## CAUSES AND CONSEQUENCES OF ELECTIONS IN NONDEMOCRACIES

#### A Dissertation

by

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#### ABSTRACT

In this dissertation, I offer an answer to one of the most important questions about authoritarian politics today: why do dictatorships hold elections? In order to answer this broad question, I study the causes and consequences of elections as well as the role of elections in nondemocratic settings. First, I develop a theory about the causes of elections in dictatorships, which is based on the different threats that dictatorships face and the different goals that they have in order to lessen or avoid these threats. I argue that dictatorships opt for elections for the effective executive if they need to avoid violent removal. In contrast, dictatorships begin elections for a national legislature if they seek to maintain the unity and cohesion of elites in the ruling circle and/or to coopt elites from outside of the regime. Second, I present a theory about the consequences of elections in dictatorships. I contend that two seemingly competing effects of elections are mutually complementary. Individual elections can create a momentum for regime change, leading to the collapse of dictatorships and democratic transitions. At the same time, once dictatorships survive elections, election results convey useful information for the purpose of cooptation and send a signal that deters future challenges to the regime. Tests of my theory on a sample of dictatorships after World War II show robust support for my theory about the causes and consequences of elections. Finally, I revisit the information collection role of elections in nondemocratic settings. I theorize that elections can be either informative or less informative depending on the strategic decisions that major opposition parties make. I develop a formal theory to describe this causal mechanism. An important implication of my theory is that informative elections are associated with post-electoral redistribution of goods and patronage while less informative elections in which major opposition parties boycott elections are not. I test this implication by using original data collected from Serbia in 1990s and present results that are consistent with my theory.

# DEDICATION

To my parents and Natsuko

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#### 1. INTRODUCTION

Scholars and policy makers have long thought that, in nondemocratic countries, political institutions such as legislatures, parties, and elections are merely window-dressing and thereby play no role in important matters such as democratization and the survival of dictators (Gandhi and Przeworski 2007; Hermet 1978). This assertion comes from the view that dictatorships lack an independent authority that can reinforce agreements among key political players. As a result, violence is the ultimate arbiter of conflicts among them (Svolik 2012). More recently, however, political scientists have revisited this conventional wisdom. They have found that the establishment of legislatures and political parties entails both costs and benefits to dictators, and therefore are the product of careful strategic calculations. Institutions matter even in dictatorships (Gandhi 2008; North and Weingast 1989; Root 1994; Svolik 2012). Does this perspective also apply to elections in nondemocratic settings?

In my dissertation, I try to answer an old, but increasingly important question: Why do nondemocratic regimes hold elections? Both the causes and the consequences of elections in nondemocratic settings are puzzling. On the one hand, there are cases where elections appear to cause breakdowns of some dictatorships: some elections result in the unexpected opposition victory while others induce popular upheaval against the regime because of their unfairness. Those instances echo the view that "liberalized authoritarianism is not a stable equilibrium: the halfway house does not stand" (Huntington 1991, 174–175). On the other hand, there are cases where elections seem to contribute to the survival of other dictatorships by generating support for the regimes. Those cases make us believe that dictators "are so successful

<sup>&</sup>lt;sup>1</sup>Throughout the dissertation, terms such as nondemocracies, nondemocratic regimes, dictatorships, and autocracies are used interchangeably.

at using elections to perpetuate their rule" (Gandhi and Lust-Okar 2009, 416). These arguments highlight dilemmas dictators face when deciding whether or not to hold elections. From a scholarly perspective, the question can be phrased as: how can we make sense of elections in nondemocratic settings and incorporate them into our explanations of the survival of dictatorships?

I propose that in order to answer the broad questions outlined above, we need to answer three more narrowly-defined questions. The rationale behind this strategy is that this broad question encompasses a set of different variations that I need to explore both theoretically and empirically. First, when and why do some dictatorships start holding elections? This is a question which has been understudied in the recent, emerging literature of elections in nondemocratic settings, but is a question which needs to be answered in order to fully understand those elections.

Second, once elections are introduced in dictatorships, do they help regime survival or do they cause democratization? In contrast to the first question, there has been a lot of attention paid to this question in the recent literature. In brief, a growing number of studies have produced two competing views on the role of elections. One body of the literature emphasizes a regime-subverting role and a democratizing role of elections. Another body of the research contends that elections play a regime-sustaining role. The question that I attempt to answer is whether these two views are mutually exclusive or complementary with each other.

Lastly, how do elections in nondemocratic settings impact dictators' policy choices? One of the key mechanisms that forms the basis for ideas about the regime-sustaining role of elections is the information collection role of elections and the resulting post-electoral redistribution of goods and patronage. Past studies demonstrated evidence that supports the idea of informative elections, but this evidence is based on case studies. Therefore, the generalizability of this perspective is in question.

In sum, by breaking down the big question into these three separate ones, I will develop a deeper understanding of the role of elections in nondemocratic settings as well as the causes and consequences of elections in nondemocracies. In the three Chapters that follow, I seek to provide an answer to each question.

In Chapter 2, I develop a theory about the causes of elections in dictatorships. This theory is based on the different threats that dictatorships face and the different goals that they have to lessen or avoid these threats. I argue that dictatorships opt for elections for the effective executive if they need to avoid violent removal. This is the case because holding those elections works as an institutionalized means of leadership succession. In contrast, dictatorships begin elections for a national legislature if they seek to maintain the unity and cohesion of elites in the ruling circle and/or to coopt elites from outside of the regime. Tests of my theory on a sample of dictatorships after World War II show robust support for my theory about the causes of contested elections.

In Chapter 3, I present a theory about the consequences of elections in dictatorships. I contend that two seemingly competing effects of elections are mutually complementary. Individual elections can create a momentum for regime change, leading to the collapse of dictatorships and democratic transitions. This happens because elections function as a focal point in which dissatisfied ruling elites split and defect from the regime, opposition forces coordinate and coalesce, and these actors challenge the regime. At the same time, once dictatorships survive elections, election results convey useful information for the purpose of cooptation and send a signal that deters future challenges to the regime. Since these mechanisms are unique to dictatorships that hold elections, those regimes can sustain their existence longer than their counterparts that do not hold elections. Tests of my theory on a sample of dictatorships after World War II provide robust evidence of my theory about the

consequences of elections.

In Chapter 4, I revisit the information collection role of elections in nondemocratic settings. I theorize that elections can be either informative or less informative depending on the strategic decisions that major opposition parties make. I develop a formal theory to describe this causal mechanism. An important implication of my theory is that informative elections are associated with post-electoral redistribution of goods and patronage while less informative elections in which major opposition parties boycott elections are not. I test this implication by using original data collected from Serbia in 1990s and present results that are consistent with my theory.

I conclude in Chapter 5 with a discussion of my future agenda and possible extensions to this dissertation research.

#### 2. CAUSES OF ELECTIONS IN NONDEMOCRACIES

#### 2.1 Introduction

Although elections in nondemocratic settings had long been denied any significance (Hermet 1978, 1), recent research shows that these elections play a regime-sustaining role (Gandhi and Lust-Okar 2009; Schedler 2013). In many ways, multiparty elections appear to help the survival of dictators through the information that they provide on allies, voters, and adversaries (Blaydes 2011; Cox 2009; Magaloni 2006; Malesky and Schuler 2011), communicating the invincibility of the dictators in order to deter challenges (Geddes 2006; Rozenas 2010), and co-opting elites and dissidents through the (re)distribution of patronage and goods (Blaydes 2011; Lust-Okar 2008; Magaloni 2006). In fact, a growing number of elections, albeit unfree and unfair in varying degrees, have been taking place in nondemocracies since the end of the Cold War (Magaloni 2008, 734; Ottaway 2003; Roessler and Howard 2009; Schedler 2013, 2–5). If elections are a useful tool for dictators, however, why do some dictators seem to avoid them? Put differently, when and why do dictators decide to hold elections? These are the questions I attempt to answer in this Chapter.

