

**DRAFT WORKING PAPER ONLY**

**Tying the Dictator's Hands: Leadership Survival in  
Authoritarian Regimes**

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**Abstract:** In this paper, I examine one of the most important elements of authoritarian politics: leadership survival. I argue that a key actor in understanding leadership survival in dictatorships is the elite coalition—the group of individuals a dictator relies on for support. Whether elites are bound together by a dominant institution, such as a party or military, affects their ability to overthrow the dictator. I look at elite coalitions in personalist, single-party and military dictatorships. Due to institutional differences in the nature of the elite coalition, elites in military dictatorships should have the greatest ability to oust the dictator, followed by elites in single-party dictatorships, and lastly elites in personalist dictatorships. I test this expectation using a survival model and find substantial support for my argument. Military dictators face the highest risk of removal from office and personalist dictators face the lowest.

In comparison to democratic systems, we know very little about how dictatorships work, who the key political actors are, and where the locus of power rests. In fact, authoritarian rule is one of the least-studied areas of political science.<sup>1</sup> Yet, authoritarian government has been the norm for most of history. As late as the 1970's, autocracy was more common than democracy. At the turn of the century, even by a modest estimate, nearly a quarter of countries were governed under authoritarian rule.<sup>2</sup> The Chinese communist regime alone rules nearly a quarter of the world's population (Brooker 2000, 1). Given that dictatorships are so widespread, it is essential that we broaden our understanding of the mechanics of authoritarian regimes.

In this paper, I examine one of the most important elements of authoritarian politics: leadership survival. I argue that under dictatorships, one of the key political actors is the elite coalition—the group that a dictator relies on for support. Indeed, the vast majority of dictators are overthrown by their own inner circle (Svolik 2006). Developing an understanding of a dictator's supporting coalition is central to understanding the sources of a dictator's survival in power. Elites are not equally capable of deposing dictators, however. The purpose of this study is to examine the conditions under which it is easier for erstwhile support coalitions to topple authoritarian leaders—as happened in the last decade to Liamine Zeroual in Algeria and Ibrahim Bare Mainassara in Niger. How do elite coalitions differ across dictatorships and what do these differences imply for the survival of the dictator?

This study is informed by the case study literature on dictatorships and by the literature on particular authoritarian institutional structures. I combine the two to build a

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<sup>1</sup> As Przeworski noted in 2003, “Dictatorships are by far the most understudied area in comparative politics. We need to start thinking about it”

([http://www.nyu.edu/gsas/dept/politics/faculty/przeworski/przeworski\\_munck.pdf](http://www.nyu.edu/gsas/dept/politics/faculty/przeworski/przeworski_munck.pdf)).

<sup>2</sup> This estimate was tabulated by using data from the World Bank (2003) and Geddes (2003).

framework for understanding the consequences of authoritarian institutions for the survival of the dictator. The case study literature devoted to authoritarian regimes is abundant. A multitude of scholars have examined personalist regimes, including Hartlyn's work on Rafael Trujillo of the Dominican Republic (1998) and Farouk-Slugett and Slugett's work on Saddam Hussein of Iraq (1987). Stepan (1974), Arceneaux (2001), and Pinckney (1972) have provided excellent accounts of military dictatorships. They use examples of Brazil, Argentina, and Ghana to detail the structure of military rule. Cases devoted to single-party regimes are also widespread. See, for example, Fitzpatrick (1982) for work on the Soviet Union and Zolberg (1966) for studies on West African one-party states. Case studies such as these provide valuable insights into how individual dictatorships function.

There is also an extensive body of work devoted to particular types of authoritarian institutional structures. Bienen (1978), Clapham and Philip (1985), and Nordlinger (1977), among many others, offer interesting theoretical analyses of military rule. Similarly, Magaloni (2006), Huntington (1970), and Brooker (1995) provide excellent insights into the behavior of single-party dictatorships. For work on less institutionalized regimes, Chebabi and Linz (1998) offer a detailed study of personalist rule, as do Bratton and Van de Walle (1997).

