Dictators Who Dominate: Betraying Allies to Gain a Preponderance of Power

by

Erin Rachel McGovern

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Doctoral Committee:

Professor William R. Clark, Co-Chair Assistant Professor Kenneth M. McElwain, Co-Chair Assistant Professor Michael T. Heaney Professor Ronald F. Inglehart

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CHAPTER 1

Introduction

In authoritarian regimes, ordinary citizens are rarely afforded the opportunity to dismiss poor leaders from office. Even when elections occur in these regimes, voters have little power to influence the outcome due to electoral fraud or unfair restrictions on candidacy and campaigning. Still, while authoritarian leaders are seldom beholden to the voting public, they often depend on a smaller group of supporters to maintain them in office. Authoritarian leaders typically attempt to secure a safe margin of continuing political support by providing political and economic benefits to an essential group of allies. While *buying* one's friends in this way can be a good strategy for dictators in the short to medium term, the best long-term strategy for dictators appears to be *bullying* ones friends into positions of powerlessness.

Leaders cannot rule alone, yet many of history's longest-serving dictators betrayed their closest allies by exiling them from the inner circle, stripping away their wealth and prestige, and even jailing or executing them. What is to be gained through intra-regime political purges, and how can a dictator remain in power after antagonizing the very people who keep him in office? How is it that the most treacherous leaders often last in power considerably longer than the more trustworthy dictators who keep their promises to key supporters?

Overview of the theory

In one view of authoritarian power, dictators have absolute freedom to do whatever they like. This fairly simplistic perspective, which O'Flaherty terms the "romantic view," paints dictators as unconstrained executives who are free to choose "any feasible option whatsoever, without worrying about what the rest of society wants or can do about it" (1991, p. 1). For example, Olson proposes the idea of a "stationary bandit," an individual who has a "monopoly of coercive power" and controls "all wealth, both tangible and human, in a country" (1993, p. 569) Olson's dictator is secure in power and can therefore focus on a singular aim: maximizing his gains from economic predation. In this simple model, domestic politics are irrelevant. It is assumed that the dictator, on his own, possesses enough coercive power to quell challenges from any actor or set of actors in the country.¹

A number of more comprehensive models of authoritarian power recognize that dictators, like all leaders, are limited by strategic considerations. While authoritarian leaders may be able to ignore the preferences of a majority of citizens, they necessarily depend on some group of supporters to bolster them against political competition. Leaders rule over complex societies in which coercive resources are naturally distributed across large groups of people. The leader survives through an *indirect* monopoly of coercive power; he controls the people who collectively control the coercive resources. These allies serve the regime, but they also have personal perspectives and priorities, and they can choose to withhold their support or even to turn against

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¹ Olson's dictator engages in constrained optimization, choosing a level of predation that gives him the biggest possible share of economic spoils. In the short-term, his preference is to seize all of the resources in the community. However, because he plans to rule over the same community for a long period of time, he restrains himself from full economic predation to allow for greater productivity, enlarging the economic pie and carving out the biggest slice possible for himself (a smaller proportion of a larger pie).

the leader if they believe they can benefit by doing so. For this reason, leaders cannot ever dismiss the possibility that some of their allies will betray them. Unpopular dictators can and do lose office to challengers with more loyal and powerful friends.

Leaders in democracies and authoritarian regimes alike typically depend on a coalition of supporters who help to establish and maintain them in office. These supporters can attempt to elicit concessions from the leader by threatening to withdraw their support if the leader refuses to cooperate. In democratic regimes, a sufficiently large group of citizens can vote an unpopular leader out of office. In authoritarian regimes, where political power tends to be concentrated close to the leader, and the rules of succession can be opaque, small groups of elites sometimes resort to the use of force to remove bad leaders from office.

Coup attempts are not uncommon in authoritarian regimes, and coup plotters pose a serious threat to most incumbents. Svolik's *Leader and Ruling Coalition* dataset shows that among all dictators who served from 1946 to 2008, roughly two thirds lost power through non-constitutional means. Of those, more than two thirds were overthrown by regime insiders (2012, pp. 5, 41). Clearly, authoritarian leaders have as much or more to fear from disloyal elements within the regime than from any external source of opposition.

Svolik's data (2012) further show that while authoritarian leadership tenure in the second half of the 20th century ranged from several days to nearly 50 years, the median leader served only three and a half years.² The lengthy tenures of dictators like Joseph Stalin (30 years), Muammar Qaddafi (42 years), and Fidel Castro (50 years) are rare exceptions in the world of authoritarian leadership. Only about 10 percent of dictators survive in office 20 years or longer, and the mean

² Even excluding leaders who survived in power for less than one year and arguably were never fully established in power, the median tenure is just six years (data from Svolik 2012).

(7.2 years) is roughly twice the median (3.5 years), suggesting that common notions of what it means to be an authoritarian leader are skewed by a small group of exceptional dictators who sustained their rule for decades longer than most of their peers. The average dictator is constrained in his actions and lives in constant fear of being ousted from power by his allies or by opposition forces. An ordinary authoritarian leader can expect to serve only a handful of years in power before losing to a challenger.

To beat the odds and become an enduring dictator requires strategic finesse. While a leader needs allies to help him gain and keep power, he must also distrust his allies, fearing that they might try to remove him from power if they find another candidate who better serves their interests or tire of him for any reason. Dictators can attempt to manage this tension by either (1) ensuring that the allies *do not wish* to remove him from office, or (2) ensuring that the allies *are incabable* of removing him from office.

The first strategy requires the leader to win an ongoing contest for support and approval. A leader who chooses this strategy shares power and spoils to ingratiate himself with the allies, hoping they will continue to prefer him over any challenger. Such a leader is likely to last in power for a short to moderate period of time before a performance setback of one kind or another prompts the allies to replace him with someone new.

The second strategy necessitates depleting the political power of the allies. A leader who chooses this strategy takes steps to weaken the allies and reduce their ability to plan and execute a successful coup in the future. While this behavior is likely to anger the allies and increase the danger of a coup in the short term, I argue that it safeguards against coups in the long term for those dictators who survive the initial risk. Attaining longevity in office requires conducting

political purges at the highest levels of power in order to establish an intra-regime balance of power that favors the dictator over his allies.

While it is true that all leaders must keep some group of supporters happy, the most successful dictators have more freedom to set their own priorities. Dictators gain this autonomy by tearing down the most potent and long-established sources of political power in the regime, striking against friends and enemies alike until the stock of concentrated, coordinated power remaining in the political system is smaller and easier to control and manipulate. Purges affect individual victims by destroying personal prestige and limiting access to wealth and coercive resources. However, they also affect the group of allies as a whole by damaging networks of trust and influence, making it much more difficult for the allies to coordinate to punish bad behavior on the part of the dictator.

While purges can diminish a leader's power in *absolute* terms by severing connections with powerful supporters, the dictator still benefits if he can shift the *relative* balance of power in his favor. After a purge, the new and remaining members of the dictator's inner circle control fewer levers of power than the original kingmakers. However, a successful purge should reduce both the amount of power in the dictator's inner circle (the numerator) *and* the total amount of power in the system (the denominator), making the new allies powerful enough to defend the dictator against whatever potential challengers remain. Furthermore, because the new allies have less recourse to personal, preexisting stocks of power, they are more dependent on the leader for their continuing well-being and are therefore more loyal and easier to control.

Most dictators are unable to establish such dominance and instead remain dependent on powerful elite allies throughout their tenures. The rare dictator who is able to gain independence from the elites who helped to establish him in office belongs to a distinct category of leaders. These

extraordinary dictators operate in a political environment that bears little resemblance to the world of normal authoritarian politics. For these leaders, the possibility of a coup is greatly reduced, allowing for high levels of political autonomy and economic predation.

In the following sections, I explain in more detail the strategic relationship between a leader and his allies, the determinants of the intra-regime balance of power, the prerequisites for organizing a successful coup, and the coup-proofing effect of political purging. I use examples from Russia and the former Soviet Union to illustrate my theory.

CHAPTER 2

Political support and the Intra-regime Balance of Power

The support coalition

The literature on authoritarian leadership uses a variety of terms to describe a leader's key supporters, including the *kingmakers*, the *viziers*, the *henchmen*, the *patronage coalition*, the *support coalition*, and the *winning coalition* (Gallego and Pitchik 2004, Egorov and Sonin 2011, O'Flaherty 1991, Arriola 2009, Svolik 2012, Bueno de Mesquita et al. 2003). Whatever the terminology, most scholars agree that some group of supporters is crucial in helping dictators to win and maintain power. Dictators rule through "reliance rather than omnipotence" (O'Flaherty 1991, p. 2).

Let us assume for the moment that leaders cannot rise to power alone. Furthermore, once in office, while some leaders likely need more support than others, all dictators need some group of allies, a *support coalition*, to help protect them against challengers. I will revisit the question of what exactly constitutes support and why leaders need it shortly. But first, what must leaders do to assemble a collection of allies to serve as members of the support coalition? How do political elites decide which candidate they will support, and what do they expect to gain in return?

In one common view of the relationship between leaders and their allies, the allies are rewarded for their loyalty primarily through the distribution of economic resources. O'Flaherty describes this view of resource allocation under authoritarian regimes as the notion of the *state as a spigot*: "Every period the state produces a flow of rent; being dictator means being able to control this flow and direct it where you want it to go. The dictator gets the spoils first and passes them

out to whomever he pleases" (1991, p. 3). In resource-based theories of authoritarian incumbency, the support coalition maintains the leader in power, and the leader invites its members to line up at the spigot to receive their earned share of spoils.

One prominent resource-based explanation is the selectorate theory (BDM et al., 2003). In this model, every leader rises to power with help from a coalition of essential supporters. These individuals are a subset of all those who take part in choosing the leader, and they collectively control "the essential features that constitute political power in the system" (p. 7). These powerbrokers evaluate potential leaders by questioning 'what can you do for me?'

In the selectorate theory, leaders have the right (by definition) to raise revenue and allocate resources, so political elites have an interest in choosing a leader who they believe will distribute resources to their benefit. Elites can maximize their economic utility by endorsing the candidate who credibly promises them the greatest share of the spoils. Once the leader is established in office, as long as he delivers on his promises to share resources, the allies support the leader against all challengers. If, however, the supporters observe the leader reneging on his promises by keeping too great a share of the spoils for himself, they are likely to withdraw their support and select a new leader.

In equilibrium in the selectorate model, leaders always keep their promises and they remain in power indefinitely. The incumbent keeps his promises because he knows he must do so or be removed from office. The allies continue to support the incumbent because no challenger can credibly promise to share resources with the existing members of the support coalition as generously as the incumbent. This is because a challenger's promises are necessarily less *credible*; he can promise any number of things to any number of people, but no one can know which promises are sincere and which amount to cheap talk. The incumbent, meanwhile, has already

made generous promises to his supporters (to gain office) and shown a willingness to keep them (to stay in office), so people know that his promises to share resources are sincere (or, at any rate, they know which promises are sincere and which are not, based on past behavior). Furthermore, a challenger can never offer a greater *quantity* of resources than the incumbent because the size of the state's resource pool is fixed (at least in the short term), making it possible for the incumbent to match any feasible offer made by a challenger. The equilibrium therefore holds indefinitely (BDM et al., 2003).