What we know from previous research is that elections play two different roles. That is, in addition to the regime-sustaining role, they might play a regime-subverting or democratizing role (Donno 2013; Huntington 1991; Lindberg 2009b). Because elections can be both beneficial and costly to dictators, we are left uncertain about what eventually makes dictators hold elections. In order to fill the gap in the literature, I propose a new theory on the causes of elections in nondemocratic settings. If dictators' preference of political survival and the theorized role of nondemocratic elections are not sufficient to explain when and why dictators hold elections, I argue that we

need to look for other possible explanations. A crucial building block of my theory is a less-pronounced assumption in the literature that dictators prefer a peaceful exit when they leave the office. I further contend that consideration of this insight leads us to make distinctions between types of elections—elections of the effective executive and legislative elections—that have been largely neglected in previous research. Since those who get elected differ between these two types of elections, they play different roles with respect to the dictators' possible mode of exit.

In the sections that follow, I begin with a brief review of the literature on the role of elections in nondemocratic settings. I then offer a new theory on the causes of elections that distinguishes between elections for the effective executive and legislative elections. In the third section, I summarize the data set that I constructed to test my theory. Fourth, I present findings from my models of the causes of elections. The last section concludes.

#### 2.2 Literature Review

At the core of the recent scholarship on authoritarian politics is the idea that dictators' primary goal is their survival. Theoretical accounts have been developed as to how elections function in nondemocratic settings with respect to the regime and the leadership survival.

Holding multiparty elections is suggested to play two different regime-sustaining roles — an informational role and a constraining role. These two roles work in tandem and dispel concerns about the threats to dictators. Elections are informative if they reveal information about the loyal supporters and opponents. That information is then used to shape effective and efficient (re)distribution of goods and patronage (Gandhi and Lust-Okar 2009; Lust-Okar 2008). Another aspect of the informational role is called the information communication role (Rozenas 2012, 4). If dictators win

elections with a wide margin, it will signal the invincibility of the regime (Brownlee 2007, 3; Simpser 2013). Elections with high turnout might indicate that there is little to no latent support for opposition forces that can be mobilized, signaling public acquiescence (Geddes 2006, 17–19). Hence, although elections are often seen as a key vehicle of democratic politics, they have a deterrence value and contribute to the survival of dictators through these informational roles.

Multiparty elections play a constraining role in two different ways (Schedler 2013, 144–145). On the one hand, they constrain dictators and facilitate power-sharing between a dictator and his allies. Since it is extremely costly to arbitrarily close the electoral arena, elections provide "a credible exit option" for dissatisfied elites in the inner circles (Magaloni 2008, 728). If dictators fail to meet the policy demand of their allies, those allies can threaten the rulers by defecting and organizing their own electoral force. Hence, policy concession between the dictator and his allies is readily achieved in this setting as it becomes more difficult for dictators to renege on their promise. On the other hand, holding elections also constrains adversaries (Anderson 1996, 33; Schedler 2013, 144–145). By offering an institutionalized means to publicly criticize the regime and express discontent, elections delegitimize violent means to depose dictators. In other words, elections replace bullets with ballots (Schedler 2013, 35). In sum, constraints generated by multiparty elections facilitate cooperation within the ruling circles and dampen non-electoral challenges by dissidents who are able to mobilize their supporters at the polls.

Although multiparty elections in nondemocratic settings might reduce uncertainty and play a regime-sustaining role, they introduce a new type of uncertainty, namely "electoral uncertainty" (Schedler 2013, 35). At the core of this regime-sustaining role is the informational role of elections (Schedler 2013, 145) since credible information is necessary for credible communication and efficient use of it. However,

elections might not always be as informative as they are supposed to be. In order for them to reveal the geographic distribution of support and opposition to the regime, it is necessary that opposition parties compete. If they are not present in the electoral contest—for example, if opposition parties strategically boycott elections in order to discredit the legitimacy (Beaulieu 2006)—, elections cannot reveal much information and thus provide little help for the shaping of (re)distribution policies (Seki 2012).

Furthermore, the information communication role of elections is severely conditioned by electoral outcomes. On the one hand, as long as the regime party dominates the legislature by securing a majority with high margins, elections are likely to signal the invincibility of the regime (Gandhi and Lust-Okar 2009, 407). On the other hand, if opposition parties are electorally viable and show a real chance of victory, they can undermine the perception of invincibility, signaling the weakness of the regime (Donno 2013, 706). For this reason, holding multiparty elections can render nondemocratic regimes unstable (Huntington 1991; Przeworski 1991).

Constraints generated by elections are a double-edged sword. Since elections admit societal pluralism and empower adversaries (Schedler 2013, 62), they might invite dissension and splits within the ruling circles (Hale 2005, 141; Way 2008). The end result might not simply be regime turbulence and limited liberalization, but even democratization (Lindberg 2009; Schedler 2002; Teorell 2010; Teorell and Hadenius 2009). Moreover, elections do not necessarily rule out the possibility of non-electoral violent movements that are aimed at ousting dictators. When dictators manipulate election results in favor of their survival, they provide good reasons for opposition forces to mobilize dissatisfied masses, which can lead to large-scale popular upheaval (Beissinger 2007; Tucker 2007).

In Table 2.1, I summarize the different arguments about costs and benefits from multiparty or multi-candidate elections with respect to the leadership and regime

Table 2.1: Costs and Benefits of Holding Elections in Nondemocracies

	Benefits	Costs
Informational Role		
(1) Information Collection	Revealed information facilitates co-optation.	Elections can be uninformative.
(2) Information Communication	Overwhelming victory signals invincibility.	Election results are not perfectly predetermined.
Constraining Role		
(1) Constraints on Dictators	Elections facilitate credible power-sharing.	"Exit" option undermines elite cohesion.
(2) Constraints on Dissidents	Elections delegitimize violent challenges.	Electoral fraud can motivate violent ouster.

survival. It reveals that electoral benefits are not always guaranteed: Information collection and information communication through elections are not necessarily achieved because there are uninformative elections and election results are not perfectly predetermined. Moreover, the same factors that generate benefits can also be the sources of subversion and instability: constraints on dictators might facilitate credible power-sharing while they can also cause elite disunity. Elections might delegitimize non-electoral challenges by dissidents, but fraudulent elections can bolster their dissatisfaction, which leads to violent popular upheaval. Therefore, although we can claim that the decision of holding elections should be the product of careful strategic calculations by dictators and their allies, the literature remains inconclusive about when and why dictators decide to hold elections.

### 2.3 Theory

Past studies reveal that holding multiparty elections in nondemocratic settings entails both costs and benefits with respect to the regime survival. They are informative when we scrutinize how elections (do not) work for the stability of non-democracies. However, this does not mean that the literature can fully explain when and why dictators decide to hold those elections. Because elections might have both positive and negative effects on regime survival, the literature remains inconclusive about their causes.

In addition to this theoretical challenge, we face a neglected, but empirically important issue about the types of elections that nondemocratic regimes hold. That is, if we turn to examine when and why multiparty elections have been held in nondemocracies, we immediately notice that, in reality, there are different types of elections such as presidential elections and parliamentary elections and the existence of those elections varies considerably across nondemocratic regimes. On one extreme, neither presidential nor parliamentary elections were held at all in Chile under the rule by Augusto Pinochet from 1973 to 1989. On the other extreme, multi-candidate presidential elections along with multiparty parliamentary elections have kept elected Alexander Lukashenko since 1994 in Belarus. In between these two extremes lie countries such as Zimbabwe. Following the parliamentary election in 1980, Robert Mugabe became prime minister and started his rule in newly independent Zimbabwe. When the position of the premiership was abolished in 1987

<sup>&</sup>lt;sup>1</sup>Another type of elections is local elections. Since the past research usually discuss the role of national elections, I do not include local elections in the analyses that follow. However, given that there are countries such as China where only local elections have been held, this type of elections needs more attention in future research.

<sup>&</sup>lt;sup>2</sup>After being appointed as President by the military junta in December 1974, Pinochet declared in July 1975, perceiving that he had consolidated his rule, that "I will die, my successor will die, but there will never be elections again!" (Muñoz (2008, 66) cited by Rozenas (2012, 2)).

Mugabe assumed the presidency, and his tenure has been subject to popular direct votes since 1990. Despite the variation in the types of elections and the timing at which they become contested, the literature does not offer clues about which elections are chosen.