Though both literatures are independently quite rich, only recently have scholars begun to integrate these studies and derive and test hypotheses of authoritarian politics based on the institutional differences among these regimes. Past empirical work on dictatorships has either left out the role of institutions or focused solely on one particular type of dictatorship. There are, of course, notable exceptions. Bueno de Mesquita et al.'s selectorate theory (2003) identifies two institutions of governance, the selectorate and the

winning coalition, that expose generic differences between democracy, monarchy, military junta, and other forms of government. They claim that differences in the make-up of the winning coalition and the selectorate explain a variety of outcomes, such as economic performance, political survival, and conflict behavior.<sup>3</sup> Haber (2006) develops a theoretical framework for understanding authoritarian politics. He argues that the strategies played by dictators to stay in power lead to three different institutional arrangements in authoritarian regimes: dictators who terrorize the leadership of their launching organizations, dictators who co-opt the leadership of their launching organization, and dictators who create a set of rival or complementary organizations. Haber examines what these scenarios imply for political repression, property rights, economic growth, and democratic transitions. Geddes (2003) shows that the institutional structure of dictatorships helps to explain variations in their longevity. Single-party regimes tend to be long-lasting and military regimes short lived.<sup>4</sup> Such dictatorships also experience different transitions to democracy (see also Haggard and Kaufman 1995). Gandhi (2003) highlights the role of legislative institutions in determining economic outcomes among dictatorships. She finds that economic growth is higher in institutionalized dictatorships, particularly those that allow semi-autonomous parties within a legislature.

In this study, I contribute to this recent line of work and apply an empirical institutionalist perspective to the study of authoritarianism. My argument builds on the well-established political science literature about domestic political institutions, which I extend to authoritarian settings. I examine how the presence of institutional structures,

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<sup>3</sup> For operational difficulties applying the theory to dictatorships, see <http://personal.lse.ac.uk/kudamats/dew/dictatorship.htm>

<sup>4</sup> For an interesting analysis of the circumstances under which hegemonic parties do rupture, see Langston 2004.

like an established party or military, contrasts with less institutionalized authoritarian environments, like that typically seen in personalist regimes. Whether elites are bound together by a dominant institution affects their ability to overthrow the dictator. I argue that it should be easier for elites in military dictatorships to overthrow the leader, followed by elites in single-party dictatorships, and lastly elites in personalist dictatorships. I test my argument quantitatively and find positive support: military dictators face the highest risk of removal and personalist dictators face the lowest. These findings have important implications for the study of authoritarian regimes. The greater the ability of the elite coalition to unseat the dictator, the greater the bargaining power of the elite coalition vis-à-vis the dictator.

One of the key insights in this paper is that leadership survival is often distinct from regime survival. Authoritarian regimes frequently last well beyond the ouster of any individual leader. I focus on the group that *leaders* rely on for support, rather than the group that *regimes* rely on for support. These two groups are not always synonymous in dictatorships. Failing to distinguish between the two can lead to misunderstandings of both the causes of regime change and of leadership change.

The paper takes the following form. In the first section, I provide a review of the relevant literature regarding leadership survival and elite coalitions in dictatorships. In the second section, I put forth my theoretical argument for understanding the political survival of dictators. In the third section, I test this argument quantitatively. And in the last section, I conclude.

## **I. Leadership Survival and Elite Coalitions in Dictatorships.**

What factors affect the survival of dictators? Prior studies of political survival in dictatorships have emphasized the various strategies that dictators employ to stay in

power (Friedrich and Brzezinski 1965; Arendt 1951; Tullock 1987). Dictators are characterized as stationary bandits (Olson 2000), maintaining their rule by using violence to extract taxes. The prospect of popular uprising is highlighted as the central threat to the dictator's power (Acemoglu and Robinson 2001; Boix 2003; Sanhueza 1999). To deter an uprising, dictators must repress some part of the population, while nurturing the loyalty of others (Wintrobe 1998). As the time horizon for the dictator increases, the quality of public good provision and economic policy will be positively correlated with the payoffs of staying in power (McGuire and Olson 1996; Grossman and Noh 1994; Galetovic and Sanhueza 1995).

Building on the scholarship on regime transitions (see Higley and Burton 1989, Kugler and Feng 1999, and Haggard and Kaufman 1995), recent studies have recognized the important role of the dictator's elite supporters. Though this research is quite varied, the identification of the authoritarian elite as a key political actor is central. Svobik (2006), for example, models bargaining between the dictator and the ruling elite and argues that, as a result of strategic behavior, two power-sharing regimes emerge: contested and established dictatorships. In contrast, Gallego and Pitchik (2004) focus on the role of the economic elite in determining the tenure of the dictator. They argue that in order to survive leaders must offer the level of investment that equates the benefit and the cost of a coup. In a different vein, Bertocchi and Spagat (2001) examine how power structures affect governmental needs to transfer income. They posit that the more powerful the ruling elite are, the more citizens are willing to accept co-optation and lower levels of government transfers.

My method is novel in that I look at how the institutional structure of authoritarian regimes influences the ability of elites to remove a dictator from power. I

focus on differences in the nature of elite coalitions in authoritarian regimes and the implications of these differences for the survival of the dictator.

