direction, they are not significant at conventional levels. This weakens the finding that coup makers can create a support party platform in order to co-opt potential rivals in the aftermath of a successful coup. Moreover, coup-initiated autocracies are only borderline more likely to be overthrown in one model, namely Polity 12. The estimates for the controls show, similar to Table 5.2, that logged GDP per capita is insignificant. Indeed, it is only significant in the core models, indicating that coup attempts in autocracies are not necessarily affected by level of economic

Table 5.4: Polity dichotomy by ACLP dichotomy

	ACLP dichotomy		
Polity dichotomy	Autocracy	Democracy	Total
Autocracy	4,057	415	4,472
Democracy	339	2,433	2,772
Total	4,396	2,848	7,244

Table 5.5: Robustness 2: Alternative operationalization of autocracy

	(Polity 1)	(Polity 2)	(Polity 7)	(Polity 8)	(Polity 11)	(Polity 12)
	Coup attempt	Coup	Coup attempt	Coup	Coup attempt	Coup
Legislative body in autocracy	0.671**	0.616*				
	[0.498,0.906]	[0.422,0.900]				
One-party autocracy			0.671*	0.540**		
			[0.491,0.918]	[0.363,0.802]		
Multiparty autocracy			0.593*	0.479***		
			[0.394,0.893]	[0.309,0.742]		
Coup-initiated autocracy	0.932	1.085	1.053	1.261	1.243	1.516+
	[0.647,1.342]	[0.705,1.670]	[0.751,1.478]	[0.848,1.874]	[0.833,1.855]	[0.941,2.441]
Creation of one party in autocracy					0.955	0.788
					[0.552,1.653]	[0.362,1.718]
Coup-initiated * Creation of one party					0.596	0.561
					[0.284,1.249]	[0.217,1.450]
Regime duration	0.922***	0.947***	0.921***	0.948***	0.919***	0.945***
	[0.896,0.948]	[0.917,0.978]	[0.896,0.946]	[0.919,0.978]	[0.894,0.946]	[0.915,0.976]
Logged GDP per capita (t-1)	0.902	0.885	0.891	0.865	0.884	0.862
	[0.748,1.088]	[0.694,1.127]	[0.741,1.071]	[0.685,1.092]	[0.727,1.076]	[0.675,1.102]
GDP growth (t-1)	0.990	0.989	0.990	0.988	0.990	0.988
	[0.971,1.010]	[0.967,1.011]	[0.970,1.010]	[0.966,1.011]	[0.971,1.010]	[0.967,1.010]
Previous coup attempt	2.226***	1.643+	2.102***	1.485	2.320***	1.763*
	[1.455,3.404]	[0.983,2.745]	[1.391,3.178]	[0.898,2.455]	[1.516,3.551]	[1.051,2.956]
Observations	4472	4472	4472	4472	4472	4472
Pseudo R^2	0.074	0.047	0.077	0.054	0.074	0.050
LL0	-1110.748	-686.673	-1110.748	-686.673	-1110.748	-686.673
LL	-1028.398	-654.194	-1025.497	-649.537	-1028.130	-652.520

Logistic regressions; Exponentiated coefficients; 95% confidence intervals in brackets

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

development. Regime duration is, on the other hand, quite robust to model specifications. Finally, previous coup attempt is significant in five of the models. However, as explained above, the results of the fixed effects estimation indicates that these results might be driven by a small number of very coup-prone countries.

In sum, the support of both H_5 and H_6 is dependent upon choice of regime type measure, while H_1, H_2, H_{2a}, H_{2b}, H_4 and H_{4b} are supported.

5.5 Summary: Model Robustness and Diagnostics

Most results from the core models are statistically robust. However, uncertainty surrounds the findings concerning multiparty autocracies and coup-initiated autocracies creating a support party base as indicated in Tables 5.2, 5.3 and 5.5 respectively. As a result, inferences based on the core models are tentative. Moreover, the assumed functional form in the models fitted on successful coups may not be satisfactory, but altering the model is unlikely to change the core

findings relevant to the theoretical framework. Finally, the results are not driven by influential cases or omitted variable bias. A notable exception is that the estimate for coup-initiated autocracies is significant in the opposite direction in two of the country fixed effects models. This is likely due to the fact that a few countries have been subjected to a disproportionate amount of successful coups. In sum however, the model diagnostics suggest that institutionalized autocracies are less likely to be attempted overthrown. Indeed, nominally democratic institutions are not mere window-dressing nor necessarily liberalizing policies, but can be pillars of stability. This is in line with previous research illustrating that institutionalized autocracies are less likely to break down, and warrants further research on the intra-regime politics of autocracies.

Chapter 6

Concluding Remarks

I opened with the question: why do autocrats allow legislatures, parties and elections? In the foregoing I have proposed that these nominally democratic institutions help shape outcomes in authoritarian regimes. They contribute to co-optation and deterrence of potential rival *elites* in autocracies, and thus lower the risk of coup attempts. I identify two mechanisms through which these institutions work. First, legislatures and parties establish a credible power-sharing relationship with the civilian and military elites. Legislatures and parties commit the ruling clique to not abuse their superior position by institutionalizing some power in the hands of a broadened group of elite citizens. By sharing power in a credible way, trust is established between the ruling clique and a larger number of influential elites in an environment normally characterized by secrecy and uncertainty. Moreover, legislators and party members are offered spoils and the possibility to advance in the ranks of the regime. During the Mexican PRI's rule for instance, leadership rotation was institutionalized, and distinguished members of the party were allowed to run for office. These circumstances generated incentives for elites to work in the interest of the regime rather than attempting to overthrow it. Second, by arranging and convincingly "winning" elections, autocrats publicly display that they are "the only game in town". "Winning" elections by large margins communicate to both the elites and the masses that the current incumbents are near invincible. Such a display of the ruling clique's right to continued rule reinforces the perception that the regime is likely to last into the future. Moreover, elections can also help the ruling clique identify popular opposition candidates and then decide how to react. Potential rivals are thus deterred from attempting a coup against people who provide them with riches and influence.

Previous research on elite co-optation and deterrence has focused on regime breakdowns, a heterogenous group of events that can involve coups, revolutions, civil wars, democratization or mere changes to the institutional framework. The complexity of the events and numerous actors involved in regime breakdowns make it hard to know whether the outcome is driven by potential rivals within the regime elite or other actors such as the masses, foreign interventionists or rebel groups. By narrowing the focus to coup attempts, a form of anti-regime activity that

is more closely connected to regime elites, be it civilian or military, the outcome group is not only more homogenous but also more in tune with the proposed theoretical mechanisms. In fact, the definition of a coup attempt involves that the attempted overthrow is performed by members of the state apparatus, most often *the elite*. Additionally, merely focusing on actual breakdowns is inaccurate, because a regime in which the incumbents are continually subjected to unsuccessful coups is undoubtedly weaker than autocracies in which incumbents are not. By ignoring unsuccessful coups that do not result in a regime breakdown, valuable information is discarded.