In contrast to the previous research that draws no clear line between the types of elections in nondemocratic settings, I argue that the distinction should be made between them in order to better explain and understand the decision of holding elections. In this Chapter, I propose and focus on two types of elections: elections of the effective executive and legislative elections. Elections of the effective executive choose dictators and can take the form of multi-candidate presidential elections when dictators assume the presidency or multiparty parliamentary elections if dictators' title is premier. I do not use the term "presidential elections" because not all presidential elections necessarily elect effective rulers in nondemocracies.<sup>3</sup> By legislative elections, I mean multiparty national parliamentary elections. Those elections do not select dictators. Instead, they elect the members of the ruling coalition as legislators. The distinction between these two types of elections is made not only for the purpose of better representing empirically observed heterogeneity in nondemocratic elections, but also for theoretical reasons that I discuss below. In brief, I argue that the different types of elections correspond with different objectives that dictators have: On the one hand, elections of the effective executive are held in order to prevent violent ouster of dictators. On the other hand, legislative elections in nondemocratic settings are aimed at maintaing elite cohesion and co-option of elites

<sup>&</sup>lt;sup>3</sup>One example is found in Nicaragua during the reign of Anastasio Somoza Garcia (effective ruler in 1937–1956). Lenoardo Argüello (in office from May 1 to May 26, 1947) was the president elected through multi-candidate presidential elections in 1947, but was a mere puppet. Likewise, René Schick Gutiérrez (in office from May 1, 1963 to August 3, 1966) served as the president, but was deemed a puppet president of Luis Somoza Debayle (effective ruler in 1956–1967).

<sup>&</sup>lt;sup>4</sup>If a country has two houses, I refer to the elections of the lower chamber.

outside of the ruling coalition.

## Elections of the Effective Executive

As I mentioned earlier, dictators' primary goal is their survival. However, theoretical accounts that are driven by consideration of this objective fail to explain when and why some dictators opt for contested elections. If the desire for political survival is not sufficient to provide full understandings of the causes of elections in nondemocratic settings, we need to look for another objective. I argue that dictators' preference for peaceful exit from office is a crucial building block. The way in which dictators leave office varies considerably: some dictators pass away peacefully, find successors, or stay in politics, while others are assassinated, jailed, or exiled by their challengers. That is, the mode of exit of dictators is largely divided into peaceful exit and violent removal. And it will be straightforward to assume that dictators prefer to leave the office peacefully in case they have to do so.

Although past research on nondemocratic elections has not paid sufficient attention to the mode of exit of dictators, this objective has been the subject of studies in another body of literature on authoritarian politics (Goemans 2008). Cox (2009)<sup>5</sup> is one of the early studies that relates this issue to the decision of holding elections in nondemocratic settings. In his formal model, a dictator is uncertain about his rival's military strength relative to his own since it is the rival's private information. Holding elections is considered a way to overcome this informational asymmetry. By incurring the risk associated with electoral uncertainty, the dictator can observe the extent to which the rival mobilizes mass support during electoral campaign and learn about the rival's military strength.<sup>6</sup> One of Cox's important and empirically testable

<sup>&</sup>lt;sup>5</sup>I refer to the version in 2009, but the first manuscript appeared in 2007.

<sup>&</sup>lt;sup>6</sup>It is implicitly assumed that a high mobilization capacity of the rival corresponds to high military strength (Cox 2009, 6).

propositions is summarized as follows: on the one hand, the absence of elections may lead to violent ouster of dictators since there is no institutionalized means to depose dictators, making violence the only way for the leadership change. On the other hand, holding multiparty elections paves the way for a peaceful exit of dictators since they can be replaced through elections insofar as they concede and decide to step down.<sup>7</sup> In sum, this study highlights the relationship between dictators' mode of exit and the decision of holding elections.

Although Cox (2009, 10) does not make the distinction between elections of the effective executive and legislative elections, I argue that the manner in which dictators leave office is closely related to the decision of holding elections for the effective executive. This is the case because this type of elections is tied with leadership selection as well as the post-tenure fate of dictators. On the one hand, with respect to the leadership selection, there are a number of ways by which dictators come into power: Some of them do so by force (e.g., Idi Amin in Uganda), others are appointed or selected by their predecessor or party (e.g., Jiang Zemin in China), and still others are elected through single-candidate presidential elections (e.g., Paul Magloire in Haiti) or referenda aimed at the approval of the presidency (e.g., Gamal Abdel Nasser in Egypt). This variation shows that, in some dictatorships, the leadership selection is highly institutionalized and regulated, which in turn allows for the possibility of peaceful replacement of dictators without holding multi-candidate elections for the effective executive. This situation is most pronounced in single-party dictatorships in which the party exclusively controls the succession process (Magaloni and Kricheli 2010, 127) and dynastic monarchies in which the ruling families negotiate and decide

<sup>&</sup>lt;sup>7</sup>Another implication obtained from his model is that, in the equilibrium where single-party elections are chosen, dictators face no risk of both peaceful and violent removal. It implies that they are more likely to stay in office by holding single-party elections than in the non-electoral equilibrium and the multiparty election equilibrium (Cox 2009, 16).

successors<sup>8</sup> (Gandhi 2008, 23). One advantage of these institutional settings is that they assure peaceful seizure of power and replacement of rulers without running the electoral risk. It means that without such institutionalization of the leadership succession, holding contested elections emerges as a solution for dictators to minimize the risks of violent exit. Two hypotheses follow from this logic:

 $H_1$ : Dictators in a dynastic monarchy are less likely to hold elections of the effective executive.

 $H_2$ : Dictators in a single-party regime are less likely to hold elections of the effective executive.

On the other hand, Debs' (2010, 3–4) study of the post-tenure fate of dictators suggests that dictators with a high military capacity are more likely to be exiled, jailed or killed for two reasons. First, militarily strong dictators are likely to be eliminated by a challenger because it is highly probable that a deposed dictator will come back to challenge the new leader in the future (Bueno de Mesquita et al. 2003, 343). Second, if they survive and stay as viable political actors in a new regime, a high capacity for violence allows ousted dictators to secure rents (Geddes 1999). Therefore, they are likely to be eliminated by their rivals. This argument implies that dictators with a high military capacity faces the greatest fear of violent removal by their rivals. Since holding multi-candidate elections of the effective executive is a way to alleviate this concern and increase the probability of peaceful exit, the following hypothesis is obtained:

<sup>&</sup>lt;sup>8</sup>Dynastic monarchies are defined as the regime in which "members of the ruling families monopolize the highest state offices" and "[t]he families have developed robust mechanisms for the distribution of power among their members, particularly during successions, and exercise a thus far unshakable hegemony over their states" (Herb 1999, 8. Italic is added by the author). Hence, dynastic monarchies are a distinct form of monarchy from, for example, monarchies in which the monarch rules alone.

 $H_3$ : Dictators with a high military capacity are more likely to hold elections of the effective executive.

### Legislative Elections

In contrast to the elections of the effective executive, the assumption that dictators prefer a peaceful exit to violent ouster will not be relevant to the decision of holding legislative elections. This is the case because those elections primarily affect the fate of the regime allies and not the fate of the dictator.

By holding multiparty legislative elections, the membership of the legislature becomes subject to popular choice. In view of individual "legislators," their access to state resources and rents depends on periodic electoral contests and they might lose office even if the regime prevails.<sup>9</sup> This, in turn, allows dictators to keep loyal and competent elites in their ruling coalition by promoting intra-party competition (Geddes 2006, 22) as well as inter-party competition.<sup>10</sup> Moreover, legislative elections mean that outsiders in society obtain chances to get access to spoils and rents (Lust-Okar 2008). Therefore, holding multiparty parliamentary elections helps maintain elite cohesion and facilitates co-optation of elites from outside of the ruling circle.

It is important to note, however, that holding contested legislative elections is not the only mechanism through which those benefits can be achieved. Past studies on authoritarian parties suggest that dominant parties, hegemonic parties, or regime-sanctioned parties have been used to discipline elites inside the ruling circle

<sup>&</sup>lt;sup>9</sup>Not surprisingly, if incumbent legislators perceive that they will not be (re)elected, they are likely to object to the introduction of multiparty elections. An example is Indonesia in 1940s when appointed representatives attempted to delay legislations necessary for holding multiparty elections (Anderson 1996, 28).

