Military Allocations and Regime Stability in Transitional Democracies

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ABSTRACT
In contrast to the conventional wisdom that democratization reduces coups, 46% of coups targeted democracies from 2000-2009, twice the rate seen in the prior half-century. Efforts to explain coups have arrived at wildly varied conclusions regarding the vulnerability of democracies. We argue that this is attributable to regime type acting as a conditional influence. We theorize that democratization incentivizes old elites to veto the process, and these vetoes are more likely to occur when the new regime cannot credibly commit to the military’s corporate interests. Using cross-national data for 172 states for the years 1952-2009, we find that though young democracies are more vulnerable to coups than either authoritarian regimes or older democracies, this vulnerability is completely mitigated when military expenditures are near or above the sample mean. We also find that commonly-argued determinants of coups have little influence in authoritarian regimes, suggesting the need for scholars to revisit commonly held assumptions regarding autocratic survival.

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Often seen solely as a product of authoritarian politics, the last decade has seen military coups end over 20 years of democracy in Mali and terminate fledgling democratic experiments in Mauritania and Egypt. More recently, Burkina Faso’s presidential guard failed in a similar bid in September 2015. Recent years have also seen an influx in studies on coups d’état. Taking advantage of a number of new cross national datasets, scholars have begun to elucidate a number of processes involving the causes and consequences of coups. This same period has seen an even more pronounced increase in attention to peculiarities of non-democratic regimes, with seminal contributions from Gandhi (2008), Svolik (2012), and others bringing renewed vigor to the study of authoritarian institutions. These bodies of work have largely converged, as scholars have tended to look at coups as a definitively authoritarian process. Geddes (2003, 66), for example, has referred to the act as an authoritarian vote of no confidence, while others have pointed to democratization as insulating regimes from coups (e.g., Lindberg and Clark 2008).

Unfortunately, scholarship has not systematically considered the conditions under which coups do threaten democracies. This tendency has important implications, given a large number of coups actually target democracies. In fact, over one hundred coup attempts targeted democratic regimes between 1951 and 2009. And in contrast to the idea that liberalization brings stability, especially in the post-Cold War era, the tendency for democracies to be targeted seems to have worsened with time. The decade of 2000-2009 saw 13 of 28 coup attempts (46%) target democracies, including 8 of the 12 attempts that succeeded.

In short, coups against democracies are a very real—if not surprisingly common—political phenomenon, and comparative literature has offered little in the way of an explanation. In this paper we explore the causes of, and potential solutions for, the military’s veto of democratic transitions. We argue that the nature of democratic regimes makes them particularly vulnerable in
their first few years of existence. Expanding on efforts by Acemoglu and Robinson (2006), Acemoglu, Ticchi, and Vindigni (2010), and Bell (2016) we argue these characteristics create a commitment problem in which militaries become especially sensitive to challenges to their corporate interests. We argue that coups are significantly more likely to target young democracies, and this trend will be strongest when youth coincides with organizational grievances. We test our expectations with a global sample of 172 countries, ultimately finding that, ceteris paribus, while democracies tend to be more vulnerable to coups when they are young, the trend is only true for states with very low levels of military expenditures. We argue this trend is driven by the ability of high spending regimes to overcome a commitment problem during transitions.

The paper proceeds as follows. First, we briefly review prior literature regarding the vulnerability of democracies to coups. Second, we offer a theoretical argument for the conditions under which democracies should be more vulnerable to coups, ultimately pointing to the importance of the regime’s youth. Next, we expand upon this argument to show how the organizational interests of the armed forces are especially important for young democracies. Finally, we test our argument and then conclude with a brief discussion of the policy implications of the results.

Coups and Democracy

Recent years have seen an influx of scholarship on the causes of coups d’état. However, few efforts have attempted to assess the implications of regime type for coup activity beyond the

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2 We ultimately defer to the definition and data described by Powell and Thyne (2011, 252), which describes coups as “illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive.” We opt for this definition and data source for multiple reasons. First, unlike authoritarian-regime focused efforts such as Svolik (2012), Powell and Thyne include all regime types. Second, efforts that exclusively code specific episodes of power transfer (e.g., Goemans et al 2009; Svolik 2012) omit efforts that fail. Given our interests lie in explaining the decision to mount a coup, focusing solely on the event’s outcome is likely to bias the results. Third, while Powell and Thyne and Marshall and Marshall (Center for Systemic Peace/CSP) both code successful and failed coup attempts,
inclusion of control variables for democracy or military regime, with no consideration of the specific conditions under which a regime’s traits might predispose it to a coup. Not coincidentally, large-N approaches to assessing the democratic vulnerability of different regime types have resulted in quite varied results.