In accordance with previous research addressing regime longevity, I find that autocrats ruling with nominally democratic institutions are less likely to be subjected to both coup attempts and successful coups. The findings provide evidence for the proposed theoretical relationship in which authoritarian leaders credibly share their power with potential rivals in a legislature, a regime support party and display strength through elections. I suggest that the existence of nominally democratic institutions in authoritarian regimes are not compromising nor necessarily liberalizing policies inevitably leading to regime breakdown or conflict. Rather, they are often pillars of stability. These institutions deter and co-opt potential rivals and compel them to support the regime in return for power, stability, spoils and the promise of potential future promotions. I find however, no evidence that institutional differences between autocracies with some variant of nominally democratic institutions in place differ in their propensity to be subjected to coup attempts. Parties and elections may thus not be "necessary". On that note, it should be mentioned that most autocracies allowing a national legislature also allow parties. Moreover, extensive robustness tests reveal that the evidence is tentative for multiple party autocracies, indicating that allowing more than one official party can involve risk. If parties are potential launching pads for rivaling elites, then more parties means a higher number of popular rivals. Also, support for the hypothesis that coup-initiated autocracies establishing a party support basis in the legislature are less likely to be attempted overthrown hinges on the choice of operationalization of regime type. In addition, durable regimes are less likely to be subjected to coup attempts while level of income fails to be significant in several robustness tests, and thus the evidence for a relationship between economic development and coup attempts in autocracies is tentative. Interestingly, country fixed-effects reveal that the coup-trap effect may be driven by a small number of countries continually subjected to coup attempts. Finally, I find no evidence that economic growth affects the probability of attempted overthrows.

Regarding the predictive accuracy of the models presented in this thesis, several notable patterns are revealed. First and foremost, both in-sample and out-of-sample tests indicate that the institutional variables utilized moderately increases the predictive power of the models. In all likelihood, the increase is moderate because an aggregated country-year study in combination with dummy variables to identify the institutional design of autocracies is too crude a tool to capture the subtlety of many of the theoretical mechanisms. One possible remedy could be to

follow the civil war literature by gradually moving away from the country-year setup and focus on date specific events. Such an approach would require extensive data collection on institutional changes. Second, the separation plots reveal that none of the first coup attempts were satisfactorily predicted by the models. This finding underlines the elusive nature of first events. Moreover, more proximate coup triggers may better anticipate the events that the models presented in this thesis fail to anticipate. Quantitative event- and country-specific studies can provide valuable insights into triggering events, the functions of institutions under authoritarianism, legislative and party representatives' behavior and the crucial role of civilian-military relations. Third, the case studies enhance both strengths and weaknesses of the theoretical framework and the data utilized. Stroessner in Paraguay and Ben Ali in Tunisia are examples of how autocrats credibly share their powers, form alliances, share regime spoils and hold elections to legitimize their stay in office. The overthrow in Liberia, on the contrary, illustrates that not all coup attempts are lead by elites that can benefit from nominally democratic institutions. Like the overwhelming majority of the population, the low rank officer Doe was marginalized because of his ethnic background. Regardless, the Master Sergeant managed to topple President Tolbert in a bloody coup. To help illuminate the link between nominally democratic institutions under authoritarianism, elite co-optation and deterrence, data on the tactics of the perpetrators, for instance whether the coup was bloody or not coupled with background information on the coup maker could be collected.

In conclusion, the results strengthen the claim that institutions under authoritarianism are effective tools for co-optation and deterrence of regime elites. It is clear that the institutional characteristics of autocracies matter for the propensity to be subjected to a coup attempt and should therefore be further scrutinized, especially whether differences in institutional design matters. Moreover, the approach of this thesis underlines that disaggregating regime breakdown and concentrating on more homogenous events such as popular revolutions or coup attempts is a fruitful endeavor in order to more accurately test complex theories.

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Appendix 1: Coding coup attempts

In some cases there were multiple coup attempts in each country year. The observations are listed below. If there were two successful coups, I recorded it as one successful coup. If there was one unsuccessful and one successful coup, I recorded it as a successful coup:

Argentina (1955) – two coups

Argentina (1971) – unsuccessful coup and coup

Bangladesh (1975) – two coups

Benin (1965) – two coups

Benin (1972) – unsuccessful coup and coup

Bolivia (1978) – two coups

Brazil (1964) – two coups

Burundi (1966) – two coups

Chile (1973) – unsuccessful coup and coup

Congo (1968) – two coups

Haiti (1957) – three coups

Haiti (1988) – two coups

Honduras (1956) – unsuccessful coup and coup

Iraq (1963) – two coups

Laos (1960) – two coups

Nigeria (1966) - two coups

Sierra Leone (1992) – unsuccessful coup and coup

Suriname (1980) – two coups

Syria (1966) – unsuccessful coup and coup

Thailand (1951) – unsuccessful coup and coup

Vietnam, South (1964) – unsuccessful coup and coup

Vietnam, South (1965) – unsuccessful coup and two coups

Appendix 2: Additional Results

Table 1: Logistic regressions – Possible type II errors excluded

	(Type II 1) Coup attempt	(Type II 2) Coup	(Type II 7) Coup attempt	(Type II 8) Coup	(Type II 11) Coup attempt	(Type II 12) Coup
Legislative body in autocracy	0.568*** [0.408,0.790]	0.489*** [0.322,0.743]				
One-party autocracy			0.704* [0.505,0.981]	0.589* [0.385,0.901]		
Multiparty autocracy			0.693$^+$ [0.451,1.065]	0.623* [0.394,0.984]		
Coup-initiated autocracy	1.261 [0.848,1.875]	1.707$^+$ [0.949,3.072]	1.339 [0.898,1.997]	1.839* [1.023,3.307]	1.868** [1.175,2.972]	2.662** [1.336,5.304]
Creation of one party in autocracy					1.243 [0.709,2.178]	1.107 [0.506,2.422]
Coup-initiated * Creation of one party					0.434* [0.205,0.916]	0.382* [0.148,0.986]
Regime duration	0.926*** [0.897,0.955]	0.951** [0.916,0.986]	0.920*** [0.892,0.948]	0.944** [0.910,0.980]	0.921*** [0.893,0.950]	0.945** [0.910,0.981]
Logged GDP per capita (t-1)	0.820* [0.687,0.979]	0.789$^+$ [0.620,1.005]	0.817* [0.678,0.984]	0.781$^+$ [0.610,1.000]	0.802* [0.661,0.973]	0.768* [0.596,0.990]
GDP growth (t-1)	0.992 [0.973,1.012]	0.991 [0.969,1.015]	0.992 [0.973,1.013]	0.991 [0.968,1.015]	0.992 [0.973,1.012]	0.991 [0.968,1.014]
Previous coup attempt	1.582* [1.012,2.474]	0.960 [0.521,1.770]	1.650* [1.050,2.591]	0.995 [0.541,1.827]	1.663* [1.043,2.652]	1.063 [0.557,2.030]
Observations	4223	4223	4223	4223	4223	4223
Pseudo R^2	0.083	0.062	0.078	0.057	0.081	0.060
LL0	-984.762	-601.034	-984.762	-601.034	-984.762	-601.034
LL	-903.352	-563.584	-907.733	-566.663	-905.411	-564.824

Exponentiated coefficients; 95% confidence intervals in brackets

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2: Logistic regressions – Institutional differences

	(1)	(2)	(3)	(4)
	Coup attempt	Coup	Coup attempt	Coup
Legislative body w/at least one party	1.437	1.789		
	[0.701,2.944]	[0.699,4.575]		
Ruling party displays strength			1.044	1.325
			[0.718,1.518]	[0.726,2.418]
Coup-initiated regime	0.975	1.074	0.983	1.087
	[0.560,1.699]	[0.520,2.221]	[0.565,1.710]	[0.528,2.236]
Regime duration	0.949**	0.976	0.947**	0.973
	[0.917,0.983]	[0.935,1.018]	[0.914,0.982]	[0.932,1.016]
Logged GDP per capita (t-1)	0.493***	0.361***	0.495***	0.365***
	[0.367,0.661]	[0.246,0.530]	[0.370,0.663]	[0.250,0.534]
GDP growth (t-1)	0.997	0.999	0.997	0.998
	[0.969,1.026]	[0.962,1.037]	[0.968,1.026]	[0.961,1.036]
Previous coup attempt	1.719*	1.122	1.708*	1.137
	[1.038,2.846]	[0.571,2.206]	[1.029,2.836]	[0.574,2.249]
Observations	3254	3254	3254	3254
Pseudo R^2	0.072	0.068	0.071	0.067
LL0	-568.044	-334.157	-568.044	-334.157
LL	-527.402	-311.405	-527.944	-311.675

Autocracies without legislatures are excluded from these regressions.

Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, [*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$

Table 3: Logistic regressions – Table 4.4 with no-party autocracy with legislature dummy

	(1) Coup attempt	(2) Coup	(3) Coup attempt	(4) Coup
No-party autocracy	0.427*	0.317*	0.467+	0.376*
	[0.193,0.947]	[0.126,0.800]	[0.208,1.047]	[0.149,0.949]
One-party autocracy	0.628**	0.539**		
	[0.441,0.893]	[0.347,0.838]		
Multiparty autocracy	0.595*	0.518**		
	[0.388,0.912]	[0.324,0.827]		
One-party autocracy displaying strength			0.705*	0.664+
			[0.506,0.983]	[0.438,1.008]
Multiparty autocracy displaying strength			0.542*	0.560*
			[0.333,0.883]	[0.319,0.985]
Coup-initiated regime	1.290	1.571	1.349	1.689+
	[0.872,1.908]	[0.879,2.807]	[0.921,1.978]	[0.954,2.990]
Regime duration	0.929***	0.955*	0.929***	0.954*
	[0.901,0.957]	[0.922,0.990]	[0.901,0.958]	[0.921,0.989]
Logged GDP per capita (t-1)	0.807*	0.766*	0.813*	0.770*
	[0.673,0.968]	[0.597,0.983]	[0.675,0.978]	[0.596,0.996]
GDP growth (t-1)	0.994	0.993	0.994	0.993
	[0.974,1.013]	[0.970,1.016]	[0.975,1.014]	[0.971,1.017]
Previous coup attempt	1.651*	1.126	1.644*	1.142
	[1.063,2.563]	[0.616,2.059]	[1.066,2.536]	[0.627,2.080]
Observations	4396	4396	4396	4396
Pseudo R^2	0.082	0.061	0.082	0.058
LL0	-1006.643	-613.456	-1006.643	-613.456
LL	-924.332	-576.135	-924.114	-578.156

Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, [*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$