<sup>&</sup>lt;sup>10</sup>As Schedler (2013, 148) argues, those elites in the ruling coalition will remain loyal and acquiesce to the extent that their party dominates the legislature and is likely to stay in power. Assuming that no dictator starts holding legislative elections under the expectation that opposition parties are likely to gain a large portion of seats in the legislature, what logically follows is that the aforementioned expected benefits drive dictators to hold multiparty legislative elections. Note that the decision to quit those elections is another issue that requires further theoretical scrutiny.

as well as to co-opt outsiders in society. In one view, those parties serve as a vehicle for economic transfers through which perks, privileges, and access to economic resources are distributed in order to reward those who support the regime (Gandhi 2008, 77–78).<sup>11</sup> More importantly, another view claims that if these parties control appointment, promotion, and succession of regime cadres and prohibit dictatorial abuse of power, they guarantee the members of the ruling circle a share of power over the long haul. This, in turn, facilitates credible power-sharing between a dictator and his allies (Magaloni and Kricheli 2010, 127). This type of co-optation through political exchange of loyalty and political and/or economic rewards is most pronounced in dictatorships where a single party prevails.

To sum up, in single-party dictatorships, the regime parties work as a selection mechanism to create loyal and competent followers who diligently work for the survival of the regime. This means that, as long as dictators are able to or are willing to establish those parties and monopolize the political sphere,<sup>12</sup> they should have little to no incentive to opt for multiparty parliamentary elections because contested elections entail risks. Thus, another hypothesis follows:

 $H_4$ : Single-party dictatorships are less likely to hold legislative elections.

Table 2.2 presents a summary of my theoretical expectations derived from consideration of the three key factors that shape the decision of holding contested elections in nondemocratic settings. First, institutionalized leadership succession decreases

<sup>&</sup>lt;sup>11</sup>One criticism to this idea is that this type of co-optation via the exchange of economic resources and support is possible even without parties (Svolik 2012, 164).

<sup>&</sup>lt;sup>12</sup>It is important to remember that not all dictators are able to establish and capitalize on such regime sanctioned parties. For example, those parties might arise, at the time of regime creation, one faction of elites decisively defeats their rivals (Brownlee 2007, 45). Another instance is that dictatorships whose support base is limited to traditional elites—landed aristocracy and the owner of capital—might find it less attractive to establish those parties (Svolik 2012, 194–195). This implies that regime sanctioned parties emerge if dictators need cooperation from the broad range of society. Thorough analyses of this claim is, however, beyond the scope of this Chapter.

Table 2.2: Causes of Contested Elections in Nondemocracies

Causes	Elections of the Effective Executive	Legislative Elections
Dynastic monarchy	_	
Single-party regime	_	_
High military capacity	+	

Note: "+" indicates positive relationship. "-" indicates negative relationship.

the dictators' incentive to hold elections for the effective executive, and therefore I expect that those elections are less likely in dynastic monarchies and single-party dictatorships. Second, since dictators with high military capacity are likely to be deposed by force, one solution to this problem, I argue, is to hold contested elections of the effective executive. Lastly, holding contested legislative elections can facilitate elite co-optation. However, dictators do not have an incentive to do so if other institutional solutions that achieve this goal are already in place. Among others, establishing a regime-sanctioned party is supposed to play the similar co-optation role. Thus, I expect that dictators are less likely to hold contested legislative elections in single-party regimes.

### 2.4 Research Design and Data

In order to test my theory about the causes of elections in nondemocratic settings, I constructed a data set that covers dictatorships from 1946 to 2008. These data are organized by individual countries as the spatial unit and by years as the temporal unit. Each observation in the data set represents information as of December 31 of the relevant year. The data were assembled in several steps. First, I relied on

three oft-used data sets on political regime in order to classify countries into either democracy or dictatorship (Boix et al. 2013; Cheibub et al. 2010; Geddes et al. 2013). Table 2.3 summarizes the resulting measure of dictatorships from 1946 to 2008. I excluded from the sample countries that lack the sovereign status. The sovereign status was obtained from Gleditsch and Ward (1999). 14

Within the set of dictatorships, I constructed dichotomous measures of whether or not elections for the effective executive and legislative elections occurred. I used a data set on *Institutions in Dictatorships* collected by Svolik (2012). In this data set, a variable called **executive** provides information about the executive selection and concentration of power.<sup>15</sup> Similarly, **legislative** variable measures the legislative selection and concentration of power.<sup>16</sup> My first dependent variable, *elections of the effective executive*, takes a value of "1" if dictators are directly elected through multicandidate contests.<sup>17</sup> It takes a value of "0" if they are not elected, selected by a small and unelected body, or elected through single-candidate elections. My second dependent variable, *legislative elections*, takes a value of "1" if the members of the legislative body are directly chosen by contested elections. It takes a value of "0" if no legislature exists, the members are not elected or appointed, or they are elected

<sup>&</sup>lt;sup>13</sup>Classification is primarily based on Geddes et al. (2013). Boix et al. (2013) and Cheibub et al. (2010) were used to supplement the measurement of the cases that Geddes et al. (2013) does not cover.

<sup>&</sup>lt;sup>14</sup>I used the version 3 (Release 5.1) that was updated in May 2013.

<sup>&</sup>lt;sup>15</sup>This variable has five categories: Dictators are (1) unelected, (2) elected through one party or candidate elections, (3) selected by a small, unelected body, (4) elected by less than 75% of the vote, and (5) elected more than 75% of the vote. The last two categories include cases in which dictators are indirectly elected by the group of people who are directly elected by popular votes.

<sup>&</sup>lt;sup>16</sup>This variable has six categories: (1) No national legislature exists, (2) the members are not elected or appointed, (3) they are elected through single-party or single-candidate elections, (4) multiple parties compete and the largest party shares less than 75% of seats, (5) multiple parties compete and the largest party shares more than 75% of seats, and (6) political parties are banned and multiple candidates compete. National legislature refers to the lower chamber in the case of bicameralism.

<sup>&</sup>lt;sup>17</sup>It include cases in which dictators are not directly elected, but are premier with directly elected legislative body.