Looking at a global sample, Casper and Tyson (2014) do in fact find that states with higher Polity IV scores are significantly less likely to have coups, while Bell and Koga Sudduth (2015) find that democracies are less coup-prone than civilian autocracies and military regimes. Results, however, are quite varied. For example, Powell (2012) and Hiroi and Omori (2013) provide limited support for a curvilinear relationship. Using various democracy indicators, Kim (2016), Leon (2014), Hiroi and Omori (2015), and Böhmelt and Pilster (2015) all find an insignificant association between democracy and coups. Disaggregating by region produces similar results. Thyne (2010), for example, finds democracy to be insignificantly associated with coup activity in Latin America, Wobig (2015) finds unified democracy scores to be unconnected to coup attempts in either Latin America or Africa, Powell et al. (2016) report no association in their study of Africa, while Tusalem (2010) actually finds democracies to be significantly more coup-prone than dictatorships, both in global and Africa-specific samples.

the latter omits many cases that fit our conceptual definition of a coup (e.g., the replacement of leaders such as a Moussa Traoré, Hosni Mubarak, Blaise Compaoré, and others), but are excluded due to the presence of protests. The dataset also includes many cases that do not fit state apparatus criteria common to most conceptualizations of coups (including our own). Cases from the most recent 10 years of the dataset includes efforts led by exiles (Gambia 2014), a pastor (DRC 2013), non-state political elites (S Sudan 2013), mutinies (Eritrea 2013, Ecuador 2010, Philippines 2007), “former” and “exiled” army officers (Guinea 2011; Ivory Coast 2012), “unspecified” actors (Philippines 2006; Chad 2006; Lesotho 2007, 2009; Burundi 2006, 2010; DRC 2011, Niger 2011, Iraq 2011; DRC 2011), “white supremacists” (South Africa 2012), foreign mercenaries (Lesotho 2009; Comoros 2013), rebel organizations attacking government forces (Sudan 2008; Chad 2006, 2008), rebel forces attacking a foreign capital (Eq. Guinea 2009), non-government militia (Central African Republic 2013); pro-democracy protestors (Bahrain 2011; UAE 2013), a dispute over party leadership (Zimbabwe 2014), and the leaders of banned political parties that by definition have no role in government (Azerbaijan 2011; Vietnam 2011). The data clearly conflate various types of activities undertaken by a range of actors that are beyond the scope of our theory. Even when looking only at the most reliable categories (successful and failed coup attempts) 40% of cases in the last decade of the CSP data cannot be definitively tied to a segment of the state apparatus.
The discrepancies in prior findings and the lack of support for an otherwise compelling case for the legitimizing influence of democracy suggests democracies are either equally vulnerable to coups when controlling for other factors, or that these models are not adequately capturing the scenarios under which democracies are vulnerable to or insulated from coups. Our reading of prior literature on political survival, and case evidence in particular, suggests that earlier studies have erred in not treating the vulnerability of democracies as conditional on other characteristics. Following earlier rationalist approaches to explaining military coups, in the next section we argue that coup vulnerability largely rests on a new democracy’s ability and willingness to incentivize potential coup-plotters to adhere to the new rules of the regime.

Vetoing Democracy

Recent history hints at the importance of these dynamics. Burkina Faso had made significant strides toward democratization following the October 2014 ouster of Blaise Compaoré. The longtime president’s downfall was prompted by mass protests against his effort to abolish term limits, with elements of the army and then the presidential guard seizing power and promising to manage a democratic transition. This process appeared to be vetoed when interim president Michael Kafando and prime minister Isaac Zida were detained in a 16 September 2015 military coup led by members of the Regiment of Presidential Security (RSP).

Gilbert Diendéré’s coup against the transitional Burkinabé government came less than a year removed from the military’s October 2014 seizure of power. Compaoré had himself seized power in a 1987 coup and maintained power for twenty-seven years, enabled specifically by elements of the RSP and Diendéré himself. In short, coups are far from unusual in Burkina Faso, and the main players in the state’s recent political turmoil have been around for decades. By the time of Diendéré’s attempted coup, the country had already racked up seven successful coups
d’état according to the Powell & Thyne (2011) dataset, just outpacing Benin (6) and Nigeria (6) as having the most in Africa. But the country is unique among these in that the phenomenon is a continuing aspect of political transitions. In stark contrast, 2015 marked four coup-free decades for Benin, while Nigeria had seen over two decades since Sani Abacha’s 1993 putsch. Both of these states have subsequently seen competitive multiparty elections lead to bona fide transitions of political power, while coups have become a trend associated with a bygone era. The Burkinabé case does, however, closely parallel recent developments in failed transitions elsewhere in the region.

Mauritania’s bloodless August 2005 coup against Maaouya Ould Sid-Ahmed Taya, for example, appeared to bring promising changes. The seventeen-member Military Council for Justice and Democracy (MCJD) was established to oversee the transition and barred soldiers from contesting the ensuing parliamentary and presidential elections. The international community was delighted when a career civil servant, Sidi Mohamed Ould Cheikh Abdallah, won the presidency. However, General Mohamed Ould Abdel Aziz of the Presidential Security Battalion seized power via a coup in June 2008 following Abdallah’s purge of senior army officers. Egypt similarly saw the Supreme Council of the Armed Forces (SCAF) take power in February 2011 with the promise to hold democratic elections. As with Burkina Faso, a longtime ruler was replaced by the armed forces following mass protests against their government. And like Mauritania, the 2012 presidential election of civilian Mohamed Morsi was heralded as an important step toward democratization. But like Abdallah, Morsi was removed from power in his second year, while Egyptian General Abdel Fattah al-Sisi would follow the path of General Abdel Aziz in winning the presidency in the subsequent election. Though the Egyptian case has a variety of confounding factors, Morsi had similarly made a number of decisions that negatively impacted the institutional
interests of the military. He had earlier removed the head of the military police, the Minister of Defense, the Chief of Staff, and the heads of the Army, Navy, and Air Force. More proximate to the coup, Morsi had begun to take steps that would undermine the military’s traditionally privileged economic and political status.