Table 4: Logistic regressions – Table 5.2 without military spending

	(1) Coup attempt	(2) Coup	(3) Coup attempt	(4) Coup	(5) Coup attempt	(6) Coup
Legislative body in autocracy	0.622*	0.560*				
	[0.425,0.911]	[0.349,0.898]				
One-party autocracy			0.731[+]	0.624*		
			[0.516,1.035]	[0.390,0.999]		
Multiparty autocracy			0.800	0.774		
			[0.507,1.262]	[0.456,1.312]		
Coup-initiated autocracy	1.025	1.213	1.059	1.255	1.460	1.760
	[0.641,1.639]	[0.621,2.370]	[0.667,1.682]	[0.649,2.428]	[0.883,2.412]	[0.866,3.574]
Creation of one party in autocracy					1.416	1.270
					[0.826,2.428]	[0.594,2.714]
Coup-initiated * Creation of one party					0.419*	0.378*
					[0.203,0.865]	[0.152,0.939]
Regime duration	0.949***	0.984	0.944***	0.979	0.945***	0.980
	[0.922,0.976]	[0.951,1.019]	[0.918,0.970]	[0.947,1.012]	[0.920,0.972]	[0.948,1.012]
Logged GDP per capita (t-1)	0.767*	0.696*	0.760*	0.688*	0.745**	0.677*
	[0.627,0.939]	[0.508,0.952]	[0.614,0.942]	[0.496,0.955]	[0.600,0.926]	[0.485,0.945]
GDP growth (t-1)	0.993	0.990	0.993	0.990	0.993	0.991
	[0.973,1.014]	[0.964,1.017]	[0.973,1.014]	[0.964,1.017]	[0.973,1.014]	[0.965,1.018]
Previous coup attempt	2.102**	1.578	2.206**	1.655	2.206**	1.752
	[1.227,3.601]	[0.790,3.151]	[1.291,3.769]	[0.838,3.271]	[1.290,3.773]	[0.884,3.474]
Africa	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)
Americas	1.566[+]	1.902*	1.561[+]	1.855[+]	1.545	1.885[+]
	[0.944,2.596]	[1.014,3.570]	[0.949,2.567]	[0.992,3.470]	[0.916,2.605]	[0.966,3.678]
Asia	0.740	0.808	0.733	0.786	0.746	0.836
	[0.481,1.139]	[0.498,1.311]	[0.476,1.129]	[0.491,1.257]	[0.484,1.150]	[0.524,1.333]
Europe	0.396	0.289[+]	0.396	0.294[+]	0.400	0.288[+]
	[0.114,1.367]	[0.069,1.216]	[0.113,1.384]	[0.069,1.259]	[0.115,1.390]	[0.068,1.215]
1950's	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)
1960's	0.893	1.147	0.895	1.144	0.872	1.093
	[0.537,1.484]	[0.629,2.092]	[0.542,1.478]	[0.639,2.051]	[0.533,1.425]	[0.613,1.949]
1970's	0.787	0.834	0.825	0.876	0.804	0.843
	[0.507,1.221]	[0.443,1.573]	[0.533,1.276]	[0.473,1.623]	[0.525,1.231]	[0.469,1.514]
1980's	0.549*	0.550	0.566*	0.577	0.546*	0.555
	[0.328,0.917]	[0.268,1.130]	[0.332,0.962]	[0.279,1.193]	[0.325,0.920]	[0.273,1.130]
1990's	0.502*	0.404*	0.492*	0.392*	0.485**	0.387*
	[0.295,0.853]	[0.183,0.890]	[0.283,0.857]	[0.175,0.875]	[0.285,0.825]	[0.179,0.834]
2000's	0.291**	0.090**	0.271***	0.081***	0.259***	0.079***
	[0.134,0.632]	[0.021,0.383]	[0.127,0.582]	[0.019,0.347]	[0.122,0.546]	[0.019,0.336]
Observations	4396	4396	4396	4396	4396	4396
Pseudo R^2	0.104	0.102	0.101	0.099	0.104	0.102
LL0	-1006.643	-613.456	-1006.643	-613.456	-1006.643	-613.456
LL	-901.606	-550.664	-904.913	-552.752	-902.200	-550.969

Exponentiated coefficients; 95% confidence intervals in brackets

[+] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Logistic regressions – Table 5.2 on H_2 and H_4

	(1) Coup attempt	(2) Coup	(3) Coup attempt	(4) Coup
Legislative body w/at least one party	0.706$^+$	0.662$^+$		
	[0.493,1.010]	[0.421,1.043]		
Ruling party displays strength			0.740$^+$	0.713
			[0.518,1.056]	[0.445,1.142]
Coup-initiated regime	1.017	1.094	1.024	1.100
	[0.636,1.625]	[0.553,2.163]	[0.638,1.644]	[0.555,2.177]
Regime duration	0.942***	0.976	0.943***	0.976
	[0.914,0.972]	[0.940,1.012]	[0.914,0.973]	[0.941,1.013]
Logged GDP per capita (t-1)	0.888	0.803	0.884	0.796
	[0.706,1.117]	[0.562,1.148]	[0.700,1.117]	[0.553,1.146]
GDP growth (t-1)	0.994	0.991	0.994	0.992
	[0.972,1.016]	[0.964,1.020]	[0.972,1.016]	[0.964,1.020]
Previous coup attempt	2.192**	1.821$^+$	2.237**	1.879$^+$
	[1.252,3.837]	[0.921,3.602]	[1.281,3.909]	[0.957,3.689]
Military spending (t-1)	0.896*	0.863*	0.896*	0.864*
	[0.815,0.985]	[0.771,0.965]	[0.815,0.985]	[0.772,0.968]
Africa	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)
Americas	1.557$^+$	1.933*	1.548$^+$	1.920*
	[0.949,2.555]	[1.038,3.600]	[0.944,2.540]	[1.032,3.574]
Asia	0.901	1.036	0.897	1.030
	[0.543,1.497]	[0.587,1.830]	[0.536,1.500]	[0.586,1.812]
Europe	0.482	0.393	0.488	0.399
	[0.130,1.787]	[0.091,1.693]	[0.132,1.800]	[0.093,1.713]
1950's	(ref. cat)	(ref. cat)	(ref. cat)	(ref. cat)
1960's	0.864	1.048	0.872	1.058
	[0.537,1.390]	[0.578,1.899]	[0.542,1.403]	[0.580,1.928]
1970's	0.837	0.859	0.851	0.875
	[0.539,1.300]	[0.455,1.621]	[0.549,1.320]	[0.460,1.664]
1980's	0.612$^+$	0.657	0.611	0.653
	[0.343,1.091]	[0.300,1.438]	[0.339,1.099]	[0.294,1.452]
1990's	0.568$^+$	0.480$^+$	0.545*	0.457$^+$
	[0.314,1.026]	[0.206,1.120]	[0.305,0.974]	[0.199,1.050]
2000's	0.705		0.666	
	[0.235,2.115]		[0.221,2.006]	
Observations	3657	3581	3657	3581
Pseudo R^2	0.098	0.088	0.098	0.087
LL0	-890.952	-558.673	-890.952	-558.673
LL	-803.315	-509.519	-804.033	-510.262