In another resource-based model of the dynamic between a dictator and his allies, O'Flaherty describes a similar equilibrium. In this model, challengers *are* able to make credible promises, but not without incurring a cost. Incumbents need not pay this cost, and can therefore always defeat the challenger by offering a larger slice of the pie to the support coalition. Both Bueno de Mesquita et al. and O'Flaherty focus on resource sharing as the key dynamic between the leader and his supporters, and predict that in equilibrium, incumbents stay in power forever.

In reality, incumbents do lose power to challengers quite frequently. Bueno de Mesquita et al., O'Flarherty, and others suggest two possible classes of explanation for this divergent outcome. First, economic shocks or mismanagement may reduce the pool of resources that can be shared with supporters. If supporters incorrectly interpret smaller payments as evidence that the leader is hoarding resources for himself, they may replace the incumbent with a seemingly more trustworthy challenger. Second, if leaders vary in competence, supporters might overthrow a trustworthy but incompetent incumbent in favor of a challenger who can improve the economy and develop a larger pool of resources to be shared. Still, while leaders sometimes lose power in these revised resource-based models, they always keep their promises because they believe there is no other way to guard against coups.

If leaders need a loyal support coalition to remain in power, we might expect that the longest-surviving leaders are those who keep their supporters happy by keeping their promises. However, many of history's most enduring dictators broke their promises to key supporters in very serious ways: they exiled, imprisoned, or killed their close allies. How did these leaders survive for so long when they treated their supporters so poorly?

If it is true that the support coalition can always credibly threaten to organize a coup against the leader, then dictators must indeed keep their promises. If, however, a leader can interfere with the ability of the support coalition to organize a successful coup, then there is also an equilibrium in which the leader reneges on his promises and the allies continue to support him because they are unable to remove him from power.

Sharing resources vs. sharing power

Svolik (2012) proposes that breaking promises to supporters can be a winning strategy for dictators. All leaders need a high level of support to gain office, and because authoritarian leaders can be removed from office at any time, they do not have the luxury of being safe in power until the next election or the expiration of a term limit. They therefore continue to depend on support from key allies even after taking office. While most dictators need continuing support to survive in power, Svolik argues that dictators can sometimes gain independence from the support coalition by engaging in a series of power grabs until they "have acquired so much power that they can no longer be credibly threatened by their allies" (p. 6).

In Svolik's view, would-be dictators must promise to share both resources *and* political power with supporters. This is because when leaders fail to share *resources*, they harm their allies only in the short term (i.e., the allies do not receive the resources they were promised in the current

period). But when leaders fail to share *power*, they harm their allies in the short term *and* reduce the ability of their allies to enforce agreements in the long run (i.e., the allies do not receive the resources they were promised in the current period, and they probably will not receive adequate resources in future periods, and they cannot do anything about it). In Svolik's model, the balance of power is more important than the distribution of resources.

Svolik points to two possible equilibria for the intra-regime balance of power in authoritarian regimes. In the first equilibrium, leaders keep their promises by sharing power and resources throughout their tenure in office. In this equilibrium, the allies retain their ability to execute a coup and the leader remains in power until the allies come to believe (correctly or incorrectly) that the dictator is incompetent or untrustworthy. The leader remains *dependent* on his support coalition. This equilibrium is similar to the single equilibrium derived from the strictly resource-based models described above.

In Svolik's second equilibrium, the leader appropriates the political power of some of his allies for himself, and gains such a preponderance of power that no group in society is capable of overthrowing him. The dictator gains *independence* from his support coalition and can continue to hoard an disproportionate share of power and economic spoils with little fear of negative consequences.

Anecdotal evidence supports the notion that betraying one's allies to establish a favorable balance of power improves authoritarian durability. For instance, Joseph Stalin rose to power in the Soviet Union by playing various factions within the Communist Party against one another, purging first Leon Trotsky's left wing, and then Nikolai Bukharin's right wing, and ultimately eliminating many members of the old revolutionary guard. After removing key political influencers and power brokers from the political arena, Stalin was able to manipulate and threaten

his remaining subordinates into (mostly) loyal servitude (Getty, 2002). Stalin's purges reduced the strength of the inner circle and helped Stalin to survive in office from the mid-1920s until his death in 1953.

It seems longevity in office can be achieved in spite of broken promises, and very likely *because of* broken promises. Svolik argues convincingly that purges within the ranks of the allies can alter the intra-regime balance of power in a way that favors the dictator over any potential group of allies (or former allies) who might wish to remove him from power.

However, additional conceptual work is needed to explain exactly what constitutes "power" and what it means to engage in a "power grab." Svolik proposes that a dictator and his key supporters together, by definition, "hold enough power to be both necessary and sufficient for a regime's survival" (57), and he defines power as follows:

Both the dictator and members of the ruling coalition may derive power from economic or military resources or by having a large number of loyal followers. Loyalty in turn may be the result of ethnic, sectarian, or tribal ties or patronage or it may have more elusive foundations, as in the case of personal charisma (p.57).

This definition is so broad that it seems to suggest that power can come from almost any source at all, and that it is essentially a "you-know-it-when-you-see-it" phenomenon. It is not clear from this explanation how one might objectively gauge the balance of power in a real-world setting.

A clearer understanding is also needed of how the dictator can "grab" power from his supporters. In Svolik's description, the dictator can take and possess for himself the power of his former supporters, as if he is transferring funds from their bank account to his own. But it seems equally possible that a purge might simply destroy the victim's power (no one can have it) or leave it intact (perhaps to be used later in support of a challenger). What is power, and under what conditions can it be redistributed in the way Svolik suggests?

The intra-regime balance of power

One perspective on political leadership equates power with *choice*. In the selectorate model, a leader needs a certain number of institutionally designated "selectors" on his side to remain in power (Bueno de Mesquita et al. 2003, p. 42). These selectors are "a subset of the selectorate of sufficient size such that the subset's support endows the leadership with political power over the remainder of the selectorate as well as over the disenfranchised members of the society" (p. 51).

The leader survives in office when he has an adequate level of support, and giving support means exercising choice. For a leader to win and keep power, key selectors (the "winning coalition") provide support by expressing a preference for the leader whenever a political challenge arises. The selectorate model develops the important insight that being able to choose the leader is a key foundation of power. However, while the definitions of the terms "selectorate" and "winning coalition" are fairly straightforward in theory, it can be difficult to map these concepts onto the complexities of real, existing or historical authoritarian regimes.

In systems with highly-institutionalized leader selection methods, it is a simple matter to designate a particular group of people as the selectorate and to name some fraction of those people as necessary to form a winning coalition. Yet a basic characteristic of many authoritarian regimes is that there are no clear rules for the transfer of power from one leader to the next. Or, when there are rules in place, they are often violated or circumvented. In the absence of institutionalized selection mechanisms, there is no clear "selectorate," and the size and attributes of the winning coalition might change from year to year. There is no group of individuals who are guaranteed the right to participate in the selection process, and winning coalitions must be constructed and

reconstructed on an ad hoc basis to overpower whatever challengers might emerge in the political context of the day.

For example, Bueno de Mesquita et al. explain that in the Soviet Union, while all adult citizens were allowed to vote and were therefore members of the selectorate, just half the members of the Communist Party (a small percentage of all voters) were necessary to form a winning coalition (pp. 53-54). In truth, however, the formal right to choose the Soviet leader had little political relevance, either for regular voters or for members of the Communist Party. The Soviet leader was typically chosen by an inner circle of top party elites, using opaque selection methods, behind closed doors. The ratification of that choice through voting in general elections or at the party congress was a propaganda exercise that was not so much a means of assigning power to the leader as it was a demonstration of the tremendous amount of power the leader already possessed. The leader needed some faction of key supporters to rise to power, but there was no rule (formal or informal) about how large or strong that group needed to be (Zimmerman, 2014).

I propose that the right to choose a leader is powerful only when it arises from a concrete ability to *enforce* the desired outcome. Power stems from political support, or *a stock of politically useful resources, mobilized on behalf of a particular leader or candidate*. This definition has two elements. First, supporters must be willing to share their patronage, repression, or propaganda resources to support one candidate in a political contest against all other candidates. For example, supporters might bribe or threaten members of the opposition, or they might circulate favorable messages about the dictator. Second, and perhaps more important, supporters as a group must be organized; they must be capable of using their resources for coordinated actions to overwhelm the actions of competitors.

In this conceptualization of support, relative levels of support for candidates are more important than absolute levels, because the key function of support is to neutralize organized challenges to the leader's rule (or to help a challenger neutralize the supporters of other candidates). A candidate for leadership can improve his chances of defeating his competitors by (1) increasing his level of support in absolute terms, by making appeals to potential supporters or by taking steps to improve coordination amongst existing supporters, and (2) increasing his level of support in relative terms by disrupting the ability of other candidates' supporters to access resources and coordinate their actions. Both of these steps help to create a balance of power that favors the dictator (or a challenger) over those who oppose him.

These steps are relatively straightforward when everyone's leadership preferences are known. However, people in authoritarian regimes often disguise their true political preferences. Kuran (1991) proposes that in every regime, there are some individuals who genuinely support the leader and others who would prefer to see a different leader in charge. In democracies, people are fairly free to reveal their true preferences. But in authoritarian regimes, people may fear the consequences of speaking out against the political status quo. Among those who privately oppose the leader, there are some who will choose to voice their discontent in public, but there are many others who will bite their tongues and behave as if they support the regime. *Preference falsification* occurs when an individual's private preference differs from his publicly expressed preference (p.17).

Kuran explains that revolutions occur when some people who were previously falsifying their preferences decide to make their anti-regime preferences public (perhaps because of a new grievance) *and* the distribution of discontent in the society is such that a bandwagoning effect occurs. A revolution is a collective action that requires a certain level of participation to produce

a successful outcome.³ In Kuran's model, people join revolutions when they see enough other people already participating that they believe the potential benefit associated with expressing their true political preference outweighs the potential risk of punishment. According to Kuran, "widespread disapproval of the government is not sufficient to mobilize large numbers for revolutionary action. Anti-government feelings can certainly bring a revolution within the realm of possibility, but other conditions must come to together to set it off" (21).

Kuran's theory focuses on mass politics, but a similar logic can be applied to authoritarian politics at the elite level. Dictators can share power and spoils to improve levels of genuine support among their allies. But some level of preference falsification is common, even within the inner circle. Like a revolution, a coup is a collective action that requires a certain threshold of participation to produce a successful outcome. Allies are unlikely to participate in a coup unless they believe they can coordinate with enough other dissatisfied elites to mount a strong challenge and carry out a successful coup.