## **II. Theoretical Argument.**

Dictatorships are often described as one-man rule, though all political leaders require the support of *some* individuals in order to maintain their command. Though the nature and method of selection of their supporting group may vary across regime types, no leader rules entirely alone. In authoritarian regimes, the group of individuals whose support the leader requires to stay in power is the elite coalition.<sup>5</sup> Individuals agree to support the leader in return for benefits. I look at how elite coalitions differ among the following types of authoritarian regimes: personalist, military, and single-party.<sup>6</sup> In personalist regimes the elite coalition is the personalist clique, in military regimes it is the military junta, and in single-party regimes it is the party cadre. The nature of the elite coalition affects whether the coalition can depose the dictator.

There are two factors that affect the elite coalition's ability to overthrow the leader. The first is whether the coalition bargains with the dictator individually or as a collective. I draw on the work of Geddes (2004) and argue that the behavior of elites in military and single-party dictatorships is analogous to that of a union. Elites in military and single-party regimes are bound together by an institution, the military and party respectively, that unites them. This makes coordination among members of the coalition less difficult. In addition, just as employers facing a unionized labor market have less autonomy in hiring, leaders in military and single-party regimes have less control over

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<sup>5</sup> Though leaders in authoritarian regimes need the support of a certain number of individuals in order to stay in power, they do not need the backing of each and every individual in the coalition. Most elites support the dictator, but there may be some who do not. The exact number of elites required to keep the dictator in power is unknown and varies from regime to regime. For in depth analyses of the process of coup d'états, see Chorley (1973), Luttwak (1969), and Decalo (1976), to name a few.

<sup>6</sup> I acknowledge that, in reality, leaders try and sometimes succeed in changing regime type. My argument applies to bargaining in stable authoritarian regimes. For an analysis of the process of regime consolidation in dictatorships and why some regimes personalize and others do not, see Geddes 2004.



membership in the elite coalition. They may try to influence membership in the coalition via promotions in the military or within the party, but they do not necessarily have absolute power over this. Leaders in military and single-party regimes have few other pools from which to draw elites bar the military or party. They may try to create new pools by forming a new party or paramilitary force, but these efforts are not always successful. Leaders also must compete with other potential leaders to secure the “employment” of the elites.<sup>7</sup> The union behavior in military and single-party regimes has two primary consequences: 1) elites face a lower coordination dilemma when it comes to potentially ousting the leader, and 2) the leader has less control over the selection of individuals who will comprise the coalition.

In contrast, in personalist dictatorships there is no institution that serves to unite elites. Because of this, elites must overcome a greater coordination dilemma in order to unseat the leader. Personalist leaders also have more control over the selection of individuals who will comprise the coalition because they do not face a unionized type of labor market. Instead, individuals must compete with one another to secure their spot in the coalition. Personalist leaders often select to the coalition low skilled individuals who are less likely to successfully unseat them. They also ensure that no individuals get too powerful through divide and conquer strategies and frequent purges.<sup>8</sup> For these reasons, the probability the elite coalition can overthrow the leader tends to be greater in military and single-party regimes than it is in personalist dictatorships.

The second factor that affects the ability of the elite coalition to oust the dictator is the extent to which members of the elite coalition have control over the security forces.

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<sup>7</sup> For this reason, the leader’s situation is not monopsonistic.

<sup>8</sup> Leaders in military and single-party regimes also engage in these strategies, though they tend to be less successful.

Most coups are executed by military forces (Kebschull 1994).<sup>9</sup> The more direct control elites have over the security apparatus, the more the leader's position is at risk. Elites in military regimes tend to have greater access to the security forces than do elites in personalist and single-party regimes. In military dictatorships, most members of the elite coalition are military commanders of various forces. These commanders usually have troops and weaponry at their personal disposal. As a result, the security forces tend to be at least partially controlled by members of the elite coalition. Leaders have less control over the security apparatus and individual commanders of various forces have more autonomy.

This is not the case in single-party and personalist dictatorships. Elites in single-party and personalist regimes do not have the same direct access to the security forces as elites in military regimes do. In single-party regimes, the party makes great efforts to keep the security apparatus under party control. They indoctrinate soldiers in the party ideology and promote them according to party loyalty. Similarly, in personalist dictatorships, the leader's control over the security apparatus is often a central reason why such regimes are identified as personalistic.<sup>10</sup> Personalist dictators generally have control over military promotions and can eliminate individuals they deem to be disloyal. Though a member of the military may be part of the elite coalition in single-party and personalist regimes, most elites do not directly control branches of the security forces. This makes staging a coup more difficult in these regimes. Because elites in military regimes have greater access to forces that can potentially unseat the leader, the probability that military elites can successfully do so is greater.

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<sup>9</sup> Kebschull (1994) notes that when conditions are favorable, only a very small military force is actually needed to achieve success.