Table 2.3: Dictatorships, 1946–2008

Albania 1946-1990 Guinea Bissau 1978-2008 Portugal 1946-12 Angola 1975-2008 Guinea-Bissau 1974-1999 Qatar 1971-20 Angola 1975-2008 Guinea-Bissau 1974-1999 Qatar 1971-20 Angola 1976-1982 Haiti 1950-1988 Rwanda 1994-2008 1997-2008 Haiti 1950-1988 Rwanda 1992-208 Azerbaijan 1991 1992-2008 1999-2005 Sao Tome and Principe 1976-19 Armenia 1991-1993 Samona and Principe 1976-19 Saudi Arabia 1946-2008 Saudi 1946-2008 Saudi Arabia 1946-2008 Saudi 1946-2008 Saudi Arabia 1946-2008 Saudi Ar	Country	Year	Country	Year	Country	Year
Algeria   1962-2008   Culvana Bissau   1974-1999   Catar   1971-20   Argentina   1951-1972   Guyana   1966-1991   Russia   1999-21   Argentina   1951-1972   Guyana   1966-1991   Russia   1999-22   Armenia   1994-2008   Argentina   1994-2008   Argentina   1994-2008   Argentina   1994-2008   Argentina   1994-2008   Argentina   1991-1908   Argentina   1991-1908   Argentina   1991-1908   Argentina   1991-1908   Argentina   1991-1908   Argentina   1991-2008   A						1946-1988
Angelia 1975-2008						1946 - 1975
Argentina 1951-1972 Guyana 1966-1991 Russia 1999-24 Armenia 1976-1982 Haiti 1950-1989 Rwanda 1962-24 Armenia 1994-2008 1991-1993 Samoa 1962-24 Armenia 1994-2008 1991-1993 Samoa 1962-24 Armenia 1994-2008 1999-2005 Sao Tome and Principe 1976-24 Sanghadesh 1971-1989 1972-1981 1997-1981 Seychelles 1976-25 Saudi Arabia 1966-26 Saudi Arabia 1966-26 Saudi Arabia 1966-26 Saudi Arabia 1966-29 Saudi Arabia 1966-290 Saudi Arabia 1966-290 Saudi Arabia 1966-290 Saudi Arabia 1966-290 Saudi Arabia 1967-290 Saudi 1967-290 Saud			Guinea-Bissau			1971 - 2008
1966						1946 - 1989
Armenia         1994-2008         1991-193         Samo and 1907-196         1976-197           Azerbaijan         1993-2008         Honduras         1946-1956         Saof Tome and Principe         1976-196           Bahrain         1971-1989         1972-1981         Senegal         1960-19           Bangladesh         1971-1989         1972-1981         Seychelles         1976-198           Belarus         1991-2008         Indonesia         1947-1989         Sierra Leone         1967-196           Belarus         1991-2008         Ina         1946-2002         Siogapore         1995-21           Botivia         1946-1978         Ivory Coast         1960-200         Somalia         1996-20           Botswana         1966-2008         Kazakhstan         1991-2008         Sowiet Union         1946-196           Brazil         1964-1984         Kenya         1963-2001         Spain         1961-196           Brundi         1962-1980         Korea, South         1948-200         Sri Lanka         1978-19           Burkina Faso         1960-2008         Kwastal         1961-1986         Sudan         1962-19           Burkina Faso         1960-2008         Kwastal         1961-1986         Suria         196	Argentina	1951 - 1972		1966 - 1991		1999-2008
Azerbaijan   1991			Haiti			1962 - 2008
Bahrain   1971-1908   Honduras   1946-1956   Saudi Arabia   1946-1968   Bahrain   1971-1989   1972-1981   Secengal   1960-1960   Bangladesh   1971-1989   1972-1981   Secengal   1967-1960   1971-1989   Secengal   1967-1976   1971-1989   Secengal   1967-1980   1971-1980   19	Armenia	1994 - 2008		1991 - 1993	Samoa	1962 - 2008
Bahrain         1971—2008         1963—1970         Sengal         1966—1976           Bangladesh         1971—1989         1972—1981         Secyhelles         1976—2981           Belarus         1991—2008         Indonesia         1946—1998         Ingrale 1946—1998         1997—1981           Benin         1960—1990         Iran         1946—2008         Singapore         1995—1997           Belnia         1946—1978         Ivory Coast         1960—2008         Solmon Islands         2000—2           Bolivia         1946—1978         Ivory Coast         1960—2008         Somalia         1996—196           Botswana         1966—2008         Kazakhatan         1991—2008         Sowith Union         1946—197           Brunei         1985—2008         Korea, North         1948—195         Soviet Union         1946—197           Burkina Faso         1960—2008         Kuwait         1961—2008         Surland         1978—198           Burkina Faso         1960—2008         Kuwait         1961—2008         Surland         1989—208           Cambodia         1965—2004         Kyrgyzastan         1991—200         Surian         1989—19           Cape Verde         1975—1990         Leson         1976—204 <t< td=""><td>Azerbaijan</td><td>1991</td><td></td><td>1999 - 2005</td><td>Sao Tome and Principe</td><td>1976 - 1990</td></t<>	Azerbaijan	1991		1999 - 2005	Sao Tome and Principe	1976 - 1990
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Belarus   1991-2008	Bahrain	1971 - 2008		1963 - 1970	Senegal	1960 - 1999
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Bolivian	Benin		Iran		Singapore	1965-2008
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Botswana   1966-2008   Razakhstan   1991-2008   Soviet Union   1946-11   Brunei   1985-2008   Kenya   1963-2001   Spain   1946-11   Brunei   1985-2008   Korea, North   1948-2008   Sri Lanka   1978-11   Bulgaria   1946-1988   Korea, North   1948-2008   Sri Lanka   1978-11   Bulgaria   1960-2008   1960-2008   1960-1992   Kuwait   1961-2008   1961-1956   Burundi   1962-2004   Kyrgyzstan   1991-2008   Suriname   1980-21   1990-2004   Kyrgyzstan   1991-2008   Suriname   1980-21   1990-2006   1990-2008   1990	Donvia					
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Brunei						
Bulgaria         1946–1989         Korea, South         1948–1956         Sudan         1958–1           Burkina Faso         1960–2008         1961–1986         1961–1986         1969–1918         1969–1918         1989–2           Burundi         1996–2004         Kyrgyzstan         1991–2008         Suriname         1980–198           Cambodia         1936–2008         Laos         1959–2008         Suriname         1980–1990           Cameron         1960–2008         Lebanon         1976–2004         Swaziland         1968–20           Cape Verde         1975–1990         Lesotho         1976–2004         Syria         1949–19           Central African Republic         1960–1992         Liberia         1946–2008         Syria         1949–19           Chad         1900–2008         Madagascar         1960–1992         Taiya         1949–19           Chile         1973–1988         Malawi         1964–1993         Taijkistan         1991–199           Colombia         1949–1957         Maldives         1966–2008         Tanzania         1964–20           Compor         1960–1991         Mauritania         1946–2006         Tanzania         1946–19           Congo, Democratic Republic         1960–2008						
Burkina Faso         1960–2008         Kuwait         1961–1908         1961–1908         1969–2008           Burundi         1996–2004         Kyrgyzstan         1991–2008         Suriname         1989–20           Cambodia         1953–2008         Laos         1959–2004         Swaziland         1980–198           Cameroon         1960–2008         Lebanon         1976–2004         Swaziland         1986–20           Central African Republic         1960–1992         Liberia         1946–2004         Syria         1946–194           Chad         1960–1992         Liberia         1946–2004         Syria         1949–11           Chad         1960–2008         Libya         1951–2008         1957–12         1949–11           Chad         1960–2008         Madagascar         1960–1992         Taiwan         1949–11           Chile         1973–1988         Malawi         1966–2008         Taizikistan         1991–19           Colombia         1945–2005         Mali         1966–2008         Tanzania         1946–19           Comgo         1960–1991         Mauritania         1946–2006         Tanzania         1946–19           Congo         Democratic Republic         1960–1994         Mexico <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
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China         1946-2008         Malaysia         1957-2008         Tajikistan         1991-20           Colombia         1949-1957         Malidives         1966-2008         Tanzania         1964-21           Comoros         1975-2005         Mali         1966-2008         Tanzania         1946-21           Congo         1960-1991         Mauritania         1946-2006         1976-12         1976-12           Congo, Democratic Republic         1960-2008         Mexico         1946-1999         Togo         1960-19           Costa Rica         1948         Mongolia         1946-1992         Togo         1960-19           Croatia         1952-2008         Morambique         1975-2008         Tonga         1960-19           Cyprus         1960-1976         Myanmar         1958-1959         Tunisia         1956-20           Cyprus         1966-1976         Myanmar         1958-1959         Tunkey         1965-20           Cyprus         1964-1976         Myanmar         1958-1959         Turkey         1966-20           Dominican Republic         1948-1988         1962-2008         Turkey         1946-190         1980-19           Ecuador         1946-1947         Nicaragua         1946-1989		1960 - 2008	Madagascar	1960 - 1992		1962 - 2008
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through single-party or single-candidate elections. With this operationalization a dictatorship has a stream of values of "0" or "1" for both types of elections. Since I test the hypotheses about the decision of holding elections, once dictators start

holding elections, their regimes are dropped from the sample in subsequent years.<sup>18</sup> Thus, for instance, countries where multi-candidate elections of the effective executive have never been held (e.g., China) show a series of "0" in elections of the effective executive. In contrast, this variable is coded as "0" from 1946 to 2004 in Egypt since no multi-candidate elections of dictators were held. But, the variable takes a value of "1" in 2005 when the presidency became subject to contested elections. From 2006 to 2008, the country is dropped from the sample since no change was made for the mode of the leadership selection.<sup>19</sup>

The first key independent variable is a dichotomous indicator for *dynastic monar-chy*. Following the aforementioned definition by Herb (1999) and the data provided by Cheibub et al. (2010), this variable is coded as "1" if a dictatorship was an established dynastic monarchy, and it takes "0" otherwise.