The risk versus reward calculation is especially stark for regime insiders, who typically have much farther to fall than regular citizens. These elites typically enjoy a high standard of living, which they put at risk through participation in a coup. Furthermore, plotting against the leader from within the highest ranks of the regime is likely to result in the severest of consequences if the coup is unsuccessful; execution is a likely outcome. Regime insiders are therefore unlikely to participate in a coup unless they believe very strongly that it will succeed. And, preference

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³ Kuran proposes that some people may be happy just to express their true preferences, while others might only participate in opposition action if they believe they can embarrass the regime or effect a total regime change. A "successful" outcome might mean different things to different people, which explains the bandwagoning effect. Some people come out to protest early, while others will not participate until the movement is bigger, when the risk seems lower and the reward higher.

falsification can make it difficult to know how many people genuinely support the leader, making it difficult to predict the outcome of a coup.

Many regimes at many points in time have likely been ripe for coups, with a large number of aggrieved elites who dislike the leader and who possess, collectively, a sufficient quantity of political resources to overpower the leader's genuine supporters. However, unless these people can identify one another as potential co-conspirators and work together to use their resources in a coordinated manner, a successful coup is unlikely. Elites who oppose the leader have an incentive to be perceived as loyal until the leader is already on his way out of power. Such preference falsification makes it difficult for potential coup plotters to know who they can work with to organize and execute a coup.

I have proposed that competition between incumbent and challenger support coalitions determines the outcome of leadership contests. However, it would be inaccurate to imagine an open competition in which the factions organize themselves on one side or the other and prepare to face off against one another. Instead, we can imagine everyone arranging themselves on one side of the line, as close to the leader as possible. Within that mass of individuals, those who oppose the leader try to whisper to one another about how and when they might stage an attack, without being overheard.

Crucially, the organization and mobilization of political resources depends on people being able to reach out to one another, either through existing relationships or through the cultivation of new relationships, to establish common goals and plan concerted action. The value of supporters depends not just on the resources they bring to the table, but on the ability of the supporters to work together. I propose that the balance of power, both within the regime and within the society as a whole, depends to a certain extent on the allocation of resources, but is also heavily influenced

by the ways in which the resource holders are *connected to one another*. For people to engage in collective action, they must feel comfortable sharing their political preferences with the other actors, and they must trust everyone in the group to keep their promises and follow through with any agreed-upon plans. Preference falsification is a major problem for coup plotters, and overcoming preference falsification in the early stages of planning a coup requires an environment that allows people to trust one another and tell the truth.

To sum up, providing political support requires both resources and a resource-sharing and planning network. Resources are *political* if they can be used to neutralize political opponents through patronage, repression, or propaganda. Resources are useful in a political battle if they can be utilized in a coordinated and organized fashion. To maintain a secure hold on power, a leader need not control a majority or even a plurality of all political resources. Rather, he needs to prevent his detractors from creating a cohesive community of opposition; he needs to make it exceedingly difficult to for people to organize a coup, even if they have the desire and the resources to do so. The intra-regime balance of power is determined by the distribution of resources as well as the ability of various groups to pool their resources for coordinated political action.

Power grabs and the importance of relative power

I have suggested that a leader can improve his level of political support relative to that of other candidates by (1) winning over additional supporters or (2) weakening the supporters of an opposition candidate. However, leaders also sometimes engage in purges that weaken their own supporters. How can a leader become stronger through actions that weaken his base of support?

When a leader purges a strong, well-connected supporter, he loses that source of support.

He can take steps to ensure, however, that his erstwhile supporter is less capable of supporting

other candidates and connecting with would-be coup plotters in the future. A well-connected individual (someone who has a stock of political resources not dependent on the leader) can be a potent weapon in either the regime camp or the opposition camp. For the leader to want to purge an ally, it must be true that (1) the purge will reduce the ally's ability to support other candidates in the future, and (2) the leader will continue to enjoy a higher level of support than any potential challenger, despite having spurned a valuable supporter.

A clue to when the first condition might be met hinges on the nature of political support. A leader's most valuable supporters are likely to be those who (1) control sizable stocks of political resources such as wealth or weapons and (2) have personal connections they can use to plan coordinated action using those resources. Most members of the inner circle likely draw their political resources in part from occupying positions that allow them to access state resources and in part from possessing a personal supply of private resources. Purging a member of the support coalition can reduce access to one or both types of resources, depending on the severity of the purge.

Perhaps more importantly, purge victims are also likely to suffer a reduction in their ability to coordinate with former friends and colleagues. When a leader renounces one of his allies, the remaining allies (as well as those outside the inner circle who control political resources) will have an incentive to limit their interactions with that person. They may find the relationship less valuable or less desirable once the person's connection with the regime is severed, or they may feel an obligation to cut off relations as a show of loyalty to the leader. In either case, the former supporter is likely to find that there are fewer people he can call upon to help him achieve his political aims.

Furthermore, an individual who has been purged may find that he can no longer communicate with others as freely as he once did, especially if he is attempting to do so from a

jail cell or from exile in another country. For example, when the Russian oligarch Mikhael Khodorkovsky was arrested in 2003, his assets were seized and sold off, and he was jailed in a remote Eastern prison camp. With this action, Vladimir Putin succeeded in neutralizing (at least in the short to medium term) the prospective challenge that Khodorkovsky might have organized against him.

While simply removing a person from the support coalition will not necessarily ruin his finances and his network of relationships, a smart dictator will be sure to take further steps to accomplish these ends. An effective purge involves accusing the victim of disloyalty or treason, removing him from any roles that might allow for continuing access to state power and resources, and taking away as many personal resources as possible.

Purging allows the leader to literally "grab" resources to some extent, but "grabbing" power is really more a matter of destroying power throughout the system, rather than actually acquiring the power of others for oneself. Because relative levels of power are more important than absolute levels, if a dictator can succeed in diminishing concentrated sources of politically relevant resources and blocking effective coordination throughout the political system, he will face no formidable challengers and will need a lower level of support than he otherwise would to maintain himself in office.

Of course, some support is still a prerequisite for maintaining power. A key aspect of incumbency advantage is that once the existing networks of political resources have been damaged, the leader can work to assemble and reassemble new networks of support under the bright lights of political legitimacy. Meanwhile, his detractors must cobble together new networks of opposition from the shadows. If a dictator initiates a campaign of purges against a number of the independently powerful political actors in a society, robust political support will be difficult to

find for the incumbent and challengers alike. However, the incumbent will have an advantage over the challenger because even if his new allies are very weak, they can get to work building a new network, with the leader's blessing. The challenger, meanwhile, will struggle to rebuild his own network in secret.

Coup road map and coup-proofing strategies

Leaders in the independent equilibrium use purges to alter the intra-regime balance of power and protect themselves from coups. To understand coup-proofing tactics, a clear view is needed of what exactly it takes to arrange a successful coup. In Luttwak's *Coup Handbook*, which outlines "the techniques which can be employed to seize power within a state (p. 12)," there is a description of a particular variety of coup, the *pronunciamento*, which appears to be the most efficient way to organize a coup:

In its original nineteenth-century Spanish version this was a highly ritualized process: first came the *trabajos* (literally the 'works') in which the opinions of army officers were sounded. The next step was the *compromisos*, in which commitments were made and rewards promised; then came the call for action and, finally, the appeal to the troops to follow their officers in rebellion against the government (1968, p. 24).

The *pronunciamento* seems efficient and decisive: the elites (or a subset of elites) simply get together and share their opinions. If there is found to be sufficient ill will against the leader, they plan a coup commit their resources to execute it. The process is likely to result in a successful coup anytime the participants dislike the leader and have an adequate supply of resources.

There exist, however, several important prerequisites for making any coup possible. First, the coup plotters must be able to assemble as a group without arousing the leader's suspicion. Second, the participants must be comfortable speaking freely against the leader in front of

everyone in the group. Finally, if it is decided that the leader should be ousted, the participants must trust every person in the group to honor his or her commitments during and after the coup.

Beyond all of this, a successful coup requires the plotters to organize what is essentially a *constructive* vote of no confidence. If the group had only to agree that the incumbent should be overthrown, plotting a coup would be somewhat simpler. Instead, the group must agree on a single challenger and commit resources and effort to help that challenger succeed.

A true *pronunciamento* is an unlikely event in most authoritarian contexts because government surveillance and repression encourage secrecy and make it difficult for people to know who they can trust. To organize a successful coup, the coup plotters must develop trust in one another to facilitate the following tasks:

- 1. Find a way to identify and communicate with other group members
- 2. Agree on a candidate to support as challenger
- 3. Assign roles and plan the details of the coup
- 4. Establish that sufficient resources are available to execute the plan
- 5. Make credible commitments to one another to carry out the plan
- 6. Make credible commitments to one another to share spoils in the new regime

Essentially, coup plotters need to be able to get together in a room (literally or figuratively) with a group of people to develop a complicated, multi-step plan. And, in most regimes, they must do so in secret.

Unless a group exists that already shares a dense network of connections (as in the example of the military officers in the *pronunciamento*), a new group will need to be formed in which the members are connected to one another in more tenuous ways. The group members are unlikely to have strong relationships with all of the other people in the cabal. Instead, each person must gather information from their friends about whom they can trust. We might imagine that when the coupplotting process is initiated, the challenger steps into the room first and invites in a few more people he feels certain he can trust. Then, anyone else who wishes to enter the room and participate in the

plot must be vouched for by someone who is already inside the room. One implication of this arrangement is that for a coup to be successful, the dissatisfied elites must have an extensive network of relationships that make it possible for everyone to enter the same room. Relationships must be in place that serve as bridges between smaller, close-knit groups of individuals.

This way of thinking about what it takes to organize a coup sheds light on why intra-regime purges might be a useful tool for some authoritarian leaders. Purges diminish prestige and resources, but they also remove connections from networks of individuals. No one who wishes to be perceived as loyal to the leader wants to be seen whispering with someone who has been exiled from the inner circle. If the leader purges a former supporter in such a way that he or she is transformed into a *persona non grata*, that person can no longer be safely allowed into the room with the other coup plotters. The loss of one person hurts the coup effort, but there may be an even bigger effect if that person's friends are also refused membership in the cabal because the person is not "in the room" to youch for them.

The example of the *pronunciamento* points to two conditions that aid coup plotters. First, people must be able to communicate without fear of being overheard and punished by the leader. Sounding opinions, making commitments, and appealing to the troops is more easily accomplished when people can communicate freely and without scrutiny from the state apparatus. In authoritarian regimes with heavy surveillance and censorship in place, coups will be much more difficult to plan than in more open political environments because it will be harder to communicate without being discovered.

Second, people must know and trust one another with sensitive information. So, networks of connections with many ties between various individuals should facilitate coups more easily than networks in which a more limited number of interpersonal ties hold the group together. It should

be more difficult for leaders to protect themselves against coups when the support coalition is composed of people who are long-time members of a cohesive group, such as a royal family or a long-standing military organization.

CHAPTER 3

Research Design

I have proposed that in order to win authoritarian power, a candidate must have the backing of a group of well-connected, well-organized supporters, who together control a large pool of resources. Every new leader necessarily begins his tenure surrounded by these politically powerful kingmakers. To remain in power for an extended period of time, however, the leader must purge his inner circle, replacing some of his initial supporters with weaker, more loyal allies. In short, I argue that intra-regime purges result in longer leadership tenures for those leaders who survive the short-term repercussions of their actions. It should therefore be possible to observe an empirical relationship between purging activity and the length of a dictator's tenure in office.