<sup>10</sup> In Geddes's dataset (2003), for example, one of the criteria for labeling a regime personalistic is whether the leader has personal control of the security police.

For these reasons, I argue that military elites have the greatest ability to oust the dictator, followed by single-party elites, and lastly personalist elites. My argument is summarized in **Table 1**.

[Insert **Table 1** about here]

I have focused primarily on differences in the ability of the elite coalition to overthrow the leader across dictatorships. Though this is a central element of elite-leader relations in authoritarian regimes, it is by no means the only one. The *ability* to oust, for example, is not synonymous with the *desire* to oust. Elites capable of unseating the dictator may choose not to do so if they are satisfied with the dictator's leadership. Dictators must constantly act to ensure the continued support of elites in the coalition and deter them from defecting to another "employer." The strategies dictators pursue to curb the desire of elites to unseat them are another important element of elite-leader relations. My main focus in this study, however, is on the ability of the elite coalition to oust the dictator.

### **III. Testing the Argument.**

If the above reasoning is correct, then leadership ouster in dictatorships should be strongly influenced by the institutional structure of the elite coalition. Elites in military regimes should have the greatest ability to oust the dictator, followed by elites in single-party regimes, and lastly elites in personalist regimes. This argument is tested quantitatively by looking at the survival rates of dictators. I use Chiozza and Goemans's (2004) dataset, which includes entry and exit dates of all leaders holding executive power for the 1919-1999 period. Leaders leaving office due to natural death are coded as censored observations.<sup>11</sup> Following Marinov (2005), I drop instances in which multiple

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<sup>11</sup> This approach is consistent with other work on the subject (see Marinov 2005, Bienen and van de Walle 1991, and Bueno de Mesquita et al. 2003).

leaders held office during a single calendar year. In these cases, I keep a single country-year which records: 1) that a leadership change occurred, and 2) who the leader in power is at the end of the calendar year.<sup>12</sup> Formatting the data in this way is useful because data on most covariates are measured annually.<sup>13</sup>

To classify authoritarian regimes, I rely on the codings of Geddes (2003). I include in my dataset all dictatorships she lists as either **personalist**, **military**, or **single-party**.<sup>14</sup> Geddes includes regimes in existence since World War II that lasted three years or longer, excluding monarchies. I create dummy variables for each regime type, with **single-party dictatorship** the excluded dummy variable in all of the statistical tests. The total number of regimes included in my dataset is 270, with 2358 observations. Total sample size varies due to missing data.

The expectation is that leaders in military dictatorships should have the shortest survival rates, followed by leaders in single-party dictatorships, and lastly leaders in personalist dictatorships. Summary statistics of the longevity rates of authoritarian leaders, presented in **Table 2**, support this expectation.

[Insert **Table 2** about here]

As the table indicates, on average military leaders rule for 3.5 years, single-party leaders rule for 8.8 years, and personalist leaders rule for 9.9 years. The following histograms provide a visual distribution of the data.

[Insert histograms here]

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<sup>12</sup> I should note that predicting leadership turnover is somewhat distinct from predicting coup d'états. While coups are generally clear indications of leadership turnover, leadership turnovers can occur without violence. Leaders may voluntarily step down from power in order to avoid a violent overthrow. The threat of a coup may be enough to induce a leader to leave office. For this reason, my dependent variable is leadership removal, rather than coups.

<sup>13</sup> Londregan and Poole (1996) use a similar approach.

<sup>14</sup> Geddes also includes hybrid regimes in her dataset. I chose to exclude hybrid cases in order to provide a more direct test of my argument. For more information regarding Geddes's criteria, refer to Geddes 2003.

When dictatorships collapse, however, the leader of the regime often goes down with it. To ensure the emphasis is on *leadership* failures, as opposed to *regime* failures, I also conduct tests excluding the tenures of dictators whose removal from office coincides with the demise of the regime. Summary statistics of dictators' longevity rates excluding these cases are presented in **Table 3**.<sup>15</sup>

[Insert **Table 3** about here]

The basic result is virtually unchanged: on average, personalist dictators rule for about three years longer than single-party dictators, and for about nine years longer than military dictators.

A serious test, however, requires an array of economic and domestic political controls to minimize the possibility that any correlation between regime type and leadership removal is spurious. The first set of controls I use, **GDP per capita** (logged) and economic **growth**, measure domestic economic conditions. Poor economic conditions have been shown to negatively affect leadership survival (Londregan and Poole 1990).<sup>16</sup> Both of these variables are taken from the World Bank (2003).