Observers of these earlier cases were likely on edge following the interim Burkinabé government’s decision to abolish the RSP in early September 2015. The organization’s subsequent coup attempt falls in line with other recent cases of failed transitions in that elements of the security services attempted to veto democratization after their organizational interests were threatened. In contrast to these efforts reducing the influence and resources of the armed forces—frequently with the lauding of the international community—Latin America’s many transitions from military rule to democracy were accompanied by deliberate attempts to appease the military, especially in the short term. For example, Uruguay’s transition from military rule saw the armed forces maintain considerable de facto power over legislation in the short term, the Law of Expiry disallowed the prosecution of the military for human rights violations, and members of the armed forces were allowed to maintain their positions (Loveman 1994). Similar policies where later enacted in Chile, which even saw Augusto Pinochet remain as the Commander-in-Chief of the Chilean Army after his stepping down from the presidency. The Chilean armed forces further received a guaranteed percentage of the state’s substantial copper revenues, which still has the Chilean armed forces among the world’s best funded over a quarter century later. Post-junta Argentina, meanwhile, illustrates the potential perils of overstepping against the military. Raul Alfonsin’s government purged dozens of generals and enacted cuts of over 40% to military operations, 50% for equipment, and 25% for salaries, leaving the armed forces in a “professionally moribund state” (Pion-Berlin 1991, 545). The ensuing years saw multiple military mutinies. Particularly notorious was a
December 1988 mutiny of over 500 soldiers that quickly spread to bases throughout the country. The effort resulted in a pay increase of 20% for the armed forces. While maintaining—or even improving—the perks of the armed forces might seem contrary to the ideal conceptualization of civilian control, maintaining these interests in the short term has often been critical to civil-military stability and the transition’s success in the long term.

The Conditional Vulnerability of Democracy

Scholars have offered a consensus view that civilian control of the military is a necessary element for democratic consolidation (e.g., Croissant et al. 2010, 950). While all regimes may stress the importance of military subordination to civilian decision makers, “new democracies face a particularly difficult and dangerous challenge” in this regard (Diamond 1999, 113). The transition from autocracy to democracy often includes a dramatic shift in the role of the military in which the armed forces go from a highly influential political entity to a more subservient one and can further threaten the traditionally privileged position they previously held (e.g., Acemoglu, Ticchi, and Vindigni 2010; Svolik 2012; Harkness 2016). Authoritarian leaders usually “secure military support by granting them wide ranging benefits…from generous revenues up to autonomous decision-making authority,” and these benefits become immediately threatened in a democratic transition (Croissant et al. 2010, 953).

We illustrate post-transition instability in Figure 1, which reports the frequency of coup attempts at each year a regime was in place, distinguishing between democracies and autocracies (0=first year as the regime type). Whereas democracies tend to see coups disproportionately target regimes that are five years or younger, autocracies see far more dispersion of coup activity. Using a different coup attempt measurement and considering incumbent takeovers, Svolik (2014) is less optimistic, contending that this democratic insulation from authoritarian reversals is really seen
between the seventeenth and twentieth year of a democracy’s existence. He equates the threat of
coups to a childhood disease, arguing that once a democracy survives long enough, the ‘disease’
disappears (Svolik 2014, 735).

Figure 1: Regime Type, Regime Age, and Coup Attempts, 1950-2009

While there might not be a short term cure, we contend that surviving Svolik’s “childhood”
will often been dependent on ongoing treatment that keeps the polity alive until maturity. Young
democracies are considerably handcuffed in pursuing the “wide ranging benefits” available to
autocracies.” It is common for autocrats to have numerous “civilian” resources with which to spoil
their potential adversaries, and these types of resources will be especially difficult to utilize in the
name of the public good. Robert Mugabe’s reforms saw Zimbabwe redistribute seized land as part
of a patronage system that would allow the regime to survive—in some notorious cases
confiscating land from farmers who supported the opposition party and turning the property over
to military and police officers (Jeter 2001). In similar fashion, Kenyan President Daniel Arap Moi
engaged in the distribution of land to enhance political support in the mid-1980s, including
providing land grants to junior military officers (Kanyinga 2000). In Côte d’Ivoire, military
officers were given positions of political or economic authority in the Parti Democratique de Côte
d’Ivoire (PDCI), while even “unreliable” officers were provided positions in state-owned
corporations (N’Diaye 2000). In Zambia, military personnel were provided subsidized food and beer under Kenneth Kaunda’s 27-year presidency (Lindemann, 2011). More systematically, Arriola (2009) demonstrated that African leaders have also used cabinet appointments as a way to lengthen their tenure by buying support from potential opponents, a trend later argued to be applicable to legislative seats (Svolik 2012; Powell and Chacha 2016).