Exponentiated coefficients; 95% confidence intervals in brackets

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix 3: Stata syntax

The syntax below produces all figures and tables included in the thesis in Stata. Most figures have been reproduced in R for cosmetic reasons.

```
***SETTINGS***
clear matrix
clear
set more off
set matsize 800
capture cd "/Users/espengeelmuydenrd/Dropbox/UiO/Master/Masteroppgave/Data"


use "mastercoups2.dta"


/*Label variables of interest*/


lab var coupsuc "Successful coup"
lab var coup2 "Coup attempt"
lab var coupunsuc "Unsuccessful coup attempt"


lab var strength "Ruling party displays strength"
lab var legpartyaut "Legislative body w/at least one party"
lab var legdum "Legislative body"
lab var onepartylp "One-party autocracy"
lab var mpartylp "Multiparty autocracy"
lab var onepartystr "One-party autocracy displaying strength"
lab var mpartystr "Multiparty autocracy displaying strength"


lab var prevcatt2 "Previous coup attempt"


lab var regdurspec "Regime duration"
lab var l2_logmadgdpc "GDP per capita"
```

```
lab var l2_madgrpercent "GDP growth"
lab var coupinit2 "Coup-initiated regime"

lab var createaut "Creation of one party in autocracy"
lab var openaut "Opening for multiple parties in autocracy"

gen sample=1 if leg!=. & legpartyaut!=. & strength!=. & coupinit2!=. ///
& l2_logmadgdpc!=. & l2_madgrpercent!=. & prevcatt2!=. & chga_demo==0
gen sampledem=1 if leg!=. & legpartyaut!=. & strength!=. & coupinit2!=. ///
& l2_logmadgdpc!=. & l2_madgrpercent!=. & prevcatt2!=.

sort gwno year

**************************************************
**************************************************
/*FIGURES*/
**************************************************
**************************************************

/*Figure 4.1 Coup attempts: 1950--2008*/

bysort year: egen nrcoupsyear=total(coupsuc)
bysort year: egen totalcoupyear=total(coup2)

lab var totalcoupyear "Coup attempts"
lab var nrcoupsyear "Coups"

gen relcoups=totalcoupyear/nrcountries
lab var relcoups "Coup attempts"

gen relcoupsucs=nrcoupsyear/nrcountries
lab var relcoupsucs "Coups"

twoway ///
(line relcoups year if sample!=.) ///
(line relcoupsucs year if sample!=.) ///
, xlabel(1950 1960 1970 1980 1990 2000 2008) scheme(vg_s2m) ///
ytitle(Proportion of countries attempted couped)
```

```
/* Figure 4.2 Institutional Design of Regimes 1950--2008*/

bysort year: egen legtotal=sum(legdum)
bysort year: egen demototal=sum(chga_demo)
gen noleg=1 if legdum==0 & chga_demo_l==0
replace noleg=0 if legdum==1 | chga_demo==1

bysort year: egen nolegtotal=sum(noleg)

gen relleg=legtotal/nrcountries
gen reldemo=demototal/nrcountries
gen relnoleg=nolegtotal/nrcountries

lab var relleg "Autocracy: Legislative body"
lab var relnoleg "Autocracy: No legislature"
lab var reldemo "Democracy"


twoway ///
(line relleg year) ///
(line relnoleg year) ///
(line reldemo year) ///
, xlabel(1950 1960 1970 1980 1990 2000 2008) ///
scheme(vg_s2m) ytitle(Proportion of countries)


/*Predictions - Clarify*/

/*Model 1*/

capture drop b1-b7

local controls regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2
```

```
estsimp logit coup2 legdum 'controls' if sample==1 ///
, or cluster(gwno) sims(10000)



/*Expected (mean) values*/
setx mean


simqi, pr /*Expected probability*/


capture drop legis0 legis1


setx mean
setx legdum 0
simqi, prval(1) level(90) genpr (legis0)


setx mean
setx legdum 1
simqi, prval(1) level(90) genpr(legis1)



/* Figure 4.3*/


graph box legis0 legis1, scheme(vg_s2m) ///
ytitle(Simulated probability of coup attempt) ///
legend(label (1 No legislature) label(2 Legislature)) ///
 marker(2, msize(small)) marker(1, msize(small))



/*Model 8*/


capture drop b1-b7


estsimp logit coupsuc onepartylp mpartylp 'controls' ///
if sample==1, or cluster(gwno) sims(10000)



/*Expected (mean) values*/
setx mean
```

```
simqi, pr /*Expected probability*/

capture drop legis0 legis1


setx mean
setx onepartylp 0
simqi, prval(1) level(90) genpr (legis0)

setx mean
setx onepartylp 1
simqi, prval(1) level(90) genpr(legis1)


capture drop prevcatt0 prevcatt1


setx mean
setx mpartylp 0
simqi, prval(1) level(90) genpr (legis00)

setx mean
setx mpartylp 1
simqi, prval(1) level(90) genpr(legis2)


/* Figure 4.4*/

graph box legis0 legis1 legis2, scheme(vg_s2m) ///
ytitle(Simulated probability of successful coup) ///
legend(label (1 No party) label(2 One party) ///
label(3 Multiple parties)) marker(2, msize(small)) ///
marker(1, msize(small)) marker(3, msize(small))


/*Model 12*/
```

```
capture drop b1-b8


/*Controls in macro*/
local controls2 regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2


estsimp logit coupsuc createaut coupinit2  ///
coupinit2_create2 openaut coupinit2_open ///
'controls2' if sample==1, cluster(gwno) sims(10000)



/*Expected (mean) values*/
setx mean


simqi, pr


capture drop legis0 legis1


setx mean
setx coupinit2 0
simqi, prval(1) level(90) genpr (legis0)


setx mean
setx coupinit2 1
simqi, prval(1) level(90) genpr(legis1)


capture drop prevcatt0 prevcatt1


setx mean
setx coupinit2_create2 0
simqi, prval(1) level(90) genpr (prevcatt0)


setx mean
setx coupinit2_create2 1
simqi, prval(1) level(90) genpr(prevcatt1)



/* Figure 4.5*/
```

```
graph box legis1 prevcatt1, scheme(vg_s2m) ///
ytitle(Simulated probability of coup attempt) ///
legend(label (1 Coup-initiated no-party) ///
label(2 Coup-initiated one-party)) ///
marker(2, msize(small)) marker(1, msize(small))




/*Figure 4.6: ROC-curve: Model 1* and Model 1*/

logit coup2 'controls' if sample==1, or cluster(gwno)
est sto m1star

predict p1
lroc if sample==1

logit coup2 legdum 'controls' if sample==1, or cluster(gwno)
est sto m1

predict p2
lroc if sample==1



roccomp coup2 p1 p2 if sample==1, graph summary /*Prob>chi2 =   0.0456*/



/*Figure 4.7: Separation plots*/


local controls regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2