Case selection

The cases in my dataset were selected based on the criteria for inclusion in Svolik's *Leader and Ruling Coalition* dataset (2012), which utilizes a minimalist, procedural definition of regime type. To be a democracy, a country must use free and competitive elections to select the legislature and (directly or indirectly) the executive. Any regime that fails to meet this standard is categorized as a dictatorship. Svolik's dataset includes all leaders who ruled over countries in the residual "dictatorship" category from 1948-2008, excepting only those dictators who were only nominally

in power during periods of "no authority" due to foreign occupation, collapse of state authority, or major civil war (Svolik 2012, p. 25).⁴

My selection of cases includes every leader from Svolik's dataset who took office after the end of the Cold War, in 1990 or later. My theory explains leader survival as an outcome primarily driven by forces within the *domestic* political arena. I therefore focus my analysis on cases in which domestic political effects were less likely to be overwhelmed by Soviet or American Cold War machinations. Prior to 1990, leaders who might otherwise have enjoyed long tenures were often undermined by subversive forces from abroad. Meanwhile, weak leaders were often bolstered by foreign aid, military assistance, or other types of support from outsiders. In 1955, for example, the popular Hungarian reformist leader Imre Nagy was removed from power by Soviet forces and eventually executed, a move that in no way reflected the domestic political atmosphere of the day. In his place, the Soviets installed the unpopular Janos Kadar, who ruled Hungary with assistance and support from the Soviet Union for over 30 years (Bekes, et. al, 2002).

Today, while international forces continue to influence domestic politics within some authoritarian regimes, the strength and reach of this influence has diminished considerably. The end of the Cold War marked a period of increased political autonomy for many states. The dataset therefore includes all dictators who took office in 1990 or later, and covers all years up through 2014. The appendix contains a list of leaders in the dataset who served one year or longer. Figure 3.1 is a histogram showing leadership tenure for all cases.

⁴ Svolik's classifications of periods of no authority are based on data from Polity IV (cite), Correlates of War (Sarkees and Wayman, 2010), and the UCDP/PRIO Armed Conflict Dataset (Gleditsch et al., 2002). The identity of the de facto leader and the dates of the leader's entry and exit from office come from the Archigos political leaders dataset (Goemans et al., 2009), with some revisions and updates from Svolik (2012).

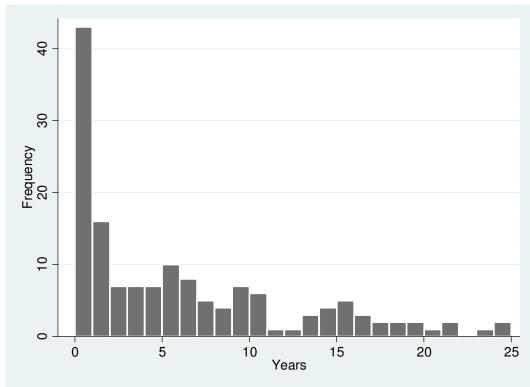


Figure 3.1. Histogram of leadership tenure in years

Forty of the 149 leaders in the dataset lasted in power less than a year, while the remaining 109 served terms of varying lengths, up to the maximum of 24.1 years.

Figure 3.2 shows the baseline hazard ratio for the dictators in my dataset (1990-2014). Leaders are typically in the greatest danger of losing power in their first few years in office, after which the hazard rate steadily decreases. It seems that initial longevity improves future longevity: the longer a leader has been able to hold on to power, the better his chances of enduring in office even longer still.⁵ The hazard rate does increase again around year 14, but late-tenure failures are typically more attributable to poor health or natural death than to coup vulnerability. Among leaders who lasted in office 14 years or more, fully 57 percent left due to poor health or old age,

⁵ The shape of the baseline hazard curve for Svolik's data (1948-2008) is fairly similar to that shown in figure 3.2, with the major difference being more cases of long-surviving dictators, which is to be expected given the extended time range of the data. See appendix 2.

while among leaders who lasted less than 14 years in office, that figure is only 4 percent (or 6 percent excluding from the denominator leaders with tenures shorter than one year).⁶

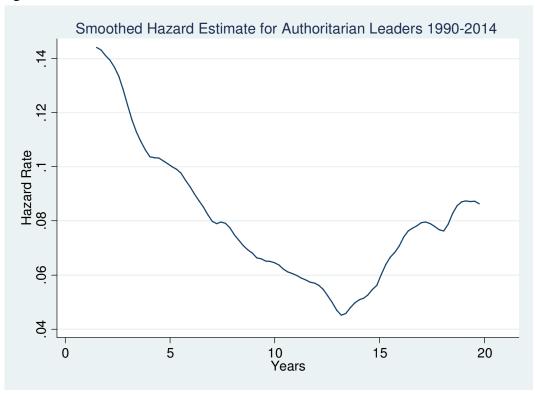


Figure 3.2. Baseline hazard ratio for leaders 1990-2014

Dictators seem to become more secure in office over time. I have proposed that successful political purges allow dictators to consolidate power, and I believe that this effect explains at least part of the pattern of increasing durability. In the following sections, I present an empirical test of the relationship between purging and longevity.

<14 year group, 4 out of 106 total leaders exited due to natural causes.

⁶ Type of exit from office coded by Svolik, *Leader and Ruling Coalition* dataset (2012). The number of cases of leaders exiting power after 14+ years in my dataset is small: 4 of 7 total leaders exited due to natural causes. In the

Dependent variable

The primary outcome of interest for my theory is a leader's tenure in power. Operationalizing this variable is fairly straightforward; it is simply the interval, in years, between the date a leader took office and the date of his death or removal from office. Table 3.1a shows summary statistics for leader tenure for all leaders who came to power after 1990, and Table 3.1b shows the same statistics for only those leaders who served one year or longer. In both tables, the median is somewhat smaller than the mean, reflecting the fact that a small number of long-serving dictators draw the mean toward the long end of the distribution.

Furthermore, to account for the possibility that these means are rendered artificially low by right-censored data, I created a second row in each table showing only those leaders who served their full tenure and ultimately lost power during the period under study. Counter to expectations, the averages are actually higher when the censored data points are *included* in the tally. This reflects the fact that the longest-surviving dictators in the dataset have proven so durable that they have lasted in power beyond the end of the 24-year period under study.

Table 3.1a. Descriptive statistics for all authoritarian leaders, 1990-2014

	Mean	Median	Std. dev	Min	Max
Leader tenure (all cases, N=149)	6.2	4.4	6.3	0.1	21.4
Leader tenure (uncensored cases only, N= 115)	4.0	1.96	4.7	0.1	21.2

Table 3.1b. Descriptive statistics for authoritarian leaders serving one year or longer, 1990-2014

	Mean	Median	Std. dev	Min	Max
Leader tenure (all cases of 1+ years,	8.3	6.4	6.2	1.0	24.1
N=109)					
Leader tenure (uncensored cases only,	5.9	5.0	4.9	1.0	21.2
N= 75)					

Independent variable

The primary explanatory variable for my theory is the extent to which a leader betrays his supporters by purging them from the inner circle. The timing and severity of purging behavior is difficult to measure, especially in a large-N dataset. Determining which individuals make up the support coalition across a large number of cases poses a significant challenge because the formal roles that are associated with the informal role of "key supporter" vary across regimes and time periods. Deciding when a purge has occurred is similarly difficult because it requires a clear understanding of what constitutes an entry or exit from the support coalition and a dynamic measure of membership over time.

In his analysis, Svolik wrestles with the fact that purges and the resulting changes in the intra-regime balance of power are difficult to measure (2012, p.73), and he tries to circumvent this difficulty by using the length of a leader's tenure as a proxy for the amount of power he controls relative to his support coalition. The argument is that if a leader stays in power long enough, he will likely have initiated purges and achieved a favorable balance of power, which will in turn enable him to remain in power for an even longer period of time. However, this operationalization is somewhat tautological in that length of tenure is essentially being used to explain length of tenure. Svolik shows that hazard rates for authoritarian leaders do, in fact, decrease over time. As Figure 3.3 shows, many leaders fail in the first few years, and those who last through this initial period experience declining hazard rates. But, this is a poor test of the theory because it utilizes a single measure to test the relationship between two distinct concepts.

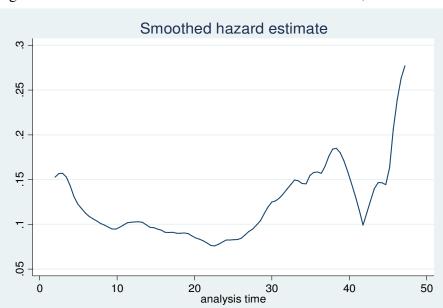


Figure 3.3. Smoothed hazard estimate from Svolik's data, 1946-2008.

Svolik further points to evidence that long-surviving dictators rarely leave office as a result of coups. He explains that not only the average rate of failure, but also the *type* of failure, evolves over time. Seventy-eight percent of leaders who lose power after 1-5 years fall victim to coups, but that percentage declines significantly with time, as natural exits become more common. Loss of power in years 6-10 is driven by coups 74% of the time, and in years 11-15, only 52% of the time. For leaders who last in power 25-30 years, just 12% lose power through coups (Svolik 2012, p. 77). This pattern suggests that leaders become more durable *and* coups become less common over time. Still, there is nothing in Svolik's analysis that points to a causal relationship between purging, changes in the intra-regime balance of power, and leadership endurance.

Svolik's data demonstrate a connection between several outcomes that are associated with general political durability (long tenures, low probability of coups), but these factors are not necessarily related to the dictator breaking his promises to his support coalition. A better test of the theory would utilize a direct measure of either the occurrence of political purging or changes

in the balance of power. While it is extremely difficult to identify changes over time in the membership of the support coalition, I propose that changes in cabinet membership can serve as a suitable proxy variable.

Cabinet membership is a noisy measure of support coalition membership, but there is evidence of significant overlap between these groups in at least some cases. While it is in no way clear that overlapping membership in the cabinet and the support coalition is the norm in every case, patronage-based cabinet appointments are common in authoritarian regimes (Schleiter 2013, p. 50).⁷ As the members of the support coalition theoretically have strong claims on patronage resources, they are somewhat likely to be included in the cabinet. I argue that cabinet turnover is at least moderately correlated with evolving membership in the support coalition. Likewise, high levels of cabinet turnover are likely correlated with intra-regime purges.

I developed a measure of cabinet turnover using data from the CIA's *Chiefs of State and Cabinet Members of Foreign Governments* (1990-2014), a monthly publication that lists the names and positions of all cabinet members in every country. The de facto political leader in each country-year was identified based on Svolik's *Leaders and Ruling Coalition's* dataset, based on the Archigos political leaders dataset (Goemans et al., 2009), and updated and revised by Svolik (2012). For each leader in my dataset, I assembled a year-by-year list of cabinet members, starting with the first month after the leader took office and continuing using the same month in each subsequent year.⁸ The average number of cabinet members for a leader in any given year is 26,

⁷ Schleiter shows that when authoritarian-leaning politicians make cabinet selections, they are less likely than their democratic-leaning counterparts to be concerned with party affiliations and legislative expertise. Instead, they tend to recruit cabinet members based on loyalty, links to coercive agencies, and links to key economic client groups (2013).