Because various studies have shown that past coups lead to future coups (Londregan and Poole 1990; Sanhueza 1999), in addition to the economic controls, I also include a measure of the number of **prior coups** occurring in the last six years, as coded by Chiozza and Goemans (2004). Bueno de Mesquita and Siverson (1995) find that leaders who engage in war subject themselves to a domestic political hazard that threatens their retention of political power. To account for this possibility, I control for whether the country underwent a **civil war**, as measured by Fearon (2005), and whether

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<sup>15</sup> In this sample, leaders are excluded from the sample if they are removed from office during the last year of the regime. Because leadership removal and regime collapse nearly always coincide in personalist regimes, I do not exclude any personalist leaders.

<sup>16</sup> This finding builds on the insight of Luttwak (1969) and Finer (1962) that economic backwardness is essentially a necessary condition for coups.

the state was involved in a militarized interstate dispute in which force was applied (**force**).<sup>17</sup> Lastly, I include variables measuring the **age** of the leader, provided by Chiozza and Goemans (2004), and the **population** of the country (logged), taken from the Penn World Table (Heston, Summers, and Aten 2006), which have both been shown to influence leadership survival (Marinov 2005; Chiozza and Goemans 2004). All control variables are lagged one year to reduce problems of endogeneity.<sup>18</sup>

The estimation procedure I use is a Cox proportional hazard model. This is one of the most general of the survival regression models because no assumptions are made regarding the nature or shape of the hazard function. The Cox model estimates a “hazard rate” for leadership removal at a particular moment.<sup>19</sup> This hazard rate is modeled as a function of the baseline hazard ( $h_0$ ) at time  $t$ , which is simply the hazard for an observation when all independent variable values are equal to zero, and a number of independent variables. Estimates of these covariates indicate proportional changes relative to this baseline hazard. For example, a hazard ratio greater than 1 indicates an increase in the risk of removal; a hazard ratio less than 1 indicates a decrease in the risk of removal.

Though the Cox proportional hazard model is not based on any assumptions regarding the shape of the underlying survival distribution, the model does assume a multiplicative relationship between the underlying hazard function and the log-linear function of the covariates (an assumption of proportionality).<sup>20</sup> In other words, it is

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<sup>17</sup> Source: Correlates of War data on Militarized Interstate Disputes (Jones, Bremer, and Singer 1996).

<sup>18</sup> I also included in my models dummy variables measuring region, as some studies have shown that South American countries are subject to a greater risk of coups than other countries (Londregan and Poole 1990; Galetovic and Sanhueza 1995). Doing so did not alter the results. The results from these tests can be obtained from the author upon request.

<sup>19</sup> The hazard rate is defined as:

$$h(t) = \frac{\text{probability of leadership removal between times } t \text{ and } t + 1}{\text{probability of leadership removal after time } t}$$

<sup>20</sup> See Fox 2002.

assumed that the ratio of the hazard functions for two observations with different values for independent variables does not depend on time. It is possible that this proportionality assumption does not hold, however, and the impacts of some of my covariates depend on time. Because of this possibility, I conduct an analysis of the scaled Schoenfeld residuals for the primary models that I estimate. All of the covariates met the proportional hazard assumption. For this reason, I do not include interactions between my explanatory variables and the logarithm of time.<sup>21</sup>

In addition, I follow Chiozza and Goemans (2004, 607) and include a frailty term in my specification. A frailty term is an additional unmeasured covariate  $\alpha_i$  that is sampled from a Gamma distribution with mean 1 and variance  $\theta$  that multiplicatively affects the baseline hazard (see Therneau and Grambsch 2000, 231-260).<sup>22</sup> It is similar to a random effect, in that it assesses whether some leaders are more likely to be ousted, all else equal. When  $\alpha_i$  is greater than 1, the leader is more likely to lose power than would be expected, given the explanatory variables. When  $\alpha_i$  is smaller than 1, the opposite is true. The frailty term essentially incorporates unmeasured heterogeneity across units. I cluster observations by countries, so that the frailty term is constant within country groups (Chiozza and Goemans 2004, 608). The idea is that leaders in some countries may have systematically different frailties than leaders in other countries, independent of the other covariates in the model.

Because some of the control variables I use may be predictors of the probability of regime type (a potential source of selection bias), I present results from a Heckman selection model in every table. This model controls for possible selection effects to

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<sup>21</sup> Graphs of the residuals and time also do not indicate non-proportionality.

<sup>22</sup> The specification for the hazard takes the following form:

$h_i(t | \mathbf{x}) = h_{oi}(t)\alpha_i \exp(\sum_{j=1}^p \beta_j x_j)$ , where  $h_{oi}(t)$  is the baseline hazard, and  $\alpha_i$  follows a Gamma distribution with shape and scale parameters equal to  $1/\theta$ .

ensure that the regime type coefficients are not biased. To estimate the selection-corrected effects of authoritarian regime type, I use the logged **level of development**, **civil war**, dummy variables measuring **region**, and **growth** to generate multinomial logit estimates of the authoritarian regime type, and then use this predicted result in my models.<sup>23</sup> I also include in each table models excluding each leader's first year in office and models excluding tenures in which regime and leadership failure coincide (as discussed above). The results from these tests are presented in **Table 4**.