logit coup2 legdum 'controls' if sample==1, or cluster(gwno)

predict pred_coup2_m2
sort pred_coup2_m2
```

```
gen rank2 = _n

/*First event*/

graph bar firstevent if pred_coup2_m2!=. & sample==1, ///
over(rank2, label(nolabels)) ylabel(none) ytitle("") ///
aspectratio(.05) plotregion(style(none)) ///
yscale(off) graphregion(fcolor(gs15)) scheme(vg_s2m)


/*Subsequent event*/

gen subscoupandatt=1 if coup2==1 & firstevent==0

graph bar subscoupandatt if pred_coup2_m2!=. & sample==1, ///
over(rank2, label(nolabels)) ylabel(none) ytitle("") ///
aspectratio(.05) plotregion(style(none)) ///
yscale(off) graphregion(fcolor(gs15)) scheme(vg_s2m)


/*Figure 5.1 Polity Index Histogram*/

lab var p_polity2 "Polity scale"

hist p_polity2 if sampledem!=., ///
percent title(Polity Index 1950-2008) scheme(vg_s2m)


/*Figure 5.2 Democracies or Autocracies?*/

gen chga_demo_graph=.
replace chga_demo_graph=10 if chga_demo_l==1
replace chga_demo_graph=-10 if chga_demo_l==0
lab var chga_demo_graph "ACLP"

sort gwno year
```

```
graph twoway (line p_polity2 year if country=="Botswana") ///
(line chga_demo_graph year if country=="Botswana"), ///
scheme(vg_s2m) title(Botswana) ///
xlabel(1967 1980 1990 2000 2008)

graph twoway (line p_polity2 year if country=="Mexico") ///
(line chga_demo_graph year if country=="Mexico"), ///
scheme(vg_s2m) title(Mexico) ///
xlabel(1950 1960 1970 1980 1990 2000 2008)




**************************************************
**************************************************
/*TABLES*/
**************************************************
**************************************************


/*Table 3.1 Descriptive statistics of variables in model -- Autocracies only*/

*ssc install sutex

sutex coup2 legdum legpartyaut strength onepartylp ///
mpartylp onepartystr mpartystr coupinit2 createaut ///
openaut regdurspec l2_logmadgdpc l2_madgrpercent ///
prevcatt2 if sample!=., labels nobs minmax ///
title(Descriptive statistics of variables in model -- Autocracies only) ///
replace file(Tables/summstat.tex)



/*Table 4.1 Institutional Features and Coup Attempts: Democracies Included (%) */


label define legpartyaut4 0 "Autocracy: No parties" ///
1 "Autocracy: One party" 2 "Autocracy: Multiple party" 3 "Democracy"
```

```
label values legpartyaut4 legpartyaut4

label define strength4 0 "Not displaying strength" ///
1 "Displaying strength: One party" ///
2 "Displaying strength: Multiple party" 3 "Democracy"
label values strength4 strength4

label define leg3 0 "Autocracy: No legislature" ///
1 "Autocracy: Legislature" 2 "Democracy"
label values leg3 leg3



/*The table is constructed from these three tabulatures*/

latab leg3 coup if sample!=., row dec(1)
latab legpartyaut4 coup if sampledem!=., row dec(1)
latab strength4 coup if sampledem!=., row dec(1)



/*Table 4.2 Logistic regressions -- Basemodel*/


logit coup2 legdum if sample==1, or cluster(gwno)
est sto m2leg

logit coup2 legpartyaut if sample==1, or cluster(gwno)
est sto m2legp

logit coup2 strength if sample==1, or cluster(gwno)
est sto m2strength

logit coup2 onepartylp mpartylp if sample==1, or cluster(gwno)
est sto m2lp

logit coup2 onepartystr mpartystr if sample==1, or cluster(gwno)
est sto m2str
```

```
logit coupsuc legdum if sample==1, or cluster(gwno)
est sto m2leg2


logit coupsuc legpartyaut if sample==1, or cluster(gwno)
est sto m2legp2


logit coupsuc strength if sample==1, or cluster(gwno)
est sto m2strength2


logit coupsuc onepartylp mpartylp if sample==1, or cluster(gwno)
est sto m2lp2


logit coupsuc onepartystr mpartystr if sample==1, or cluster(gwno)
est sto m2str2



esttab m2leg m2leg2 m2legp m2legp2 m2strength ///
m2strength2 m2lp m2lp2 m2str m2str2 ///
using "Tables/basemodel.tex", ///
b(3) eform ci label scalar(N) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Basemodel") replace



/*Defining control variables as macro*/

local controls regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2

/*Table 4.3*/

******COUP ATTEMPTS******

logit coup2 legdum 'controls' if sample==1, or cluster(gwno)
est sto m2leg


logit coup2 legpartyaut 'controls' if sample==1, or cluster(gwno)
est sto m2lp
```

```
logit coup2 strength 'controls' if sample==1, or cluster(gwno)
est sto m2str


*******COUPS*******


logit coupsuc legdum 'controls' if sample==1, or cluster(gwno)
est sto m2leg2


logit coupsuc legpartyaut 'controls' if sample==1, or cluster(gwno)
est sto m2lp2


logit coupsuc strength 'controls' if sample==1, or cluster(gwno)
est sto m2str2



esttab m2leg m2leg2 m2lp m2lp2 m2str m2str2 ///
using "Regressiontables/coups111.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace



/*Table 4.4*/


*******COUP ATTEMPTS*******


logit coup2 onepartylp mpartylp 'controls' if sample==1, or cluster(gwno)
est sto m2lp


logit coup2 onepartystr mpartystr 'controls' if sample==1, or cluster(gwno)
est sto m2str


*******COUPS*******


logit coupsuc onepartylp mpartylp 'controls' if sample==1, or cluster(gwno)
est sto m2lp2
```

```
logit coupsuc onepartystr mpartystr 'controls' if sample==1, or cluster(gwno)
est sto m2str2


esttab m2lp m2lp2 m2str m2str2 ///
using "Regressiontables/coups.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace



/*Table 4.5*/


/*Controls in macro*/
local controls2 regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2


*******COUP ATTEMPTS*******


logit coup2 createaut coupinit2 coupinit2_create2 openaut coupinit2_open ///
'controls2' if sample==1, cluster(gwno)
est sto m2


*******COUPS*******


logit coupsuc createaut coupinit2 coupinit2_create2 openaut coupinit2_open ///
'controls2' if sample==1, cluster(gwno)
est sto m22



esttab m2 m22 ///
using "Regressiontables/coupinitinteractionsNEW.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Party Creation") replace



/*Table 4.6*/
```

```
logit coup2 'controls' if sample==1, or cluster(gwno)