⁸ When no cabinet members were initially listed, I used the first month that showed a full cabinet. For the instances in which there were missing data, I used the month closest to the month for which the data were unavailable.

with a minimum of 2 cabinet members for Saparmurat Niyazov in Turkmenistan in 1990 and a maximum of 81 members for Hun Sen in Cambodia during the period 2001-2003.

To create the turnover measure, I scanned the yearly lists of names one by one to identify changes in the composition of the cabinet. Every time a new individual surfaced on the list to replace an existing cabinet member, I counted one full instance of change. A half-change was logged every time a position was eliminated or created (or left vacant or eventually filled after being vacant for a period of time). When an individual simply changed to a new position, or moved from a single position to multiple positions (or vice versa), no change was recorded. Annual turnover was calculated by summing the total number of changes in each year and dividing by the total number of cabinet members in the previous year. The leader was not included in the denominator for the turnover variable, and neither was anyone who held a position as the ceremonial head of state.

Because I looked for changes only at yearly intervals, I have not recorded all instances of turnover in every year. For instance, a leader might have cycled several individuals in and out of a particular cabinet position over the course of a single year, and this would only be captured in my dataset as one change. So, the turnover measure is not capturing total turnover in a year, but rather whether *any* turnover occurred in each position in each year. For partial years (e.g., the last 6 months of a dictator's 3.5-year tenure), the turnover is calculated for the portion of the year that the leader was in office and then annualized.

While most instances of turnover involve the leader moving people in out of existing cabinet positions, my measure also registers increased turnover when new positions are created or existing positions are eliminated. However, conceptually, purges only involve *removing* people from positions of power, and not expanding the roster of cabinet seats. So, an additional condition

has been incorporated in the measure of turnover: all membership changes are counted as instances of turnover (as described above) *unless* the cabinet increased in size by more than 5 percent and by two or more members in a given year. Leader-years that meet both these conditions are coded as having zero turnover for the year. This condition is intended to avoid treating simple growth in the size of the cabinet as a "purge" while still allowing for the possibility that the leader can add a position here or there while also implementing sweeping changes across the rest of the cabinet.⁹

A further conceptual consideration is the question of whether the dictator is the person responsible for choosing cabinet members in each regime. For instance, if the leader is the president in a nominally semi-presidential system, it might be argued that it is the prime minister, and not the president, who selects the cabinet in some instances. However, while there is considerable variation in the dataset in terms of the dictators' formal titles and whether they ruled over systems labeled as presidential, parliamentary, or something else, such formal distinctions in authoritarian regimes are often trumped by informal norms and the de facto levels of influence of various political actors. For the purposes of my analysis, I assume that the dictator has more influence over cabinet selection than any other political figure, regardless of who holds formal responsibility for selecting cabinet members.

It must be noted that while the CIA's data on cabinet membership is generally accurate, there is sometimes a lag of several months or more between the real-time occurrence of changes to the cabinet and the documentation of those changes in the *Chiefs of State and Cabinet Members of Foreign Governments* publication. These deficiencies in the data sometimes cause annual

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⁹ The threshold of 5% and 2 or more people is somewhat arbitrary, but it is intended to strike a balance that minimizes the two possible types of error: counting a cabinet expansion as a purge, or ignoring an actual purge because a few positions were also added in the same year. The results described below are robust to various threshold values.

turnover to be measured over periods that are effectively slightly shorter or longer than a full year. However, the data still provides a fairly solid record of cabinet turnover from year to year. The majority of these data issues occur for little-known dictators who lasted in power for very short periods of time. For this reason, dictators who left office before serving a full year are excluded from the analysis. This omission improves the integrity of the data, as well as addressing the theoretical concern that dictators with very short tenures might be special cases—leaders who ruled in a period of flux and were never fully established in their positions. Many of these short-lived dictators likely lost power for reasons that are outside the scope of my theory.

Table 3.2 shows the distribution of the cabinet turnover variable for all leaders who served one year or longer. The first row shows statistics for average annual turnover over each leader's *entire tenure*. The second row counts average annual tenure in the just the first three years, to help dispel the possible concern that purging might generally be a late-tenure phenomenon.

Table 3.2. Average annual cabinet turnover (%)

	,				
	Mean	Median	Std. dev	Min	Max
Total turnover (average over all years)	17.9	15.5	14.7	0	92.0
Early turnover (average in the first 3 years)	16.9	14.5	16.3	0	92.0

While the average for the first three years is slightly lower, the two variables have similar values and are highly positively correlated across cases (r = .85). A plot of means and confidence intervals by year in Figure 3.4 shows that the mean of 17-18% turnover tends to remain fairly consistent in the beginning, middle, and end of an average leader's term. These data taken together lend support to the idea that dictators come in two distinct varieties, those who are for the most part loyal to their allies throughout their tenures, and those who seem to subscribe to the view that secure leadership involves betraying one's allies early and often.

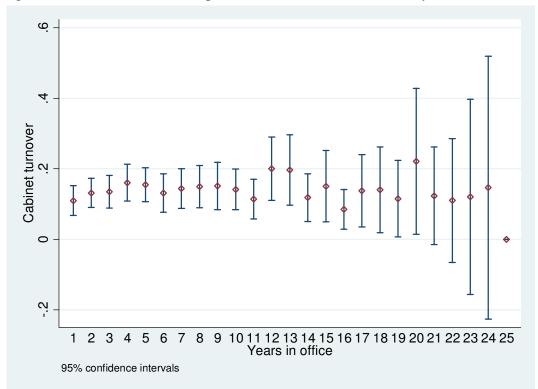


Figure 3.4. Confidence interval plot for turnover variable in each year

The leader in the dataset responsible for the highest level of turnover was Mohamed Taki Abdoulkarim, who oversaw 92% average annual cabinet turnover in the 2.6 years of his rule, swapping out almost every member of his cabinet every year (cabinet size = 8-12 total seats). The cases with the next-highest amounts of turnover are all in the 50-60% range annually. On the low end of the spectrum, some leaders, especially those who served for relatively short periods of time, chose an initial roster of cabinet members and stuck with that group to the end, with 0% turnover in each year.

I use a square root transformation of the cabinet turnover variable in my analysis to account for the idea that an increase in the turnover percentage at low levels of turnover represents a bigger substantive change than a similarly sized increase at higher levels of turnover. For instance, a tenpercentage-point change from 5 to 15 percent turnover (beginning at a very low level and increasing to roughly average) should have a larger effect than a ten-percentage-point change from 60 to 70 percent (beginning at an extremely high level and remaining extremely high). Figure 3.5 plots dictator tenure against the square root of annual turnover averaged over the length of each dictator's tenure.

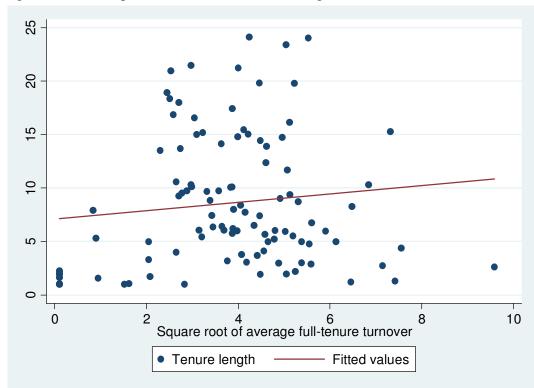


Figure 3.5. Scatterplot of turnover and tenure length

If my theory about purges and longevity is correct, dictators will fall into two main camps: the *trustworthy* dictators who keep their promises to share power and spoils with supporters and the *duplicitous* dictators who break their promises by purging some members of the support coalition. Among the members of the duplicitous group, some will initiate successful purges and gain independence and durability, while others will fail at the strategy and be overthrown in a

coup. Therefore, we should observe high purgers with both short and long tenures and low purgers with short tenures, but we should not observe low purgers with long tenures (see table 3.3). So, if duration is plotted against turnover, there should be an empty area in the upper left corner of the plot.

Table 3.3: Predicted dictator types and tenure lengths

	Low purging	High purging
Long tenure		Duplicitous and successful
Short tenure	Trustworthy but vulnerable	Duplicitous and unsuccessful

Eyeballing Figure 3.5 suggests that there may indeed be an empty left corner. All dictators with average turnover below 6-7% (square root = ~2.5) have relatively short tenures, while those with higher average turnover exhibit more variance in survival. However, 6-7% is well below the mean and the empty upper left triangle is therefore fairly small. More rigorous tests are needed to evaluate the notion that when it comes to political purges, the old adage is true: "What doesn't kill you makes you stronger."

In the regression analysis described below, I use a rolling average of the turnover variable as the key explanatory variable. In each period, I look at the turnover score for that year and every preceding year and calculate the average value. For example, if a dictator has survived through his 3rd year, I take the unweighted average turnover for years 1-3 as the turnover variable for that period. If he has survived 10 years, I calculate the average of the annual turnover value for years 1-10.

Censorship

Organizing a coup depends on communication and coordination. My theory suggests that it should be easier for members of the support coalition to work together to enforce their agreements with the leader when communication can flow relatively freely through the political system. Secrecy and censorship, on the other hand, encourage preference falsification and make coordination more difficult. The ease with which information is permitted to flow through the upper reaches of the regime is difficult to measure, but I have assumed that secrecy at the top is likely to be reflected in secrecy at the mass level. I therefore use Freedom House's *Annual Survey of Press Freedom* (1990-2014) as a proxy for the freedom of information flows at the elite level of politics.

Freedom house rates each country annually as "free," "partly free" or "not free," based on the degree of print, broadcast, and internet freedom. My *censorship* variable takes a value of 1 if a country is rated "not free" in the year the leader takes power, or 0 if the country is ranked "free" or "partly free" in the same year. Of the 109 leaders in my dataset who served one year or longer, the *censorship* variable equals 0 (low censorship) in 44 cases, and 1 (high censorship) in 66 cases. If my theory about information flows is correct, censorship should have the effect of increasing leader longevity (reducing the failure rate).

Regime type

Support coalitions should be able to punish the leader for broken promises more easily in some regime types than in others. Specifically, monarchies and military regimes are typically characterized by networks of long-term relationships that make it possible for a dictator's allies to maintain the dense networks of relationships that facilitate coordination even in environments of

high preference falsification. Monarchs rely on family and kin networks to form their support coalitions, and military leaders rely on the hierarchy of military leaders and soldiers as the foundation of their power. Civilian dictators, meanwhile do not necessarily come to power as members of a pre-established organization. They may therefore be in a better position to prevent coordination among the inner circle and thereby stave off potential coups.