[Insert **Table 4** about here]

### *Discussion of Results.*

As the table indicates, personalist dictators have the lowest likelihood of being overthrown and military dictators have the highest. According to Model 3, for example, after correcting for selection effects, in comparison to single-party dictators, personalist dictators are 64% less likely to be ousted and military dictators are 1000% more likely to be ousted. These are substantively large differences. The effects are also statistically significant at the .01 level. In short, these results support the theoretical framework that I present.

It may be the case, however, that high leadership turnover is particularly likely during the first year in office. To account for this, in Model 4 I exclude the first year of the dictator's tenure. The effects remain virtually unchanged. The same is true when cases of simultaneous regime and leadership failure are excluded (Model 5).

The results also indicate that the number of **prior coups** in a country and the size of the **population** increase a dictator's risk of being ousted. In contrast, the **age** of the leader leads to a lower hazard of being overthrown, as do economic **growth** and

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<sup>23</sup> Regions include Latin America, North Africa and the Middle East, Eastern Europe, Asia, and Africa. Though fuel exports may also predict regime type (Ross 2001), due to problems of missing data, I do not include such a measure in my selection model.



involvement in a military dispute (**force**). Interestingly, once selection effects are taken into account, **civil war** and **GDP per capita** have almost no effect on a leader's risk of being deposed.

### *Robustness Checks.*

In this section, I test whether my results are robust to an alternate classification of institutions. I include in my statistical tests Bueno de Mesquita et al's (BdM) measurement of regime type, which focuses on the selectorate and the winning coalition.<sup>24</sup> BdM argue that institutions can be characterized by the size of the selectorate (the set of people who have an institutional say in choosing leaders), denoted by **S**, and the size of the winning coalition (the minimal set of people whose support the incumbent needs in order to remain in power), denoted by **W**. BdM predict that it is easier for leaders to survive when the size of **W** is small and the size of **S** is large. **Table 5** presents results from tests in which measures of **W** and **S** are included in the specification.

[Insert **Table 5** about here]

As the table indicates, the effects of **personalist dictatorship** and **military dictatorship** are still strong. According to **Model 8**, for example, after correcting for selection effects, the hazard rate of a personalist dictator is the lowest and the hazard rate of a military dictator is the highest. These differences are substantively large and the effects are statistically significant. Interestingly, the effects of the BdM variables are also in the direction expected, substantively large, and statistically significant. My findings hold regardless of whether the first year of the leader's tenure is excluded or cases of simultaneous regime and leadership failure are excluded. These results are remarkably robust and provide strong support for my argument. Even when controlling for other

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<sup>24</sup> See Bueno de Mesquita 2003 for information on the measurement of these variables.

measures of institutions, among dictatorships, military dictators face the highest risk of being ousted, followed by single-party dictators, and lastly personalist dictators.

#### **IV. Conclusion.**

In this paper, I have examined a key element of authoritarian politics: leadership survival. I argue that under dictatorships, one of the key political actors is the elite coalition—the group that a dictator relies on for support. One of the key determinants of the risk that dictators face on their hold on power is the nature of the elite coalition. Whether elites are bound together by a dominant institution, like a party or military, affects their ability to overthrow the dictator. I argue that there are two main factors that affect the elite coalition’s ability to oust. The first is whether elites share membership in a unifying institution. Membership in a dominant party or military, as in single-party and military regimes, makes it easier for elites to coordinate to overthrow the leader. The second factor is whether elites have control over the security forces, as in military regimes. Direct influence over the security apparatus makes it easier to stage a coup. The expectation follows that elites in military regimes should have the greatest ability to oust the dictator, followed by elites in single-party regimes, and lastly elites in personalist regimes.

I test this expectation quantitatively by using a survival model to predict the ouster of dictators. Controlling for other relevant factors, I find strong support for my argument. Among dictatorships, military leaders face a significantly greater risk of being removed from power. On average, they only rule for around three or four years. The average lifespan of single-party dictators is about double the average lifespan of military dictators, but about a year shorter than that of personalist dictators. In fact, personalist dictators face the lowest risk of being overthrown, ruling on average for around ten years.

These results are remarkably robust. They hold under a variety of circumstances, as well as when alternate measures of domestic institutions are taken into account.