est sto m1star

logit coup2 legdum 'controls' if sample==1, or cluster(gwno)
est sto m1

esttab m1star m1 ///
using "Regressiontables/m1starandm1.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions") replace




/*TABLE 4.7 */

/* MODEL 1* */

/*Predictive power of model*/
/* Out-of-sample analysis */
/* Averaging over 10 seeds */

capture label define tradpred20 0 "P: NO" 1 "P: Yes"
capture label define tradpred15 0 "P: NO" 1 "P: Yes"
capture label define tradpred10 0 "P: NO" 1 "P: Yes"

capture drop include
gen include = 0
replace include = 1 if sample==1

forvalues i = 1001(1)1010 {
display 'i'
capture drop sampler
capture drop gwno_sampler
capture drop estsample
capture drop ds_median
set seed 'i'
gen sampler = uniform() if include == 1
```

```
sort gwno
by gwno: egen gwno_sampler = mean(sampler)
gen estsample = 0
sum gwno_sampler
egen ds_median = median(gwno_sampler) if include == 1
replace estsample = 1 if gwno_sampler > ds_median
capture drop tradprob
capture drop tradpr*

quietly logit coup2 regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2 ///
if include==1 & estsample==1, or cluster(gwno)
predict tradprob, p
gen tradpred20 = 0 if tradprob >=0  & include == 1
replace tradpred20 = 1 if tradprob >= .20 & include == 1
gen tradpred15 = 0 if tradprob >=0 & include == 1
replace tradpred15 = 1 if tradprob >= .15 & include == 1
gen tradpred10 = 0 if tradprob >=0 & include == 1
replace tradpred10 = 1 if tradprob >= .10 & include == 1

lab var tradpred20 "p>20"
lab var tradpred15 "p>15"
lab var tradpred10 "p>10"

label values tradpred20 tradpred20
label values tradpred15 tradpred15
label values tradpred10 tradpred10

tab coup2 tradpred20 if estsample == 0, row col
tab coup2 tradpred15 if estsample == 0, row col
tab coup2 tradpred10 if estsample == 0, row col
}


/*MODEL 1*/


/*Predictive power of model*/
/* Out-of-sample analysis */
```

```
/* Averaging over 10 seeds */


capture label define tradpred20 0 "P: NO" 1 "P: Yes"
capture label define tradpred15 0 "P: NO" 1 "P: Yes"
capture label define tradpred10 0 "P: NO" 1 "P: Yes"



capture drop include
gen include = 0
replace include = 1 if sample==1


forvalues i = 1001(1)1010 {
display `i'
capture drop sampler
capture drop gwno_sampler
capture drop estsample
capture drop ds_median
set seed `i'
gen sampler = uniform() if include == 1
sort gwno
by gwno: egen gwno_sampler = mean(sampler)
gen estsample = 0
sum gwno_sampler
egen ds_median = median(gwno_sampler) if include == 1
replace estsample = 1 if gwno_sampler > ds_median
capture drop tradprob
capture drop tradpr*


quietly logit coup2 legdum regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2 ///
if include==1 & estsample==1, or cluster(gwno)
predict tradprob, p
gen tradpred20 = 0 if tradprob >=0  & include == 1
replace tradpred20 = 1 if tradprob >= .20 & include == 1
gen tradpred15 = 0 if tradprob >=0 & include == 1
replace tradpred15 = 1 if tradprob >= .15 & include == 1
gen tradpred10 = 0 if tradprob >=0 & include == 1
replace tradpred10 = 1 if tradprob >= .10 & include == 1
```

```
lab var tradpred20 "p>20"
lab var tradpred15 "p>15"
lab var tradpred10 "p>10"


label values tradpred20 tradpred20
label values tradpred15 tradpred15
label values tradpred10 tradpred10


tab coup2 tradpred20 if estsample == 0, row col
tab coup2 tradpred15 if estsample == 0, row col
tab coup2 tradpred10 if estsample == 0, row col
}



/*Table 4.8 Logistic regressions  Model 1 with case indicators included*/

logit coup2 legdum 'controls' maxexclpop if sample==1, or cluster(gwno)
est sto m1


logit coup2 legdum 'controls' limr_l if sample==1, or cluster(gwno)
est sto m2


logit coup2 legdum 'controls' fh_cl_l if sample==1, or cluster(gwno)
est sto m3


logit coup2 legdum 'controls' maxexclpop limr_l fh_cl_l if sample==1, or cluster(gwno)
est sto m4



esttab m1 m2 m3 m4 ///
using "Regressiontables/Robustness_spec/casemodel.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions: M1 w/case indicators included") replace



/*Table 5.1 Continent by coup attempts: Autocracies only*/
```

```
tab un_continent_l un_continent_name
lab var un_continent_l "Continent"
label define continent 2 "Africa" 19 "Americas" ///
142 "Asia" 150 "Europe" 9 "Oceania"
lab values un_continent_l continent
tab un_continent_name coup


latab un_continent_l coup if sample!=.


/*Table 5.2 Logistic regressions -- Robustness tests 1 */


/*Macro for robustness variables*/


local rob1 i.un_continent_l i.decade lnme


lab var lnme "Military spending"
lab var un_continent_l "Continent"
lab var decade "Decade"


logit coup2 legdum 'controls' 'rob1' if sample==1, or cluster(gwno)
est sto rob1


logit coup2 onepartylp mpartylp 'controls' 'rob1' if sample==1, ///
or cluster(gwno)
est sto rob2


logit coup2 createaut coupinit2 coupinit2_create2 ///
'controls2' 'rob1' if sample==1, cluster(gwno)
est sto rob3


logit coupsuc legdum 'controls' 'rob1' if sample==1, or cluster(gwno)
est sto rob11


logit coupsuc onepartylp mpartylp 'controls' 'rob1' if sample==1, ///
or cluster(gwno)
est sto rob22
```

```
logit coupsuc createaut coupinit2 coupinit2_create2 ///
'controls' 'rob1' if sample==1, cluster(gwno)
est sto rob33
```

```
esttab rob1 rob11 rob2 rob22 rob3 rob33 ///
using "Regressiontables/Robustness_spec/robcheck2.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace
```

```
/*Table 5.3: Fixed effects*/
```

```
xtlogit coup2 legdum 'controls' if sample==1, fe
est sto fe1
```

```
xtlogit coup2 onepartylp mpartylp 'controls' if sample==1, fe
est sto fe4
```

```
xtlogit coupsuc legdum 'controls' if sample==1, fe
est sto fe6
```

```
xtlogit coupsuc strength 'controls' if sample==1, fe
est sto fe8
```

```
xtlogit coupsuc onepartylp mpartylp 'controls' if sample==1, fe
est sto fe9
```

```
local controls2 regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2
```

```