To test this relationship, I use data from Cheibub et al. (2010) that categorizes dictatorships as monarchic, military, or civilian regimes. To be categorized as a monarchy, the leader of the regime must bear the title of "king" (or something synonymous) and have a hereditary successor and/or predecessor. A regime is categorized as "military" if it is not a monarchy and the effective head of government is a current or past member of the armed forces. A civilian dictatorship is a non-monarchy in which the leader is not a current or past member of the armed forces (pp. 83-87). Of the 109 leaders in my dataset who served one year or longer, 48 ruled in civilian regimes, 32 in military regimes, and 16 in monarchies. If my theory about regime types is correct, civilian dictatorships should be correlated with increased leader longevity, as civilian supporters likely have networks that are less characterized by trust and familiarity, making it more difficult to coordinate to overthrow the leader (decreased failure rate).

Control variables

In addition to the key theoretical variables described above, I also include in the model the annual economic growth rate, GDP per capita, and the leader's age. Increasing growth and GDP per capita should increase the overall number of political resources in the society and make it more difficult for leaders to target and weaken potential sources of opposition. Additionally, Inglehart and Welzel argue that as people become wealthier, they increasingly begin to demand democratic institutions (2008, p. 134). While my theory focuses on the intra-elite balance of power, it is

important to control for wealth effects that may register at both the mass and elite levels. According to both of these views, growth should be associated with decreased longevity (increased failure rate). For the *% Econ Growth* and the logged *GDP per capita* variables, I use data from the World Bank's *World Development Indicators* database (1990-2014).

I also include in the model a *Leader age* variable to capture the logic that a leader becomes increasingly likely to lose power due to poor health or general old age with every passing year. In the next section, I explain my modeling choices and present the results of my analysis.

CHAPTER 4

Cox PH Model and Estimation Results

Model estimation

My theory suggests that purging is most dangerous in the first few years of a leader's tenure, when the kingmakers who have succeeded in installing their favorite candidate in office are likely still close to the center of power and able to punish the leader's misbehavior. If a duplication leader survives the fallout from purging in this initial period and successfully alters the intra-regime balance of power in his favor, then less is at stake for the leader in subsequent purges. Middle- and late-tenure purges serve to maintain the status quo rather than to effect a fundamental change in the balance of power, which should make them less dangerous to the leader. If the group of allies has already been hobbled, purging a few allies does not increase the risk of a coup nearly as much as it would in the early years.

A Cox Proportional Hazards (PH) model is ideal for survival data with right-censoring in the dependent variable. Estimating a PH model is a reasonable way to test my theory because the dependent variable in my dataset is a measure of longevity (time to failure), and there is a significant amount of right-censored data (34 of 150 dictators were still in power in 2014). Furthermore, a PH model allows for the inclusion of time-varying covariates (e.g., GDP, age of the leader) and the evaluation of how changes in those variables over time affect the likelihood of survival in each period.

The PH model requires the assumption of proportional hazards, or a belief that the independent variables do not have time-varying *effects*. The PH model estimates a nonparametric baseline hazard rate, which can increase and/or decrease over time. With the baseline probability of failure (when all independent variables are equal to zero) established, the model evaluates the extent to which each independent variable increases (or decreases) the likelihood of failure above (or below) the baseline hazard. It estimates the average effect of each variable across all event times and weights the effect equally in each period. PH allows the baseline hazard rate to vary over time, but works on the assumption that the *hazard ratio* is constant: the effect of one variable beyond the baseline hazard rate should be the same in any period (Box-Steffensmeier and Jones 2004).

If the effect of one or more of the variables changes over time, the proportional hazards assumption is violated. A Cox Proportional Hazards model can still be used in such cases, but the model must be altered to account for the presence of variables with time-varying effects (Bellera et. al 2010). My theory predicts that the first few purges in a leader's tenure might help or hurt him, either establishing a favorable balance of power or provoking a coup that he is unable to defend against. For leaders who endure through this period of risk, purging should become unequivocally beneficial. The effect of purging should therefore vary over time, having an ambiguous or perhaps even harmful average effect in the first few years and becoming beneficial over time, as those leaders who could not carry out successful purges drop from the dataset.

To test empirically for whether a variable has time-varying effects, a Kaplan-Meier survival distribution with the data grouped into different values for the variable in question is helpful. In this case, I have divided the data points into two groups: leaders who are high or low purgers. High purgers have average annual average turnover at or above the median of 15.5%, and

low purgers are below the median. If the proportional hazards assumption is valid and the hazard ratio is constant over time, the two lines should begin in the same position on the left side of the graph (100% of leaders of both type survive in period 0), and the lines should move away from one another at a consistent rate over time, as the difference in failure rates between the two groups remains constant in each period. If the lines diverge from this pattern or cross at any point on the graph, the assumption of proportional hazards is likely violated, as the variable can be seen to increase the likelihood of failure in some periods and decrease it in others. Figure 4.1 is a Kaplan-Meier survival plot showing that high purgers suffer an increased rate of failure in the first 5 years, after which the lines cross and the low purgers become more likely to fail.

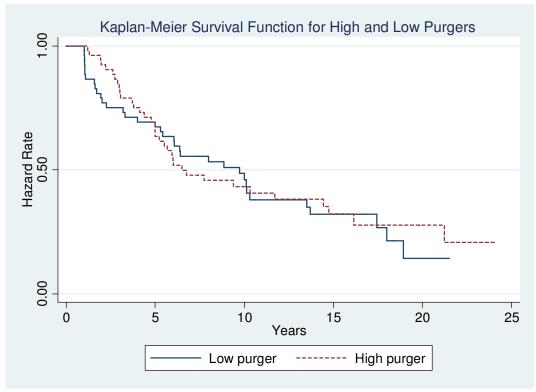


Figure 4.1. Kaplan Meier survival plot for low and high purgers

A graph of smoothed hazard estimates for the two groups shows the difference more clearly.

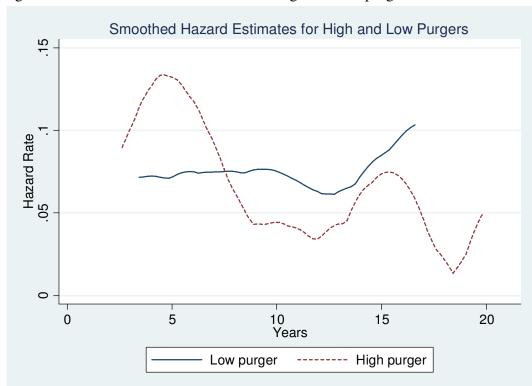


Figure 4.2. Smoothed hazard estimates for high and low purgers

High purgers are more likely to lose power initially, but after the first few years, their risk of failure steadily decreases. Meanwhile, low purgers appear to be in danger of losing power at a fairly constant rate throughout their tenures. Comparing the survival functions for the two groups makes it clear that proportional hazards for the turnover variable cannot be assumed.

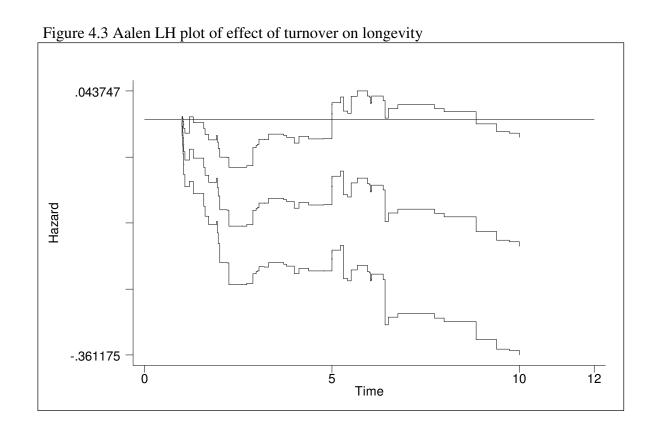
One solution for modeling a variable with time-varying effects is to include an interaction term between the variable and the amount of time that has passed since the leader entered power However, using this solution in my model would imply that the effect of turnover on survival increases or decreases at a constant rate over time. Instead, I am proposing that turnover increases the likelihood of failure initially, and then decreases that likelihood as more time passes.

Another "well-known and accepted estimation [approach] for dealing with suspected non-proportionality" is to estimate separate Cox models for distinct time intervals (Box-Steffensmeier and Zorn, 2001). I adopt this approach, estimating piecewise regressions with one estimate of the regression coefficients for the initial years (when purging is likely to help some leaders and hurt others), and another estimate for later years (when purging is expected to have a uniform effect, helping all leaders maintain a secure grasp on power).

I have no theoretical expectation about when exactly the transition from "initial years" to "later years" from the discussion above likely occurs. So, I use an Aalen Linear Hazards (LH) model to identify the best point in time to split the data for piecewise analysis. The key benefit of this model is that it is a form of survival analysis in which both the covariates and the regression coefficients are allowed to vary over time. However, there are some drawbacks to using the model to understand the effects of variables on survival time, especially when using small datasets. It is therefore preferable to use a piecewise PH model to estimate the effects of the variables after using the LH model to identify appropriate cut-points (Hosmer and Royston, 2002).

Figure 4.3 presents results from the an estimation of the LH model estimation that tests the time-varying effect of turnover, controlling for *censorship*, *regime type*, *economic growth*, *GDP per capita*, and *leader age*. The middle line is the estimate of the effect of turnover on the hazard ratio, and the top and bottom lines are 10% confidence intervals. The horizontal line running across the top of the graph is zero effect. The graph shows that, contrary to my expectation, turnover seems to have a strong negative effect on the likelihood of failure in the initial years of a leader's time in power. In fact, the effect seems to be negative across the whole period except around years five and six, where the hazard ratio seems to increase somewhat. I suspect that term limits may

be the explanation for this period, during which the effect of turnover on the rate of failure becomes more positive and less significant.



Baturo (2010, p 638) explains that beginning in the 1990s, formal term limits became increasingly common in authoritarian regimes. Of course, many authoritarian regimes do not have term limits, and those leaders who are subject to term limits often alter the constitution to remove term limits or find other ways to get around them. Still, in the period leading up to a first term limit, a dictator is likely to be more vulnerable to opposition, from both within and outside of the regime. A term limit presents an excellent coordination point for any regime detractors to attempt to oust the leader from power. During this period, coups plotters should have an easier time coordinating against both high and low purgers. Term limits typically range from 4 to 7 years, which coincides nicely with the bump in the LH estimates.

Based on the result of the Aalen LH estimation and my theory about the effect of term limits, I have split the data into three time periods for piecewise PH regression. The first period covers the leader's first 4 years in office. The middle period ranges from the day the leader hits his four-year anniversary in office through the day of his seven-year anniversary. The final period lasts from the day after a leader's seven-year anniversary through year 24, the last period in the dataset.

Table 4.1 shows the results for the same Cox Proportional Hazards model estimated 3 times, once for each of the three time periods described above. The dependent variable is survival in years. The key explanatory variables are *mean turnover to time t, regime type*, and *censorship*. The control variables are *GDP per capita, economic growth*, and *leader age*. Because there are multiple records for each leader in the dataset (one for each year in a leader's tenure), robust variance estimation techniques are used (Box-Steffensmeier and Jones, 2004, p. 116).