The second key independent variable is a measure for *single-party regime*, which represents the restrictions on political parties.<sup>20</sup> I used data collected by Cheibub et al. (2010). In this data set, a variable called **dejure** measures different levels of legal restriction on parties, while **defacto** and **defacto2** refer to actual, *de facto* 

 $<sup>^{18}</sup>$ In fact, previous studies do not follow my approach and keep dictatorships that continue to hold elections in the sample (e.g., Cox 2009). Their approach is valid insofar as the following assumption holds: The factors that let dictators hold elections also affect their decision of quitting elections. In my view, to begin elections and to stop them are two distinct classes of phenomena, and therefore I solely focus on the former.

<sup>&</sup>lt;sup>19</sup>These are the examples of coding on the basis of regime-year observations. As I detail below, however, alternatives are to measure the dependent variables with respect to leader-year and authoritarian-spell-year.

<sup>&</sup>lt;sup>20</sup>Some might think of subtypes of nondemocracies such as single-party regime, personalist regime, and military regime that are developed by Geddes (2003). A problem with this type of measure is that those subtypes do not necessarily correspond with the presence/lack of regime-sanctioned parties. As Svolik (2012, 29) contends, those subtypes are proposed by reducing multiple dimensions of nondemocratic rule into a single dimension. For example, military regimes emphasize the level of military intervention into politics whereas single-party regimes stresses the restriction on political parties. The use of those subtypes is justified only if one theorizes important distinction between them. In the present analysis, what matters is simply the presence of regime-sanctioned parties, and therefore I need to observe the varying level of restriction on political parties across nondemocracies, not the difference between composite measure of regime types.

existence of political parties. **dejure** has three categories: (1) All parties are legally banned, (2) one party is legalized, and (3) multiple parties are legally allowed. One problem with observing *de jure* restrictions is that it does not necessarily reflect the actual presence of regime sanctioned parties. In some cases, trivial participation of minor parties is allowed (e.g., Singapore) or satellite parties are intentionally created in order to disguise multipartism (e.g., Poland under communist rule). Because of this problem, I used an indicator that counts *de facto* number of political parties as a measure of actual working of political parties. For the present analyses, I relied on a variable called **defacto2** that has three categories: (1) no party, (2) one party, or (3) multiple parties.<sup>21</sup> I created a dummy variable for each category and used the variable for multiple parties as a reference category.

The third key independent variable measures dictators' military capacity. One way to assess it might be to compare military regimes with non-military regimes, typically civilian dictatorships (Debs 2010; Geddes et al. 2013). However, the mere facts that dictators are not professional soldiers or that the military does not intervene into politics at all do not necessarily mean that a particular dictator is militarily weak. Indeed, as Svolik (2012, 134) argues, the extent to which the military intervenes into politics depends on the proclivity of mass threats and the indispensability of the military as a coercive force to suppress those threats. This implies that civilian dictators can be heterogeneous in their military capacity. Therefore, rather than comparing military dictatorships with civilian dictatorships, I focus on the differences

<sup>&</sup>lt;sup>21</sup>I chose **defacto2** over **defacto** for the following reason. **defacto** counts the number of existing political parties. Therefore, it considers that multiple parties *de facto* exist in countries such as China where multiple parties are legalized and parties other than the Communist Party of China indeed exist although those minor parties are mere satellite parties and are subordinate to the regime. **defacto2** does not count those parties and consider China as *de facto* single-party dictatorship. Note that I report in appendices the results that are obtained from these alternative measures of restrictions on political parties (**dejure** and **defacto**) in order to show that my findings are not sensitive to the choice of particular measures.

between military dictators. One possible indicator that represents this variation is the extent to which the preferences of dictators and the military align with each other. I relied on a measure that was developed by Svolik (2012, 33) to capture this. When dictators are professional solders, there are two distinct types. On the one hand, the military rule is **corporate** if the military is institutionally incorporated into government's decision-making, which is typically the case where a dictator rules as a part of the military junta. On the other hand, the military rule is **personal** if a single or a few military personnel happen to seize power and the military as an organization does not prevail together with the dictator in the regime. To be comprehensive, dictatorships in which the military rule is neither corporate nor personal are the regimes with **civilian** dictators. I thus refine the third hypothesis that I suggested above:

 $H_{3a}$ : Dictatorships with corporate military rule are more likely to hold elections of the effective executive.

Five control variables reflect factors that may affect the decision of holding elections of the effective executive as well as legislative elections. First, I controlled for how dictators (their allies) came in office before transition to multi-candidate/party elections happened. As I described above, dictators (their allies) come to power through non-electoral means or single-candidate elections. In order to reflect this variation, I constructed a dummy variable that takes a value of "1" if dictators (their allies) were selected by single-candidate (party) elections. It is coded as "0" otherwise. Second, the presence of a legislature might play a similar role to political parties in facilitating policy concessions between a dictator and elites (Gandhi 2008, 79–80). Following this logic, one possible expectation is that the existence of a

national legislature decreases the probability of holding elections.<sup>22</sup> I used Cheibub (2008)'s data and created a dummy variable legislature that takes a value of "1" if the legislature exists, and "0" otherwise.<sup>23</sup> Third, ethnic-linguistic fractionalization is a continuous variable (Alesina et al. 2003) and was used as a proxy of policy polarization.<sup>24</sup> Greater diversity corresponds to a higher cost of policy concessions (Gandhi 2008, 87),<sup>25</sup> which might decrease the incentive to hold elections in general. Fourth, the proportion of democracies in the world is a continuous variable and can be thought as a proxy for external factors that affect the demand for political liberalization and democratization. A higher proportion of democracies might empower the opposition and increase domestic pressure for reform (Gandhi 2008, 96–97), which then gives dictators an incentive to hold contested elections. Lastly, I included a dummy variable for the Cold War. It is coded as "1" from 1945 to 1990 and "0" after 1991. This variable was employed to account for any potential impact of the Cold War on the incentives for holding multiparty elections.

Two variables take into account economic conditions. First, the level of *economic development* is measured by the natural log of GDP per capita. *Economic growth* represents annual change in GDP per capita. These data were obtained from Bolt and van Zanden (2013), which is the update of Maddison (2008).<sup>26</sup>

<sup>&</sup>lt;sup>22</sup>There are views, however, that the role of legislature is limited (Blaydes 2011) or conditional upon subtypes of dictatorships (Wright 2008). Since thorough analyses of the legislature is beyond the scope of this Chapter, I simply control for the existence of national legislature in my analyses.

<sup>&</sup>lt;sup>23</sup>More specifically, I used a variable named **closed** that has three categories: Legislature is (1) closed, (2) appointed, and (3) elected. If the legislature is either appointed or elected, *legislature* is coded as "1." It takes a value of "0" if legislature is closed. In bicameral system, the legislature refers to the lower house.

<sup>&</sup>lt;sup>24</sup>Another possible proxy for policy polarization is economic inequality. I collected measures on Gini coefficient (Solt 2009; UTIP-UNIDO 2008), but they were not used because the large number of missing observations significantly reduced the sample size.

<sup>&</sup>lt;sup>25</sup>One possible criticism to this view is that that the mechanism is *not* that ethnic cleavages cause conflicts in preferences, *but* that those conflicts at the local level happen to coincide with ethnicity (Przeworski 2009, 6–7).

<sup>&</sup>lt;sup>26</sup>Another economic factor that has been studied in the literature and might affect the outcome of the interest is the national economy's dependence on natural resources (Dunning 2008; Ross

Finally, time dependence is an issue that requires careful treatment. Following Carter and Signorino (2010), I included in logistic regressions a cubic polynomial of the duration for which multiparty/candidate elections were not held. This duration can, however, be counted in a number of ways. A usual practice in the literature is to measure the duration of the non-electoral period if a country was a dictatorship. This approach, however, is increasingly criticized because it ignores leadership changes in dictatorships (Przeworski 2007). At the same time, using the length of leader tenures as the duration is deemed problematic for dictatorships in which leaders change but the same political coalition sustains (Svolik 2012, 185). For those reasons, I followed the approach that Svolik (2012, 41–43) suggested<sup>27</sup> and counted the non-electoral years of dictatorships by each ruling coalition.<sup>28</sup> This means that the unit of analyses is not country-year or leader-year, but ruling-coalition-year.<sup>29</sup>

## 2.5 Findings/Results

I estimated logistic regressions with a cubic polynomial of the duration of the non-electoral periods. All independent variables were lagged by one year. The first column of Table 2.4 shows the model in which the ruling coalition is the unit of analysis. The results show that, consistent with my theoretical expectations, dynastic monarchies are less likely to hold elections for the effective executive  $(H_1)$ . Single-party regimes are less likely to hold contested elections of the effective executive than

<sup>2001).</sup> I have collected data on fuel exports and ore and metal exports from World Bank (2013) and computed their share in total merchandise exports. The data cover 1960 to 2012.