xtlogit coup2 createaut coupinit2 coupinit2_create2 'controls2' if sample==1, fe
est sto fe11
```

```
xtlogit coupsuc createaut coupinit2 coupinit2_create2 'controls2' if sample==1, fe
est sto fe12
```

```
esttab fe1 fe6 fe4 fe9 fe11 fe12 ///
using "Regressiontables/Robustness_spec/fe.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Fixed effects") replace



/*Table 5.4: Polity dichotomized and ACLP*/

gen polity_di=.
replace polity_di=0 if p_polity2<6
replace polity_di =1 if p_polity2>5
tab p_polity2 polity_di

lab var polity_di "Polity dichotomy"
lab var chga_demo_l "ACLP dichotomy"

label define polity_di 0 "Autocracy" 1 "Democracy"
label values polity_di polity_di

label define chga_demo_l 0 "Autocracy" 1 "Democracy"
label values chga_demo_l chga_demo_l

latab polity_di chga_demo_l



/*Table 1 in Appendix 2*/

summ p_polity2 if type2_l==1 & sample!=.

gen type2polity=0
replace type2polity=1 if p_polity2>5 & type2_l==1

logit coup2 legdum 'controls' ///
if sample==1 & type2polity==0, or cluster(gwno)
est sto rob1

logit coup2 onepartylp mpartylp 'controls' ///
```

```
if sample==1 & type2polity ==0, or cluster(gwno)
est sto rob2


logit coup2 createaut coupinit2 coupinit2_create2 ///
'controls2' if sample==1 & type2polity ==0, cluster(gwno)
est sto rob3


logit coupsuc legdum 'controls' ///
if sample==1 & type2polity ==0, or cluster(gwno)
est sto rob11


logit coupsuc onepartylp mpartylp 'controls' ///
if sample==1 & type2polity ==0, or cluster(gwno)
est sto rob22


logit coupsuc createaut coupinit2 coupinit2_create2 ///
'controls2' if sample==1 & type2polity ==0, cluster(gwno)
est sto rob33



esttab rob1 rob11 rob2 rob22 rob3 rob33 ///
using "Regressiontables/Robustness_spec/robchecktype2.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace



/*Table 2 in Appendix 2*/

/*Institutionalized autocracies only*/

logit coup2 legpartyaut 'controls' if sample==1 & legdum==1, or cluster(gwno)
est sto m1


logit coup2 strength 'controls' if sample==1 & legdum ==1, or cluster(gwno)
est sto m2


logit coupsuc legpartyaut 'controls' if sample==1 & legdum==1, or cluster(gwno)
```

```
est sto m3


logit coupsuc strength 'controls' if sample==1 & legdum ==1, or cluster(gwno)
est sto m4


esttab m1 m3 m2 m4 ///
using "Regressiontables/Robustness_spec/instdiff.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
 title("Logistic regressions -- Institutional differences") replace



/*Table 3 in Appendix 2*/

local controls regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2

logit coup2 noparty onepartylp mpartylp 'controls' if sample==1, or cluster(gwno)
est sto m2lp

logit coup2 noparty onepartystr mpartystr 'controls' if sample==1, or cluster(gwno)
est sto m2str

logit coupsuc noparty onepartylp mpartylp 'controls' if sample==1, or cluster(gwno)
est sto m2lp2

logit coupsuc noparty onepartystr mpartystr 'controls' if sample==1, or cluster(gwno)
est sto m2str2



esttab m2lp m2lp2 m2str m2str2 ///
using "Regressiontables/Robustness_spec/noparty.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- No party autocracies with legislature included") ///
replace



/*Table 4 in Appendix 2*/
```

```
local rob2 i.un_continent_l i.decade


logit coup2 legdum 'controls' 'rob2' if sample==1, or cluster(gwno)
est sto rob1


logit coup2 onepartylp mpartylp 'controls' 'rob2' if sample==1, ///
or cluster(gwno)
est sto rob2


logit coup2 createaut coupinit2 coupinit2_create2 ///
'controls2' 'rob2' if sample==1, cluster(gwno)
est sto rob3


logit coupsuc legdum 'controls' 'rob2' if sample==1, or cluster(gwno)
est sto rob11


logit coupsuc onepartylp mpartylp 'controls' 'rob2' if sample==1, ///
or cluster(gwno)
est sto rob22


logit coupsuc createaut coupinit2 coupinit2_create2 ///
'controls' 'rob2' if sample==1, cluster(gwno)
est sto rob33



esttab rob1 rob11 rob2 rob22 rob3 rob33 ///
using "Regressiontables/Robustness_spec/robcheck8.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace



/*Table 5 in Appendix 2*/


logit coup2 legpartyaut 'controls' 'rob1' if sample==1, or cluster(gwno)
est sto h2
```

```
logit coup2 strength 'controls' 'rob1' if sample==1, or cluster(gwno)
est sto h4

logit coupsuc legpartyaut 'controls' 'rob1' if sample==1, or cluster(gwno)
est sto h22

logit coupsuc strength 'controls' 'rob1' if sample==1, or cluster(gwno)
est sto h42

esttab h2 h22 h4 h42 ///
using "Regressiontables/Robustness_spec/robcheck7.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace



/*Table 5.5: Logistic regressions  Robustness tests 2*/
/*Alternative operationalization of democracy*/
/*Loading dataset nr.2*/

***SETTINGS***
clear matrix
clear
set more off
set matsize 800
cd "/Users/espengeelmuydenrd/Dropbox/UiO/Master/Masteroppgave/Data"

use "mastercoups3.dta"
summ

gen sample=1 if leg!=. & legpartyaut!=. & strength!=. ///
& coupinit2!=. & l2_logmadgdpc!=. & l2_madgrpercent!=. ///
& prevcatt2!=. & polity_di==0

tab sample

sort gwno year
```

```
/*Macros for controls*/


local controls regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2 coupinit2


local controls2 regdurspec l2_logmadgdpc ///
l2_madgrpercent prevcatt2



logit coup2 legdum 'controls' if sample==1, or cluster(gwno)
est sto rob1


logit coup2 onepartylp mpartylp 'controls' if sample==1, or cluster(gwno)
est sto rob2


logit coup2 createaut coupinit2 coupinit2_create2 ///
'controls2' if sample==1, cluster(gwno)
est sto rob3


logit coupsuc legdum 'controls' if sample==1, or cluster(gwno)
est sto rob11


logit coupsuc onepartylp mpartylp 'controls' if sample==1, or cluster(gwno)
est sto rob22


logit coupsuc createaut coupinit2 coupinit2_create2 ///
'controls2' if sample==1, cluster(gwno)
est sto rob33



esttab rob1 rob11 rob2 rob22 rob3 rob33 ///
using "Regressiontables/Robustness_spec/robcheckpolity.tex", ///
b(3) eform pr2 ci label scalar(N ll_0 ll) ///
star(+ 0.10 * 0.05 ** 0.01 *** 0.001) ///
title("Logistic regressions -- Coups") replace
```