However, legal and other constraints placed on democratic leaders reduce their ability to utilize spoils in a similar manner. In their in-depth discussion of coup-proofing, Pilster and Böhmelt (2012, 359) point to “cost efficient ‘fire alarms’” that greatly reduce the ability of democrats to coup-proof. News outlets, watchdog groups, think tanks, and public access to this information will limit the ability of democratic leaders to ensure loyalty through the provision of private goods. Not surprisingly, Pilster and Böhmelt find that democracies are significantly less likely to undertake institutional coup-proofing. These dynamics make it especially important for democracies to be able to commit to the armed forces via resources that are more acceptable to the public. Perhaps most obvious is the potential for military expenditures to be directed toward ensuring loyalty more than providing security.

Numerous studies have unsurprisingly pointed to organizational interests, especially issues related to funding, as catalysts for coups (Mbaku 1994; Leon 2014), while others have pointed to governments increasing expenditures during periods in which they fear coup risk is high (e.g., Collier and Hoeffler 2006). These studies suggest the manipulation of military expenditures is an indispensable tool for authoritarian survival. In an investigation of military capabilities in Africa, for example, Henk and Rupiya (2001, vii) concluded that the region’s leaders spend “an overwhelming and crippling proportion of their budgets on salaries and personnel allowances…and tend to serve regimes in power rather than societies at large.” In some cases, they
report over two-thirds of military budgets going directly toward allowances. Notable exceptions to their critique include South Africa, Botswana, Namibia, Ghana, and Nigeria, all of which are—not coincidentally—the continent’s more democratic regimes. As Bueno de Mesquita et al. (2003, 37) conclude, “leaders who rely on a broad-based coalition to remain in office cannot keep their supporters from defecting to a rival by offering substantial private benefits.” In line with Acemoglu and Robinson (2006) we point to the challenge democratization poses for the distribution of goods amongst actors who can veto a transition. Already constrained from providing private goods such as higher salaries, new democracies face the additional challenge of having to provide a much wider array of public goods given the increased size of the winning coalition after a transition (Bueno de Mesquita et al. 2011). In short, funds are a scarcer resource.

Democracies consequently face a coalescence of factors that make the security apparatus see the new system as a threat to their private and organizational interests, the regime has little recourse to lower the armed forces’ disposition for a coup, and they lack the tools to be able to combat one. The willingness of the armed forces to accept the constraints of democracy, then, can be seen as “letting go of the trapeze without knowing whether one would be caught” (Pzreworski 2015, 103). This is perhaps an earned fear. Investigating various budget crises in Africa, for example, Gallagher (1994) found military expenditure was cut more frequently than any other type of government spending. Global studies, meanwhile, commonly find that democracies tend to systematically spend less on their militaries than non-democracies (e.g., Hewitt 1992; Goldsmith 2003; Dunne and Perlo-Freeman 2003; Nordhaus, Oneal and Russett 2012; Albalate, Bel, and Elias 2012).³

³ Albalate et al. (2012) further find that military expenditures are significantly higher in presidential democracies than in parliamentary democracies, potentially suggesting that other aspects of institutional design are important could be driving the data. Additional tests reveal that presidential systems are in fact typically more coup-prone than parliamentary regimes. However, this is only true for non-democracies. In a sample of democracies, presidentialism
These dynamics can largely be framed through the lens of commitment problems (e.g., Bell 2016. Similar to the environments seen after civil wars, young democracies exhibit characteristics of uncertainty and fragility (Licklider 1995; Fearon 2004; Hartzell and Hoddie 2007; Walter 2009). Following a decision to cease fighting, adversaries engage in a process of bargaining which ultimately requires parties to credibly commit to agreements in the post-conflict environment. This process often requires power-sharing stipulations that former adversaries not only agree to, but do so with credible commitments (Hartzell and Hoddie 2007, 2016). In these cases, various actors may seek to protect their own interests—some even deciding to use power to exercise control over desired resources, thus spoiling a successful transition and/or hampering prospects for democratic consolidation (Hartzell 1999). We echo these points and contend that in the midst of the uncertainty often ushered in during the democratization process, the sustainability of democracy will likely depend on the ability of the regime to commit to protecting the interests of a would be adversary, in this case the armed forces.

It is consequently important for the regime to signal a commitment to the interests of potential veto players. Slater, Smith and Nair (2014), for example, question the redistributive model as a cause of democratic breakdown and rather contend that redistribution, when targeted at those who threaten democracy, can improve prospects for democratic longevity (consolidation/insulation). As they succinctly note, “if unhappy soldiers are the biggest proximate threat to democracy, then soldiers should be reasonably well paid, well treated, and well equipped to help encourage and sustain their political subservience” (Slater, Smith, and Nair 2014, 368).4

4 This is not to say that such efforts are always successful. Salvador Allende, for example, attempted to ensure military loyalty by asking soldiers to serve as cabinet members, increasing military salaries and fringe benefits, and purchasing additional military equipment (Nordlinger 1977, 28, 71). While these increases were designed to mitigate the threat posed by the military, Allende was overthrown by a putsch in 1973.

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is far from conventional levels of statistical significance ($p<.615$). Results reported in the following section remain consistent when including a presidentialism dummy variable.