A hazard ratio greater than 1 indicates an increased likelihood of failure, while a hazard ratio less than 1 indicates decreased likelihood of failure. For example, an estimated hazard ratio of 1.05 would indicate that a one-unit increase in the variable in question increases the likelihood of failure by 5%. A hazard ratio of 0.75 would indicate that a one-unit increase in the variable decreases the likelihood of failure by 25%.

My theory predicts that purging might harm some leaders and help others in the initial years in power. However, the data seem to show that purging has a significant beneficial effect on longevity for leaders both early and late in their tenures. The effect is slightly stronger in the later years, but even in the first four years, moving from 9% to 16% turnover, or from 25% to 36% (one square-root unit), produces a 40% reduction in the likelihood of a leader losing power. Perhaps

this effect can be explained as the result of leaders being good at predicting how purges will be received by the members of the support coalition.

If a leader expects the support coalition to be vigilant in protecting the balance of power, he may see no other option but to maintain the dependent equilibrium, sharing power and spoils throughout his tenure. If, on the other hand, a dictator believes he can initiate a purge and get

Table 4.1. Regression output for Cox Proportional Hazards Model

Table 4.1. Regression output for Cox Proportional Hazards Model						
Hazard ratios with p-values in parentheses (robust standard errors)						
	-1 xx20	***	4.7 220000		> 7	•0
	<4 yea	<u>18</u>	<u>4-7 years</u>		>7 year	<u>S</u>
Turnover	0.60	**	1.05		0.53	**
	(0.01)		(0.86)		(0.04)	
Civilian	0.48	*	1.60		2.73	**
	(0.08)		(0.40)		(0.04)	
Censorship	0.73		0.65		0.37	*
	(0.45)		(0.34)		(0.06)	
GDP pc (ln)	1.02		0.95		1.01	
	(0.89)		(0.78)		(0.93)	
% Econ						
growth	1.01		0.94	**	1.08	*
	(0.47)		(0.02)		(0.07)	
Leader age	1.02		1.01		1.08	***
	(0.13)		(0.52)		(0.00)	**
Subjects	104		76		51	
Failures	28		22		20	

^{***} p < .01

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^{**} p < .05

^{*} p < .10

away with it, purging will be a more viable option. In other words, if purging is strong medicine that kills some and cures others, perhaps only those who believe in the power of the medicine for their particular circumstances are willing to try it.

Each square-root unit increase in the *turnover* variable makes a dictator 40% less likely to lose power in years one through four and 47% less likely to lose power in year seven and beyond. These effects are significant at the α =.05 level. In years five, six, and seven, the effect of the turnover variable is only slightly different from zero, and it is not statistically significant. Purging behavior during this period has a negligible effect on average, perhaps because term limits make the average leader too politically vulnerable for purges to have any beneficial effect.

The *regime type* variable performs as expected in the early years of a dictator's tenure, with leaders of civilian regimes failing roughly half as often as leaders in monarchies or military regimes. However, after the dictator's seventh year in power, civilian leaders become almost three times as likely to fail as other leaders. This large swing in the direction and size of the effect is unexpected, and no ad hoc explanation readily presents itself. Given that many civilian regimes have a hegemonic party that helps to distribute spoils and manage individual promotions through the party hierarchy, perhaps the difference between civilian regimes on one hand and monarchic or military regimes on the other hand is smaller than initially imagined. The change in the estimated effect may be an artifact of a few long-surviving leaders who pull the regression coefficient for that variable in an odd direction.

The *censorship* variable has the expected effect, reducing the rate of failure for dictators, but it is not significant in the first seven years, and only becomes significant at the α =.1 level in the third stage of the piecewise regression. This Freedom House measure, focusing primarily on mass media is likely not a particularly good proxy for the extent to which elites can openly

communicate their political preferences amongst themselves. A better measure would require researching individual regimes and devising a system for measuring the frequency with which elites make negative comments about the leader or the regime, perhaps in government or party meetings or some other observable venue.

GDP per capita and economic growth do not appear to have a significant effect on leader survival. Leader age does increase the likelihood of a leader leading office slightly in the initial years (although not significant) and substantially in the later years. With each year of increased age after a leader has been in office for seven years, his likelihood of losing office (perhaps because of illness or natural death) increases by 8 percent.¹⁰

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¹⁰ I tested a number of variations of the model described above, using different cut points for the piecewise regression, and including additional variables in the model. In general, the models performed the same regardless of these changes. The coefficients on the variables tended to predict effects in the same direction and at similar levels of significance.

CHAPTER 5

Conclusion

I propose that dictators rise to leadership positions by promising to share power and spoils with the political elites who help to establish them in office. Once in power, a leader can attempt to retain his position in the short to medium term by keeping his promises and maintaining the status-quo balance of power. Alternatively, he can attempt to secure a longer tenure by breaking his promises, purging prominent allies, and establishing an unequal balance of power that allows him to behave as he likes, with impunity.

My theory builds on selectorate theory (BDM et al., 2003), but calls into question the assumption that all leaders come to power within a preexisting set of institutions that are exogenously determined and fixed over time. Instead, I argue that one of the most interesting and important dynamics in authoritarian regimes is the ability of dictators to reshape and reinvent political institutions in line with their aspirations, their appetite for risk, and their ability to manipulate their supporters—purging some while successfully reassuring others that they have nothing to fear.

Selectorate theory helps to explain the dynamic that underlies the *dependent* intra-regime equilibrium, in which supporters continue to uphold the leader as long as they believe he is keeping his promises to share the spoils of office, and the leader continues to share spoils so that he may remain in power. However, the assumptions in selectorate theory are too rigid to explain the *independent* intra-regime equilibrium. For BDM and coauthors, if a leader were to purge a key supporter, he would need to find another qualified supporter to fill the position, and he would need to continue sharing resources as before to maintain a sufficiently sized coalition to keep him in

office. He would never, in fact, choose to purge a key supporter for fear of becoming more vulnerable to challengers. In my view of intra-regime politics, however, a purge has the potential to alter the structure of the political system by changing both the size of the "winning coalition" and the requirements for membership. An independent dictator can alter the distribution of political resources and the ability of various political actors to coordinate their activities, so that fewer, weaker supporters than were initially necessary may be adequate to keep the leader in power. Additionally, a purge may enable the leader to hoard more resources for himself because an *independent* leader cares less about keeping his supporters happy.

The fact that many long-surviving dictators are known to have purged members of their inner circles with the aim of consolidating power or staving off perceived threats lends credence to the idea that dictators can protect themselves and extend their longevity in office by betraying key supporters. The data presented above provides further evidence that there is likely a connection between turnover in the inner circle and leader tenure.

My theory borrows heavily from Svolik's theory of authoritarian power-sharing and his description of the *dependent* and *independent* intra-regime power-sharing equilibria (2012). However, while I agree that the intra-regime balance of power is a key determinant of political survival in authoritarian regimes, I question the characterization of power as a transferrable resource that can be easily taken from one individual and granted to another. Instead, I argue that power comes from the combination of political resources and effective coordination, and that leaders survive in power by maintaining a favorable balance of power in *relative* terms. To gain additional security in office, they must sometimes destroy or disrupt their own sources of power, rather than "grab" any additional power to keep for themselves. A dictator can strengthen his hand

by weakening his own base of support, as long as he makes it increasingly difficult for his current and future detractors to work together to support any potential challenger.

Furthermore, Svolik's empirical approach can be improved through a more rigorous operationalization of the independent variable. Svolik uses the time a leader has spent in power as a measure of the extent to which the balance of power favors him over his supporters. To better test the theory that a leader can shift the balance of power in his favor by betraying members of the inner circle, I assembled an original dataset on authoritarian cabinet turnover. The turnover variable is intended as a more direct measure of the concept of political purges, and while it is still a fairly rough proxy, it is nonetheless an improvement.

The empirical results show that cabinet turnover does indeed seem to be associated with increased leader longevity, greatly reducing the probability of a leader losing office. The exception to this pattern comes in the fifth, sixth, and seventh years after a leader takes office, when the effect of purging on longevity is negligible. I believe term limits may partially explain this break in the relationship, and further research could test this hypothesis. Collecting data on term limits in every leader year would allow me to re-estimate the model with the inclusion of this additional variable. If term limits matter, including a dichotomous variable for whether a leader was subject to a term limit in any particular year should help to explain the break in the pattern that I observed and clarify why the effect of purges on a dictator's probability of losing office might vary over the course of his tenure.

Another topic for further study is the question of which types of leaders engage in purging, and under what circumstances. I attempted some initial explorations of this question using my dataset, but I was unable to uncover any patterns that pointed to an explanation for why some leaders are able to pursue the independent equilibrium and others must be content with the

dependent equilibrium. A more direct measure of changes in the composition of the support coalition would greatly aid this effort, but collecting such data would require an extensive research effort. A series of detailed case studies might be an effective alternative approach.

I believe I have proposed an interesting extension of existing theoretical work on authoritarian durability, which highlights the dynamic structure of authoritarian institutions and the importance of political coordination and the *relative* balance of power. I have tested my theory using original data and found evidence that supports the notion that political purges play an important role in creating dominant, long-surviving dictators.

As a final point, I would like to note that this work is not intended as a guide for creating durable authoritarianism, but rather as a set of guideposts for protecting against absolute authoritarian power. The conclusion is that those with the necessary resources and connections to select and support new leaders must be brave and diligent in their oversight of the leader if they wish to maintain some checks on authoritarian power. In addition, all people in authoritarian regimes should place a premium on maintaining open lines of communication and developing networks of relationships that can be activated to promote political change when windows of opportunity open. Most people agree that democracy is a desirable political system that tends to produce outcomes that are good for a large number of people. In the absence of democracy, however, a broad oligarchic leadership coalition is better than a single despot who rules with unlimited power.