<sup>&</sup>lt;sup>27</sup>Svolik (2012, 42) defines that a dictator "was politically affiliated with the previous leader and, hence, from the same ruling coalition if he was a member of the government, a government party, the royal or ruling family, or a military junta under the previous authoritarian leader."

<sup>&</sup>lt;sup>28</sup>Since the data that I collected lack information prior to 1946, no information was available in order to left-censor the duration variable. That is, the duration variable begins with 0 in 1946 if an observation appears in the sample. Data collection for the period before 1945 is the agenda of future research.

<sup>&</sup>lt;sup>29</sup>In order to see whether my findings are sensitive to those different units of analyses, I report estimation results based on country-year and leader-year observations.

regimes where multiple parties de facto exist  $(H_2)$ . As expected, dictatorships with corporate military rule are more likely to hold this type of election than regimes with personal military rule  $(H_{3a})$ . The type of previous leadership selection is found to have no statistically significant effect on the decision of holding multi-candidate elections of the effective executive. That is, dictators who hold onto power with force and those who are "elected" by plebiscite or referendum (with no alternative candidate) are not different from each other with regard to their propensity to hold this type of election. The results also suggest that greater economic growth decreases the probability of holding the elections while a higher proportion of democracies in the world is positively associated with it. In contrast to that, the level of economic development, the existence of a national legislature, the level of ethnic-linguistic fractionalization, and the period of cold war are not systematically related to the likelihood of holding elections of the effective executive.

In the fourth column of Table 2.4, I present an analogous model with Column 1, but the dependent variable is legislative elections. The same set of independent variables was included in the model in order to highlight that we need to make a distinction between these types of elections. The findings are consistent with my expectation and single-party regimes are less likely to hold legislative elections than  $de\ facto$  multiparty regimes ( $H_4$ ). As expected, but showing a clear contrast to the model of elections of dictators, the results demonstrate that dynastic monarchies and dictators' military capacity are not related to the decision of holding contested legislative elections. Another difference from Column 1 is that the type of allies selection matters. Compared to regimes where the regime allies are appointed or unelected, dictatorships where single-party or single-candidate legislative elections are held are less likely to opt for multiparty legislative elections.

In Table 2.4, I also present the findings based on alternative units of analyses.

Table 2.4: Causes of Elections in Nondemocracies, 1946–2008

Types of Elections Effective Executive Legislative Model 1 Model 4 Model 6 Independent Variable Model 2 Model 3 Model 5 Leadership Succession Dynastic Monarchy -2.993\*\* -2.941\*\* -0.602 -0.710 -0.880 (dropped) (1.328)(1.264)(0.772)(0.883)(0.755)Political Party (de facto) $^2$ -3.172\*\*\* -3.129\*\*\* -1.775\*\*\* Single-Party Regime -2.949\*\*\* -1.907\*\*\* -1.764\*\*\* (0.556)(0.501)(0.590)(0.473)(0.443)(0.451)Parties Banned -1.895\*\* -1.563\*\* -1.753\*\* -2.254\*\*\* -1.898\*\*\* -1.938\*\*\* (0.812)(0.669)(0.794)(0.871)(0.705)(0.717)Military Involvement into Politics<sup>3</sup> Corporate 1.204\*\* 0.964\*0.4660.2630.278 0.109(0.581)(0.501)(0.554)(0.541)(0.406)(0.459)Civilian 0.880\*\* 0.657\*\* 0.4200.199 0.112 0.062(0.375)(0.310)(0.364)(0.383)(0.361)(0.389)Economic Development -0.006 0.029-0.287-0.207-0.179-0.244(0.255)(0.190)(0.237)(0.270)(0.204)(0.187)-5.135\*\*\* -3.787\*\* -4.143\*\*\* -3.738\*\*\* -3.290\*\*\* -3.918\*\*\* Growth (1.860)(1.474)(1.464)(1.401)(1.164)(1.289)ControlsSingle-Candidate 0.1690.2900.094Executive Elections<sup>4</sup> (0.389)(0.363)(0.378)Single-Party -0.769\*\* -0.809\*\* -0.878\*\* Legislative Elections<sup>5</sup> (0.325)(0.371)(0.349)Legislature<sup>6</sup> 0.6480.601\*0.4450.6370.4860.568(0.549)(0.476)(0.519)(0.376)(0.353)(0.392)Proportion of Democracies 8.336\*\*\* 7.573\*\* 3.2673.899 3.489 3.117(3.113)(2.946)(2.954)(2.543)(2.409)(2.541)Ethnic-Linguistic 0.4770.4850.208-0.011-0.124-0.300Fractionalization (0.663)(0.610)(0.631)(0.708)(0.672)(0.628)Cold War 0.0380.022 -0.5310.088-0.045-0.232(0.563)(0.551)(0.614)(0.620)(0.564)(0.597)Constant -2.698 -3.523 1.354 1.344 1.336 2.023 (3.259)(2.931)(2.298)(2.365)(2.178)(3.246)2814 2903 2365 2529 2619 2605 N of clusters 137 106 287 132 107 299 Clustered by ruling leader ruling country leader country coalition coalition Wald  $\chi^2$ 177.65 93.35 112.39 159.64113.81 169.97Prob.  $> \chi^2$ 0.000 0.0000.0000.0000.0000.000 Log pseudolikelihood -194.042 -219.924 -185.238 -244.361 -266.360 -228.021 Pseudo  $\mathbb{R}^2$ 0.2730.2470.2230.1320.1830.169

 $\text{Logistic regression. Clustered standard errors in parentheses. *} \\ p < 0.10, \\ *^*p < 0.05, \\ *^{***}p < 0.01 \text{ (Two-tailed test)}.$ 

Setting the elections of the effective executive as the dependent variable, Column 2 shows the results from regime-year observations while Column 3 is estimated with

Parameter estimates and standard errors for duration dependence are not shown, but available upon request.

Reference category is "No dynastic monarchy." <sup>2</sup> Reference category is "Multiple parties."
Reference category is "Personal." <sup>4</sup>Reference category is "Unelected or Appointed Dictators."

<sup>&</sup>lt;sup>5</sup> Reference category is "Unelected or Appointed Regime Allies." <sup>6</sup> Reference category is "No Legislature."

leader-year observations. The findings are substantively unchanged by moving from Column 1 to Column 2. In contrast to that, Column 3 shows no estimated coefficient on dynastic monarchy. This happened because, based on leader-year observations, no dictators in dynastic monarchies held elections of the effective executive, which is in fact consistent with my theoretical expectation. Another deviation from Column 1 and Column 2 to Column 3 is that the coefficient on corporate military is positive, but not statistically significant. One interpretation of this result is that, because the duration of individual leaders' tenure represents their idiosyncratic strength including their military capacity,<sup>30</sup> leader-year observations are not pertinent to assess the impact of the measure of dictators' military capacity.<sup>31</sup> As for models that set the contested legislative elections as the dependent variable (Column 5 and Column 6, Table 2.4), the findings are substantively the same across different units of analyses.

In order to illustrate the core findings, Table 2.5 presents the extent to which the predicted probability of holding contested elections changes with respect to the hypothesized factors.<sup>32</sup> Institutionalizing leadership succession by establishing either a dynastic monarchy or a regime-sanctioned party decreases the probability of holding elections of the effective executive by 7%. Dictators who rule as a part of the military junta are more likely to hold elections of the effective executive by 15% in order to prevent violent removal than those who do not incorporate the military as an organization into dictatorial rule. Finally, dictatorships in which multiple parties de facto exist are more likely to opt for contested legislative elections by 4 % that regimes that establish a regime-sanctioned party.