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Huntington’s seminal *Third Wave* further notes that soldiers in democratizing states will often believe they “are badly paid, badly housed, and badly provided for—and they are probably right” (1991, 252). His solution is to “give them toys,” ranging from better personal perks to fancy tanks, planes, and the like. Bell (2016, 27) similarly argues that democracies can mitigate threats posed by military coup plotters by “improving the lives of military elites throughout [a] democratic transition.” He recasts threats of coup d’état in democracies as a commitment problem between leaders and plotters. Highlighted by executive constraints, he shows that the nexus between leaders and plotters looks quite different in democracies than scholars have traditionally noted. Commitment problems ultimately lead to the inability of democracies to prevent attempts and executive constraints increase the propensity of coups. In contrast to civil-military friction being inevitable when democracies are young, a demonstrable commitment to the corporate interests of the armed forces can potentially provide stability.

Specifically, we argue that the heightened vulnerability of young democracies will be driven by cases in which the regime is unwilling or unable to demonstrate such a commitment. Conversely, regimes that do see a commitment to the corporate interest of the armed forces will see the uncertainty associated with transitions create less of a concern. This discussion leads us to the following expectations.

*Hypothesis 1:* Democracies are more vulnerable to coups than autocracies when the regime is young.

*Hypothesis 2:* Democracies are more vulnerable to coups than autocracies when military expenditures are low.
Hypothesis 3: The vulnerability of young democracies to coups occurs when military expenditures are low.\textsuperscript{5}

Data and Research Design

The argument presented in the previous section resulted in three expectations. First, we anticipate that a democratic transition can be volatile. We expect that young democracies will be more vulnerable to coups than young autocracies (Hypothesis 1). Second, democracies should be more vulnerable to coups than autocracies when spending on the military is low (H2). Third, we expect that low levels of military spending is disproportionately problematic for young democracies, relative to otherwise similar autocracies (H3). While our theory is applicable to a wide range of organizational interests, we frame our argument here in terms of military expenditures due to the availability of systematic data for the factor (as opposed to dynamics such as recruitment, promotion, and retention practices). Further, given the constraints placed on democracies, military expenditures are perhaps the best tool for regimes needing to demonstrate a commitment to both the corporate interest of the armed forces and to providing the public good of security. To test these expectations, we use cross-national data from 172 countries for the years 1952-2009. We employ a logistic regression due to the dichotomous nature of the dependent variable, discussed below.

Dependent Variable

\textsuperscript{5} Given a common overemphasis on interaction coefficients, it is worth clarifying that our expectations for the coup vulnerability of democracies (relative to autocracies) includes a significant democracy coefficient at low levels of regime years and military expenditures. Our argument does not require that the three-way interaction we adopt to result in a significant interaction coefficient. It anticipates that democracy will be positive and significant at low levels of regime years, military expenditures, and the coincidence of both. We anticipate that democracies will be indistinguishable from autocracies at mid to high values of military expenditures. Stated simply, we do not specifically predict significantly interaction coefficients, just that democracy is significant and positive at low levels of the other constitutive term(s). However, as reported below, we do find significant signs in two of the three.
The dependent variable, *coup attempt*, is drawn from Powell and Thyne (2011, 252), who describe coups as “attempts by the military or other elites within the state apparatus to unseat the sitting head of government using unconstitutional means.” We operationalize coup attempts dichotomously, distinguishing between country-years in which the unit did not experience a coup attempt (0) from those in which the country experienced at least one attempt (1). We opt for a binary treatment of the dependent variable over a count model due to assumptions of the estimator. Given that coups occurring in close succession are almost invariably tied to one another, a within-year count variable would violate the assumption of event independence. We address temporal dependence for coups occurring between years by including temporal controls.

*Explanatory Variables*

Our primary theoretical interests lie with regime type, regime age, and spoils available to the military. We utilize democracy data from Cheibub, Gandhi, and Vreeland (2010) to account for regime type and regime age. Our proxy for military spoils relies on the logged value of *military expenditures per soldier*. The *expenditures per soldier* data are taken from the Correlates of War’s National Material Capabilities dataset, with updates from the Stockholm International Peace Research Institute (Singer, 1988; SIPRI, 2014). We opt for expenditures per soldier over alternatives such as expenditures as a proportion of GDP or proportion of government spending since the latter are relative to the size of the economy and/or budget, and not relative to the per capita benefit of soldiers. In Huntington’s (1991) suggestion for democratizing states, for example, he explicitly encourages a reduction in personnel precisely so that more per capita benefits can be provided to the soldiers that remain in the absence of having to actually increase military
expenditures. As a result, this operationalization seems especially appropriate and has previously been found to be negatively associated with coup activity (Bell and Koga Sudduth 2015).6

**Conditional Influences**

Our theory argues that the influence of democracy on coup activity is best treated as conditional on the regime’s age and military expenditures. Here we anticipate democracies being more coup-prone in their early years. We then expect this association to be conditional on a third explanatory factor, military expenditures, where the vulnerability of young democracies is driven by low expenditures. Our models consequently introduce interaction terms in three ways: 1) we interact democracy with regime age; 2) we interact democracy with military expenditures; 3) most explicitly testing our expectations, we introduce a three-way interaction that simultaneously considers all three variables and interactions. Here we expect democracies will be most vulnerable to coups when they are young, but that this vulnerability is offset by higher levels of military expenditures.