AppendixAuthoritarian Leaders by Region¹

AFRICA (34)	Leader	Term	Avg. % turnover
Algeria	Khaled Nezzar	1992 - 1994	0.01
Algeria	Abdelaziz Bouteflika	1999 - 2014	0.18
Algeria	Zeroual	1994 - 1999	0.23
Burundi	Pierre Buyoya	1996 - 2003	0.31
Burundi	Pierre Nkurunziza	2005 - 2014	0.28
Chad	Idriss Deby	1990 - 2014	0.25
Comoros	Mohamed Taki Abdoulkarim	1996 - 1998	0.92
Comoros	Azali Assoumani	1999 - 2002	0.51
Cote D'Ivoire	Laurent Gbagbo	2000 - 2010	0.15
Cote D'Ivoire	Konan Bedie	1993 - 1999	0.10
Dem. Rep. Congo	Joseph Kabila	2001 - 2006	0.25
Djibouti	Ismail Omar Guelleh	1999 - 2014	0.10
Eritrea	Isaias Afwerki	1993 - 2014	0.06
Ethiopia	Meles Zenawi	1991 - 2012	0.16
Gambia	Yahya Jammeh	1994 - 2014	0.27
Guinea-Bissau	Henrique Pereira Rosa	2003 - 2005	0.00
Lesotho	Elias Phisoana Ramaema	1991 - 1993	0.20
Liberia	Gyude Bryant	2003 - 2006	0.00
Liberia	Charles Taylor	1997 - 2003	0.23
Mali	Amadou Toure	1991 - 1992	0.42
Mauritania	Sidi Mohamed Ould Cheikh Abdallahi	2007 - 2008	0.55
Mauritania	Ely Ould Mohamed Vall	2005 - 2007	0.04
Morocco	Muhammad VI	1999 - 2014	0.16
Mozambique	Armando Emílio Guebuza	2005 - 2014	0.07
Niger	Mainassara	1996 - 1999	0.14
Nigeria	Sani Abacha	1993 - 1998	0.31
Rep. Congo	Denis Sassou Nguesso	1997 - 2014	0.09
Rwanda	Pasteur Bizimungu	1994 - 2000	0.21
Rwanda	Paul Kagame	2000 - 2014	0.13
Seychelles	James Alix Michel	2004 - 2014	0.15
Sierra Leone	Valentine Strasser	1992 - 1996	0.20
Tanzania	Jakaya Kikwete	2005 - 2014	0.16
Tanzania	Benjamin Mkapa	1995 - 2005	0.09
Togo	Faure Gnassingbé	2005 - 2014	0.24
ASIA (26)			
Bhutan	Kinzang Dorji	2002 - 2003	0.00
Bhutan	Yeshey Zimba	2004 - 2005	0.00
	-		

Bhutan	Jigme Thinley1	1998 -	1999 0.74	
Bhutan	Yeshey Zimba	2000 -	2001 -	
Bhutan	Jigme Thinley2	2003 -	2004 0.00	
Bhutan	Sangay Ngedup	2005 -	2006 0.00	
Bhutan	Khandu Wangchuk	2001 -	2002 0.00	
Bhutan	Jigme Thinley	2008 -	2013 0.01	
Bhutan	Sangay Ngedup	1999 -	2000 -	
Cambodia	Norodom Sihanouk	1991 -	1993 0.00	
Cambodia	Ranariddh	1993 -	1997 0.17	
Cambodia	Hun Sen	1997 -	2014 0.07	
China	Hu Jintao	2003 -	2012 0.11	
China	Jiang Zemin	1997 -	2003 0.14	
Laos	Khamtai Siphandon	1992 -	2006 0.05	
Laos	Choummaly Sayasone	2006 -	2014 0.01	
Malaysia	Abdullah Ahmad Badawi	2003 -	2009 0.10	
Myanmar	Than Shwe	1992 -	2011 0.06	
North Korea	Kim Jong-Il	1994 -	2011 0.15	
Pakistan	Pervez Musharraf	1999 -	2008 0.12	
Singapore	Lee Hsien Loong	2004 -	2014 0.08	
Singapore	Goh Chok Tong	1990 -	2004 0.08	
Thailand	Sunthorn Kongsompong	1991 -	1992 0.03	
Vietnam	Nong Duc Manh	2001 -	2011 0.13	
Vietnam	Do Muoi	1991 -	1997 0.19	
Vietnam	Le Kha Phieu	1997 -	0.04	
LATIN AMERICA	A (12)			
Cuba	Raul Castro	2008 -	2014 0.15	
Ecuador	Gustavo Noboa	2000 -	2003 0.24	
Haiti	Rene Garcia Preval	2006 -	2011 0.22	
Haiti	Boniface Alexandre	2004 -	2006 0.28	
Haiti	Preval	1996 -	2001 0.04	
Haiti	Jean-Bertrand Aristide	2001 -	2004 0.18	
Haiti	Raoul Cedras	1991 -	1994 0.29	
Mexico	Ernesto Zedillo	1994 -	2000 0.16	
Paraguay	Wasmosy Monti	1993 -	1998 0.29	
Paraguay	Nicanor Duarte	2003 -	2008 0.38	
Paraguay	Luis Gonzalez Macchi	1999 -	2003 0.57	
Peru	Alberto Fujimori	1990 -	2000 0.47	
MIDDLE EAST (1	13)			
Afghanistan	Hamid Karzai	2001 -	2014 0.21	
Afghanistan	Mohammed Rabbani	1996 -	2001 -	
Bahrain	Hamad Isa Ibn Al-Khalifah	1999 -	2014 0.10	

Jordan	Abdullah Ibn Hussein El-Hashimi	1999 - 2014	0.54
Kuwait	Jaber Al-Sabah	1991 - 2006	0.25
Kuwait	Sabah IV Al-Ahmad Al-Jaber Al-Sabah	2006 - 2014	0.42
Lebanon	Emile Lahoud	2005 - 2007	0.31
Lebanon	Michel Suleiman	2008 - 2014	0.35
Mauritania	Mohamed Ould Abdel Aziz	2008 - 2014	0.15
Qatar	Amad Al Thani	1995 - 2013	0.07
Saudi Arabia	Abdullah	1996 - 2014	0.06
Syria	Bashar al-Assad	2000 - 2014	0.21
United Arab Emirates	Khalifa bin Zayed bin Sultan Al Nahyan	2004 - 2014	0.08

OCEANIA (9)

Fiji	Mahendra Chaudhry	1999 - 2000 0.02
Fiji	Laisenia Qarase	2000 - 2006 0.13
Fiji	Frank Bainimarama	2006 - 2014 0.12
Samoa	Sailele Malielegaoi Tuila'epa	1998 - 2014 0.17
Tonga	George Tupou V	2006 - 2012 0.27
Tuvalu	Apisai Ielemia	2006 - 2010 0.21
Tuvalu	Saufatu Sopoanga	2002 - 2004 -
Tuvalu	Ionatana Ionatana	1999 - 2000 0.00
Tuvalu	Maatia Toafa	2004 - 2006 0.26

POST-SOVIET / EASTERN EUROPE (18)

Azerbaijan	Ilham Aliyev	2003 - 2014	0.07
Azerbaijan	Abulfaz Elchibey	1992 - 1993	-
Azerbaijan	Heydar Aliyev	1993 - 2003	0.09
Belarus	Alexander Lukashenko	1994 - 2014	0.20
Georgia	Eudard Shevardnadze	1992 - 2003	0.26
Kazakhstan	Nursultan Nazarbaev	1990 - 2014	0.31
Kyrgyzstan	Askar Akayev	1990 - 2005	0.20
Moldova	Mircea Snegur	1990 - 1997	0.12
Russia	Dmitri Medvedev	2008 - 2012	0.07
Russia	Putin1	2000 - 2008	0.15
Serbia	Vojislav Kostunica	2000 - 2008	0.17
Tajikistan	Emomalii Rahmon	1992 - 2014	0.09
Tajikistan	Rahmon Nabiyev	1991 - 1992	0.73
Turkmenistan	Gurbanguly Berdimuhamedow	2006 - 2014	0.20
Turkmenistan	Saparmurat Niyazov	1990 - 2006	0.26
Uzbekistan	Islam Karimov	1990 - 2014	0.18
Yugoslavia	Borisav Jovic	1990 - 1991	0.08
Yugoslavia	Slobodan Milosevic	1991 - 2000	0.26

¹ This list includes all authoritarian leaders who held office one year or longer and began their terms starting in 1990 or later. There are 112 total leaders and 107 with cabinet turnover data.

Works cited:

- Békés, C., Byrne, M., & Rainer, M. J. (Eds.). (2002). *The 1956 Hungarian revolution: a history in documents*. Central European University Press.
- Arriola, Leonard R. (2009). "Patronage and Political Stability in Africa," Comparative Political Studies, Volume 42, No. 10, pp. 1229-1362
- Baturo, Alexander (2010). The stakes of losing office, term limits and democracy. *British Journal of Political Science*, 40(03), 635-662.
- Bellera, C. A., MacGrogan, G., Debled, M., de Lara, C. T., Brouste, V., & Mathoulin-Pélissier, S. (2010). Variables with time-varying effects and the Cox model: some statistical concepts illustrated with a prognostic factor study in breast cancer. *BMC medical research methodology*, 10(1), 20.
- Box-Steffensmeier, J. M., & Jones, B. S. (2004). Event history modeling: A guide for social scientists. Cambridge University Press.
- Box-Steffensmeier, J. M., & Zorn, C. J. (2001). Duration models and proportional hazards in political science. *American Journal of Political Science*, 972-988.
- Bueno de Mesquita, B., Smith, A., Siverson, R. M., & Morrow, J. D. (2003). The logic of political survival.
- Chiefs of State and Cabinet Members of Foreign Governments database (1990-2014). https://www.cia.gov/library/publications/world-leaders-1/
- Egorov, G., & Sonin, K. (2011). Dictators And Their Viziers: Endogenizing The Loyalty— Competence Trade-Off. *Journal of the European Economic Association*, 9(5), 903-930.
- Freedom House (1990-2014). Annual Survey of Press Freedom. FreedomHouse.org
- Hosmer, David W., & Royston, Patrick (2002). Using Aalen's linear hazards model to investigate time-varying effects in the proportional hazards regression model. *Stata J*, 2, 331-350.

- Gallego, M., & Pitchik, C. (2004). An economic theory of leadership turnover. *Journal of Public Economics*, 88(12), 2361-2382.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand (2002). "Armed Conflict 1946-2001: A New Dataset" (UCDP/PRIO Armed Conflict Dataset). *Journal of Peace Research* 39(5)
- Getty, John Arch (2002). The Road to Terror: Stalin and the Self-destruction of the Bolsheviks, 1932-1930, Yale University Press
- Cheibub, José Antonio, Jennifer Gandhi, and James Raymond Vreeland. 2010. "Democracy and Dictatorship Revisited." Public Choice, vol. 143, no. 2-1, pp. 67-101.
- Goemans, H.E., Kristian Screde Gleditsch, and Giacomo Chiozza (2009). "Introducing *Archigos*: A Data Set of Political Leaders," *Journal of Peace Research*, 46(2), (March) 2009: 269-183.
- Kuran, T. (1991). Now out of never: The element of surprise in the East European revolution of 1989. *World politics*, 44(01), 7-48.
- Luttwak, Edward. (1969). Coup d'Etat: A Practical Handbook. New York: Alfred A. Knopf.
- O'Flaherty, B. (1991). *How to be a dictator: the advantages of incumbency* (unpublished).
- Olson, M. (1993). Dictatorship, Democracy, and Development. *American Political Science Review*, 87(03).
- Marshall, M. G., Jaggers, K., & Gurr, T. R. (2002). *Polity IV project*. Center for International Development and Conflict Management at the University of Maryland College Park.Sarkees, Meredith Reid and Frank Wayman (2010). Resort to War: 1816 2007 (Correlates of War dataset). Washington DC: CQ Press.
- Svolik, M. W. (2012). *The politics of authoritarian rule*. Cambridge University Press.
- Schleiter, P., & Morgan-Jones, E. (2009). Constitutional power and competing risks: monarchs, presidents, prime ministers, and the termination of East and West European cabinets. *American Political Science Review*, 103(03), 496-512.
- Welzel, C., & Inglehart, R. (2008). Democratization as human empowerment. *Journal of Democracy*, 19(1), 126-140.

World Bank Group (1990-2104). World Development Indicators. World Bank Publications.

Zimmerman, W. (2014). *Ruling Russia: authoritarianism from the revolution to Putin*. Princeton University Press.