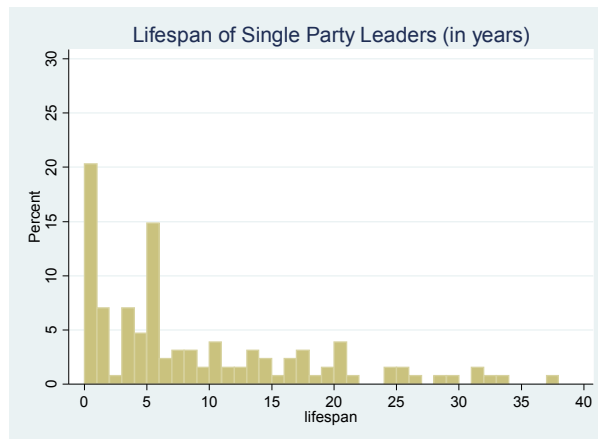
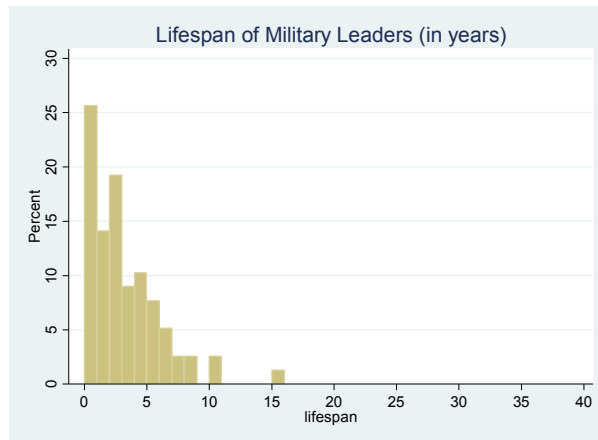
My findings are evidence in support of the claim that authoritarian institutional structures matter and affect the relative power of the dictator vis-à-vis the elite coalition. Dictatorial institutions play an important role and have significant consequences for these regimes. When elites can credibly threaten to oust the dictator, this decreases the bargaining power of the dictator relative to his supporters. This study is a small step toward a deeper understanding of authoritarian politics. Further research is necessary to test differences in the ability of authoritarian support coalitions to make their will felt in other policy areas.

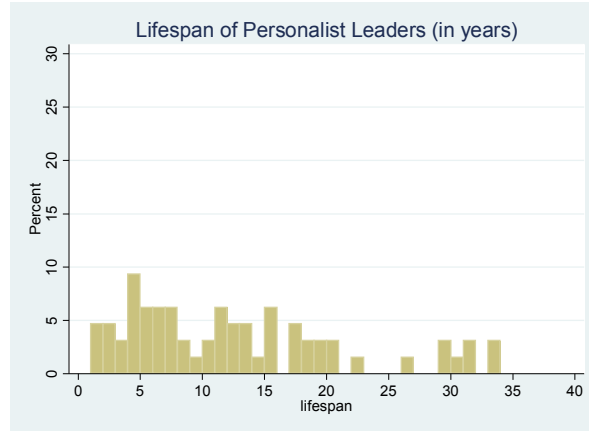
<b>Table 1: Power of Elite Coalition</b>			
	Collective Actor?	Security Access?	Ability to Stage Successful Coup:
Military Elites	Yes	More likely	High
Single-party Elites	Yes	Less likely	Medium
Personalist Elites	No	Less likely	Low

<b>Table 2: Survival Rates of Authoritarian Leaders, in years</b>				
	N	Mean	St Dev.	Median
Personalist Regimes	64	12.1	8.9	11
Single-party Regimes	128	8.5	8.9	5
Military Regimes	78	2.7	2.9	2

<b>Table 3: Survival Rates of Authoritarian Leaders, in years</b> ( cases of simultaneous regime and failure excluded )				
	N	Mean	St Dev.	Median
Personalist Regimes	64	12.1	8.9	11
Single-party Regimes	105	8.8	9.2	5
Military Regimes	46	2.7	3.0	2.7