**Control Variables**

A host of control variables are also included in order to address potentially confounding factors. First we include *military regime*, again using regime type data of Cheibub, Gandhi, and Vreeland (2010), as military regimes are known to be disproportionately more coup-prone than

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6 We avoid considering changes in military expenditures for four reasons. First, our argument largely expects maintenance of the status quo to be a potentially stable environment. In other words, we do not anticipate that absence of an increase will motivate a coup. Second, as indicated in Collier and Hoeffler (2006), leaders will often increase expenditures when they are especially fearful of coups. We consequently do not expect short term increases to insulate leaders, and such trends could reflect instances in which leaders are especially vulnerable to coups. We pointed to Salvador Allende as an example in fn 3. Third, the decision to reduce expenditures could itself prompt a coup prior to the cut materializing. Idi Amin, for example, notoriously ousted Milton Obote following the latter’s publication of a streamlined budget and a mere promise to investigate recent military spending patterns (e.g., Lofchie 1972). Finally, realized expenditure cuts are potentially more likely to go through when the government has little reason to otherwise fear a coup. Not surprisingly, change in military expenditures has been found to be a very poor predictor of coups, a trend attributed to endogeneity (e.g., Powell 2012). While military expenditures per soldier may not be an ideal measure for organizational interest, it avoids the numerous concerns related to changes in military expenditures.
civilian regimes and we wish to avoid reporting an autocratic effect that is driven solely by military regimes (Geddes 1999; Belkin and Schofer 2003). Next, we capture state wealth by taking the natural log of real GDP per capita. Growth refers to year-to-year percent fluctuations in gross domestic product. Economic data are taken from updates from Gleditsch (2002). We anticipate higher wealth and growth to be associated with fewer coups (Londregan and Poole 1990; Galetovic and Sanhueza 2000).

Cold War refers to country-years prior to 1990 and is expected to carry a positive sign. Civil conflict accounts for whether the state was involved in internal dispute involving at least 25 deaths, using the incidence measure available from the Armed Conflict Dataset (Themnér and Wallensteen 2013). Following the lead of scholars such as Hultquist (2013), we recode instances of armed conflict to 0 when the case histories reveal the event to be a bloody military coup. Finally, we control for temporal dependence by including a measure for the number of years since the country’s last coup attempt, as well as the measure’s squared and cubed polynomials (Carter and Signorino 2010).

Results

Table 1 reports our logistic regressions, beginning with a base model that omits our interaction terms (Model 1). We next introduce the democracy and regime years interaction term in model 2, and the democracy and military expenditure interaction in model 3. Our final model considers the three-way interaction. As a test of the sensitivity of our results, we report the interactive models when controlling for country (models 5-7) and year (models 8-10) fixed effects. Our results are very consistent across these specifications, while differences amongst the control variables can be explained by the nature of the model. For example, the insignificance of military regimes in the fixed effects models is likely due to countries with no variation on the measure
dropping from the analysis. In other words, countries that never experienced military rule or a coup would not appear in the sample. We defer to reporting results from the fixed effects models.

We find support for all of our proposed hypotheses. Model 1 reports an insignificant association between regime type and coup activity, a result that largely mirrors prior research and

| Table 1: The Conditional Relationship between Democracy and Coups, 1952-2009 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                 | 1               | 2               | 3               | 4               |
| Democracy                       | 0.214           | 0.668***        | 0.936***        | 1.291***        |
|                                 | (0.195)         | (0.220)         | (0.326)         | (0.450)         |
| Regime Years                    | -0.003          | 0.002           | -0.004          | 0.006           |
|                                 | (0.006)         | (0.006)         | (0.006)         | (0.012)         |
| Expenditures per Soldier        | -0.261***       | -0.255***       | -0.134          | -0.095          |
|                                 | (0.093)         | (0.093)         | (0.102)         | (0.182)         |
| Democracy * Regime Years        | -0.051***       | -0.051***       | -0.058          |                 |
|                                 | (0.018)         | (0.018)         | (0.043)         |                 |
| Democracy * Expenditures        | -0.493***       | -0.487*         |                 |                 |
|                                 | (0.175)         | (0.265)         |                 |                 |
| Regime Years * Expenditures     |                 | -0.004          |                 |                 |
|                                 |                 | (0.007)         |                 |                 |
| Democracy * Regime Years * Expenditures |        | 0.010          |                 |                 |
|                                 |                 | (0.020)         |                 |                 |
| Military Regime                 | 0.300**         | 0.330**         | 0.319**         | 0.337***        |
|                                 | (0.126)         | (0.130)         | (0.128)         | (0.130)         |
| Civil Conflict                  | 0.349**         | 0.337**         | 0.346**         | 0.333**         |
|                                 | (0.163)         | (0.161)         | (0.163)         | (0.164)         |
| GDP per Capita                  | -0.238***       | -0.203**        | -0.229***       | -0.206**        |
|                                 | (0.090)         | (0.086)         | (0.088)         | (0.087)         |
| Growth Rate                     | -1.279***       | -1.315**        | -1.263**        | -1.295**        |
|                                 | (0.569)         | (0.562)         | (0.556)         | (0.554)         |
| Cold War                        | 0.397**         | 0.459***        | 0.368**         | 0.427***        |
|                                 | (0.164)         | (0.161)         | (0.160)         | (0.163)         |
| Years since Coup                | -0.255***       | -0.255***       | -0.256***       | -0.255***       |
|                                 | (0.041)         | (0.041)         | (0.042)         | (0.042)         |
| Years²                          | 0.013***        | 0.013***        | 0.013***        | 0.013***        |
|                                 | (0.003)         | (0.003)         | (0.003)         | (0.003)         |
| Years³                          | -0.000***       | -0.000***       | -0.000***       | -0.000***       |
|                                 | (0.000)         | (0.000)         | (0.000)         | (0.000)         |
| Constant                        | 0.073           | -0.373          | -0.138          | -0.509          |
|                                 | (0.595)         | (0.579)         | (0.575)         | (0.568)         |
| Observations                    | 7,334           | 7,334           | 7,334           | 7,334           |

***p<.001; **p<.05; *p<.10 (two-tailed). Standard errors reported in parentheses.
was expected in the base model. Regime years were also insignificant. While at first glance this might appear to undermine the argument for young democracies being vulnerable, this belief is more appropriately treated as an interaction that considers how the coefficient for democracies varies in accordance with the regime’s age. Finally, increasing military expenditures per soldier was found to significantly reduce coup activity.

Each of the subsequent models in Table 1 report a positive and significant coefficient for democracy. Directly interpreting interactions and their constitutive terms from logit coefficients can be problematic, but we can draw some limited inferences. For example, model 2 suggests that democracies are more coup-prone than civilian autocracies when regime years is 0. In practical terms, this refers to a regime that is in its first year as either a democracy or autocracy. Model 3 indicates that democracies are more coup-prone than civilian autocracies when military expenditures is 0. While this is not a practical value, it does suggest that lower levels of expenditures makes democracies more vulnerable to coups than non-democracies. Finally, model 4 shows that democracies are significantly more coup-prone when both expenditures and regime years are equal to 0, precisely the type of condition anticipated by the argument. We now move to further exploring these conditional relationships.

Our hypotheses made specific predictions about the behavior of the democracy coefficient at different levels of regime years and expenditures per soldier. In other words, we are interest in explaining the behavior of democracies, relative to autocracies, at a specific range of values of another variable. The hypotheses is not make explicit predictions about the interaction coefficients themselves. However, the first two interactions yielded a significant coefficient. This suggests that, in addition to democracies being significantly more vulnerable to coups than autocracies at low values of each other constitutive term, we see significant variation within democracies. In other
words, older democracies are significantly less prone to coups than younger democracies, and high spending democracies are less prone to coups than low spending ones.

Table 2: The Conditional Relationship between Democracy and Coups, with Fixed Effects

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<th>Country FE 5</th>
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<th>Country FE 7</th>
<th>Country FE 8</th>
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<td>Democracy</td>
<td>0.253</td>
<td>0.783**</td>
<td>0.855*</td>
<td>0.707***</td>
<td>0.952***</td>
<td>1.272***</td>
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<td></td>
<td>(0.246)</td>
<td>(0.356)</td>
<td>(0.462)</td>
<td>(0.223)</td>
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<td>Regime Years</td>
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<td>-0.001</td>
<td>0.002</td>
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<td>(0.008)</td>
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<tr>
<td>Expenditures per Soldier</td>
<td>-0.381***</td>
<td>-0.234*</td>
<td>-0.260**</td>
<td>-0.210**</td>
<td>-0.113</td>
<td>-0.125</td>
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<td>Democracy * Regime Years</td>
<td>-0.034*</td>
<td>-0.028</td>
<td>-0.054***</td>
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<td>(0.018)</td>
<td>(0.044)</td>
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<td>(0.037)</td>
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<td>Democracy * Expenditures</td>
<td>-0.561***</td>
<td>-0.504*</td>
<td>-0.501***</td>
<td>-0.441*</td>
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<td>(0.216)</td>
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<td>Military Regime</td>
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<td>-0.164</td>
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<td>0.327**</td>
<td>0.357**</td>
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<td>(0.145)</td>
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<tr>
<td>GDP per Capita</td>
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<td>-0.392*</td>
<td>-0.217***</td>
<td>-0.236***</td>
<td>-0.218***</td>
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<td>-1.224*</td>
<td>-1.238**</td>
<td>-1.332**</td>
<td>-1.243**</td>
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<td>0.713***</td>
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<tr>
<td>Years since Coup</td>
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<td>-0.156***</td>
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<td>-0.267***</td>
<td>-0.266***</td>
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<td>Years²</td>
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<td>0.010***</td>
<td>0.014***</td>
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<td>Years³</td>
<td>-0.000***</td>
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<td>-10.403</td>
<td>-0.260</td>
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<td>-0.305</td>
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<td></td>
<td>(414.463)</td>
<td>(416.937)</td>
<td>(478.221)</td>
<td>(0.917)</td>
<td>(0.906)</td>
<td>(0.916)</td>
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<td>Observations</td>
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<td>4,043</td>
<td>4,043</td>
<td>7,180</td>
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</table>

***p<.001; **p<.05; *p<.10 (two-tailed). Standard errors reported in parentheses.

Following the suggestions of Braumoeller (2004) and Brambor, Clark, and Golder (2006), the democracy*regime years and democracy*military expenditures interactions are illustrated in Figure 2. The first row reports the regime year interaction and the second reports the military
expenditure interaction. The left column reports predicted probabilities of coups for democracies at different values of the other constitutive term, while the right column reports probabilities for authoritarian regimes. For both purposes of presentation and to reflect a typical case, the figures provide probabilities for states that have no ongoing civil conflict, are not a military regime, are in the post-Cold War period, and GDP per capita, growth rates, and time since last coup are held at their mean values.