## Histograms





<b>Table 4. Leadership Removal in Authoritarian Regimes</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3 (selection corrected)</b>	<b>Model 4 (selection corrected, first year of tenure excluded)</b>	<b>Model 5 (selection corrected, cases of simultaneous regime and leadership failure excluded)</b>
<b>Personalist dictatorship</b>	.52* (.19)	.45** (.17)	.36*** (.12)	.38*** (.13)	.45** (.18)
<b>Military dictatorship</b>	24.8*** (11.2)	20.3*** (9.0)	11.0*** (4.7)	11.1*** (5.0)	19.4*** (10.0)
<b>Civil war</b>		2.1** (.76)	1.1 (.46)	1.0 (.45)	1.2 (.55)
<b>Prior coups</b>		2.0*** (.27)	1.9*** (.24)	1.8*** (.24)	2.0*** (.28)
<b>Age</b>		.95*** (.01)	.96*** (.01)	.96*** (.01)	.96** (.01)
<b>Growth</b>		.05** (.07)	.01*** (.01)	.009*** (.01)	.008*** (.01)
<b>GDP per capita (logged)</b>		1.11 (.17)	.99 (.18)	.98 (.18)	.94 (.18)
<b>Population (logged)</b>		1.16 (.15)	1.2 (.16)	1.1 (.16)	1.2 (.17)
<b>Force</b>		.61 (.21)	.59 (.21)	.62 (.22)	.60 (.24)
<i>No. of obs.</i>	2086	1699	1699	1526	1477
<i>No. of countries</i>	84	78	78	77	74
<i>No. of failures</i>	163	144	144	134	112
<i>Log-likelihood</i>	-965.8	-804.3	-791.3	-731.6	-601.8



<i>Wald <math>\chi^2</math></i> ( $p > \chi^2$ )	87.22 (0.000)	132.15 (0.000)	166.63 (0.000)	154.73 (0.000)	126.18 (0.000)
$\Theta$	1.95	1.36	.96	.98	.98
Likelihood ratio test of $\theta = 0$					
$\chi^2$ ( $p > \chi^2$ )	128.46 (0.000)	54.61 (0.000)	34.86 (0.000)	36.20 (0.000)	27.23 (0.000)
Results of a Cox proportionate hazard model; hazard ratios (standard errors). * $p < .10$ , ** $p < 0.05$ , *** $p < 0.01$ , two-tailed tests. The Wald test refers to a test of the hypothesis that all coefficients are simultaneously equal to 0. The frailty parameter $\theta$ measures the variance of a Gamma distribution with mean equal to 1.					

<b>Table 5. Leadership Removal in Authoritarian Regimes— Robustness check</b>	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8 (selection corrected)</b>	<b>Model 9 (selection corrected, first year of tenure excluded)</b>	<b>Model 10 (selection corrected, cases of simultaneous regime and leadership failure excluded)</b>
<b>Personalist dictatorship</b>		.42** (.16)	.33*** (.11)	.34*** (.12)	.29*** (.13)
<b>Military dictatorship</b>		10.0*** (4.7)	4.9*** (2.24)	4.5*** (2.1)	5.7*** (3.5)
<b>Civil war</b>	3.5*** (.01)	2.5** (.96)	1.57 (.66)	1.68 (.74)	1.14 (.56)
<b>Prior coups</b>	2.0*** (.24)	2.1*** (.30)	2.1*** (.27)	2.0*** (.28)	2.1*** (.32)
<b>Age</b>	.97** (.01)	.95*** (.01)	.96** (.01)	.96*** (.01)	.97* (.01)
<b>Growth</b>	.12 (.18)	.06** (.08)	.02** (.03)	.02* (.05)	.01** (.02)
<b>GDP per capita (logged)</b>	1.86*** (.32)	1.27 (.20)	1.2 (.22)	1.22 (.24)	1.1 (.23)
<b>Population (logged)</b>	1.31* (.19)	1.27 (.20)	1.31** (.17)	1.25* (.17)	1.33** (.19)
<b>Force</b>	.67 (.23)	.61 (.22)	.62 (.22)	.65 (.24)	.72 (.29)
<b>Winning Coalition</b>	5.3** (4.0)	4.9** (3.6)	4.4** (3.1)	6.7** (5.1)	2.0 (1.9)
<b>Selectorate</b>	.06*** (.02)	.08*** (.03)	.09*** (.03)	.06*** (.02)	.07*** (.03)

<i>No. of obs.</i>	1666	1666	1666	1498	1444
<i>No. of countries</i>	77	77	77	76	73
<i>No. of failures</i>	140	140	140	130	108
<i>Log-likelihood</i>	-773.9	-748.2	-735.8	-689.4	-549.0
<i>Wald <math>\chi^2</math></i>	130.0	166.70	205.6	154.2	159.3
<i>(p &gt; <math>\chi^2</math>)</i>	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
<b><math>\theta</math></b>	1.74	1.38	.94	1.45	1.12
Likelihood ratio test of $\theta = 0$					
$\chi^2$	90.0	65.49	41.50	64.22	42.51
<i>(p &gt; <math>\chi^2</math>)</i>	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Results of a Cox proportionate hazard model; hazard ratios (standard errors). *p<.10, **p<0.05, ***p<0.01, two-tailed tests. The Wald test refers to a test of the hypothesis that all coefficients are simultaneously equal to 0. The frailty parameter $\theta$ measures the variance of a Gamma distribution with mean equal to 1.					

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