Figure 2: The Conditional Vulnerability of Democracies, 1952-2009

Two trends are apparent. First, democracies become significantly less coup-prone when they grow older and when military expenditures are higher. Second, regime years and military expenditures appear to have no conditioning influence on the coup vulnerability of authoritarian regimes. The latter trend is quite striking, as military expenditures per soldier is often cited as an
important determinant of coup activity, and authoritarian regimes are especially likely to spoil the
armed forces. Aside from the finding that a commonly attested determinant of coups is actually
driven by a regime type typically thought to not be vulnerable to them, these results can be
explained by our theory. Since autocrats have a variety of patronage strategies available outside of
the military that are less available in democracies, our argument anticipated that democracies
would be disproportionately reliant on military expenditures as a tool to ensure loyalty. Though
not explicitly hypothesized, it is unsurprising that the factor would be more important for
democracies.

Our argument also anticipated that the conditional vulnerability of young democracies will
be true at low levels of military expenditures, and inconsequential at higher levels. We graphically
represent this three-way interaction in Figure 3. Holding military expenditures and regime age at
0, democracies (.047) are around four times more likely to experience a coup attempt than
authoritarian regimes (.012). When military expenditures are increased from 0 to the 50th percentile
(1.95), the probability of a coup drops by over 70% to .012. Authoritarian regimes, meanwhile,
see virtually no change in coup probability, regardless of their age or military expenditures. In all,
the results provide quite revealing evidence that military expenditures disproportionately benefit
democracies, and this benefit is most pronounced when democracies are most in need of it: when
they are young.

Historical evidence bolsters this point, as pacts in Latin America illustrate how reassuring
stakeholders that their interests would remain intact quelled would be plotters from attempting to
veto the new democracy. Although far from perfect these “…pacts can calm military (as well as
civilian) fears and dissuade the military from retaking the reigns of government” (Hagopian 1990,
This “democracy by undemocratic means” may in fact be one way to suppress early threats to young democracies (Hagopian 1990).

Figure 3: The Conditional Vulnerability of Democracies, 1952-2009

All control variables have coefficients in the expected direction and are significant throughout each model in Table 1. Military regimes have a higher probability of a coup attempt than other regimes. States troubled by civil conflict are more susceptible to coups than states where civil conflict is absent. The coefficient for our Cold War control variable is positive and significant. The coefficients for our economic measures are both negative and significant. Wealthier states are less vulnerable to coup attempts and states with a positive growth rate can decrease the likelihood that they will experience an attempted coup. Lastly, the years since the last coup is negative and significant across all models. As the number of years increases since a state experienced a coup attempt, the probability that an attempted coup will occur decreases.

Conclusion

Larry Diamond (1999, 114) has suggested that democratization “requires a strategy by which military influence…is gradually reduced…” Our findings demonstrate the democratization process can be quite fragile and democratizing regimes should consider the transition as a delicately evolving progression instead of a rapid transformation. In short, “time is needed for
civilians and military elites to adapt to new structures of authority and to develop trust in one another” (Diamond 1999, 115). The attempt to disband the RSP in Burkina Faso, Morsi’s purging of Egypt’s military leadership highlight these dynamics. As Agüero (2001, 200) notes, “Guarantees, reassurances, and certainty form the crux of change…and are critical to understanding military acquiescence to democracy.” Our results point to military expenditures as a particularly important aspect of this acquiescence.

Our findings illustrate that democratizing regimes face substantial threats if the military is treated as an outcast instead of as a stakeholder in the process. Huntington’s *Third Wave* discusses many cases in which policymakers followed a different approach than those taken recently by Mauritania, Mali, Egypt, Burkina Faso, and others. Corazon Aquino greatly increased the pay of the Philippine army after replacing Ferdinand Marcos. Newly democratic Greece saw massive increases in military benefits under Karamanlis and, later, Andreas Papandreou. Perhaps most infamously, Augusto Pinochet was allowed to act as the head of the armed forces after Chile’s transition, while the heads of the armed forces and national police received guarantees they would not be removed for seven years. To this day the Chilean military enjoys one of the world’s highest rates of military allocations thanks to Pinochet-era perks.

While allowing authoritarian holdovers, especially those in uniform, is likely an unattractive prospect for new democracies and the international community, case evidence of democratic successes and failures, and the results presented here, suggest that this may often be a necessary evil early in the process. Given these findings, aspiring democracies would do well to follow the advice of Huntington and give the military toys—or at the very least some vested interest in preserving the new system. While entirely rewriting the guide to successful
democratization is unnecessary, considering the military as a stakeholder rather than an obstacle appears to be a worthwhile endeavor for aspiring democratic states.
Works Cited