<sup>&</sup>lt;sup>30</sup>See Svolik (2012, 185) for the similar discussion.

<sup>&</sup>lt;sup>31</sup>The result is not driven by exclusion of dynastic monarchies from the sample. When I estimated Model 1 that dropped all dynastic monarchies from the sample, I still obtained the substantively same inference as Column 1 provides (Results not shown, but available upon request).

 $<sup>^{32}</sup>$ Table 3.8 is based on simulations using *Clarify* (Tomz et al. 2001). The models used to compute the predicted probability are those in Column 1 and Column 4 of Table 2.4 with the value of all covariates set to their median.

Table 2.5: Changes in the Predicted Probability

## Probability of Holding Elections

Elec	Elections of the Effective Executive					
$H_1$ :	Dynastic Monarchy	-7%				
	(vs. Other Dictatorships)	[-16,-1]				
$H_2$ :	Single-Party Regime	-7%				
	(vs. Multiparty Regime)	[-15, -3]				
$H_3$ :	Corporate Military Rule	+15%				
	(vs. Personal Military Rule)	[1, 40]				
Legislative Elections						
$H_4$ :	Single-Party Regime	-4%				
	(vs. Multiparty Regime)	[-8, -1]				

Note: The 95% confidence intervals in brackets.

In order to ascertain that the findings are not driven from a particular measure of the restriction on political parties, I ran a set of analyses that employs the measure of legal restriction (i.e., **dejure** variable in Cheibub et al. (2010)). Table 2.6 shows the estimation results. Conclusions obtained from this alternative measure remain unchanged.

## 2.6 Implications and Conclusions

In this Chapter, I have developed and found empirical support for a theory about the causes of contested elections in nondemocratic settings. Studies have been accumulated that explore the role of elections with respect to dictators' political survival, but they yield both the regime-sustaining role and the regime-subverting role, leading to unclear and equivocal explanations of the causes of those elections. In order to better understand when and why dictators decide to hold elections, I argue that the

Table 2.6: Robustness Check (De jure restrictions on political parties)

Types of Elections Effective Executive Legislative Independent Variable Model 1 Model 2 Model 3 Model 4 Model 5 Model 6 Leadership Succession Dynastic Monarchy -2.461\* -2.443\*\* -0.727-0.458-0.471(dropped) (1.290)(1.237)(0.666)(0.632)(0.772)Political Party (de jure)<sup>2</sup> -1.705\*\*\* Single-Party Regime -3.458\*\*\* -3.621\*\*\* -3.413\*\*\* -1.560\*\*\*-1.660\*\*\* (0.988)(0.994)(0.439)(0.481)(0.963)(0.436)-1.862\* -1.999\*\*\* Parties Banned -1.081\* -1.125\*\* -1.842\* -0.943(0.580)(0.531)(0.604)(0.676)(0.569)(0.602)Military Involvement into Politics<sup>3</sup> Corporate 1.338\*\* 1.117\*\*0.5860.4840.4850.243(0.613)(0.536)(0.584)(0.544)(0.404)(0.483)Civilian 0.588 0.4270.201 0.3430.2260.194(0.378)(0.331)(0.384)(0.417)(0.390)(0.419)Economic Development 0.009 0.017-0.288-0.202 -0.201 -0.296 (0.248)(0.228)(0.245)(0.185)(0.190)(0.197)Growth -4.641\*\*\* -3.610\*\*\* -3.125\*\* -3.299\*\* -2.870\*\* -3.483\*\*\* (1.370)(1.160)(1.269)(1.646)(1.393)(1.476)ControlsSingle-Candidate -0.188-0.076 -0.248Executive Elections<sup>4</sup> (0.413)(0.396)(0.385)Single-Party -1.470\*\*\* -1.392\*\*\* -1.568\*\*\* Legislative Elections<sup>5</sup> (0.319)(0.291)(0.361)Legislature<sup>6</sup> 0.7210.4460.6380.5890.592\*0.567(0.357)(0.394)(0.560)(0.497)(0.576)(0.381)4.607\* Proportion of Democracies 7.563\*\* 7.151\*\* 2.796  $4.795^{*}$ 3.825(2.935)(3.072)(2.471)(3.084)(2.634)(2.608)0.363Ethnic-Linguistic 1.454\*1.389\*1.0860.5260.408Fractionalization (0.788)(0.728)(0.707)(0.835)(0.768)(0.735)Cold War -0.203-0.158-0.7840.0160.001-0.139(0.637)(0.607)(0.661)(0.616)(0.563)(0.608)0.276 Constant -3.292-3.7300.1690.1491.213 (2.941)(2.963)(2.851)(2.422)(2.473)(2.266)28142903 23652529 2619 2605 N of clusters 137 106 287132 107 299 Clustered by leader ruling country leader ruling country coalition coalition Wald  $\chi^2$ 111.30123.97 62.75127.48175.20103.86Prob.  $> \chi^2$ 0.0000.000 0.0000.000 0.0000.000 Log pseudolikelihood -207.628 -229.539-198.064 -249.991-269.073 -230.665Pseudo  $R^2$ 0.2220.1590.2140.1690.1630.175

Logistic regression. Clustered standard errors in parentheses. \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01 (Two-tailed test).

distinction should be made between the types of elections since the different types coincide with those who get elected. On the one hand, elections of the effective ex-

Parameter estimates and standard errors for duration dependence are not shown, but available upon request.

Reference category is "No dynastic monarchy." <sup>2</sup> Reference category is "Multiple parties."
Reference category is "Personal." <sup>4</sup>Reference category is "Unelected or Appointed Dictators."

 $<sup>^5</sup>$  Reference category is "Unelected or Appointed Regime Allies."  $^6$  Reference category is "No Legislature."

ecutive are intended to prevent violent ouster of dictators, and thereby can work as an institutionalized means of leadership succession. On the other hand, legislative elections select regime allies and are primarily aimed at co-optation and elite unity. Unless we separate the different types of elections and scrutinize the different motivations behind them, we can not develop an accurate understanding of the causes of elections in nondemocratic settings.

Most studies on nondemocratic elections have focused on the role of elections and the discussion has been made usually in isolation from the role of other political institutions such as political parties and legislatures that dictators can make use of. At the same time, scholars who investigate the causes and the consequences of political parties and legislature in nondemocracies have been aware of elections as another important type of institutional arrangement, but thorough analyses of elections are set aside as a future agenda (Gandhi 2008, xx; Svolik 2012, 91). In this regard, my theory of the causes of nondemocratic elections can bridge two separate bodies of the literature as it incorporates institutional alternatives into the motivation of holding those elections. Of course, more studies are needed to disentangle the relationship among elections, parties, legislature, and other form of political institutions available in nondemocracies.

#### 3. CONSEQUENCES OF ELECTIONS IN NONDEMOCRACIES

#### 3.1 Introduction

Elections constitute a key element of democracies as they make incumbent governments and politicians accountable for their policy-making and enable peaceful alternation in power. However, it is also known that holding elections is not a sufficient condition for a nation to be considered a full-fledged democracy. Intuitively enough, elections without competition—which we saw in the Soviet Union and that we can observe even today in North Korea, for instance—should have no relevance to democratic political regimes. What is puzzling is that electoral competition appears to exist in some dictatorships albeit a limited degree and those "competitive" elections become more frequently held in the last two decades (Magaloni 2008, 734; Ottaway 2003; Roessler and Howard 2009; Schedler 2013, 25). One body of previous research suggests that those elections are inherently destabilizing for dictatorships and they might even cause democratic transitions (Huntington 1991; O'Donnell and Schmitter 1986). Another body of the literature, however, claims that they in effect prolong the life of dictatorships (Gandhi and Lust-Okar 2009). In this Chapter, I will neither make these two views compete with each other nor suggest that one is superior to another. Instead, I attempt to argue that these seemingly competing views are mutually complementary since they look at different parts of causal processes that are associated with elections in nondemocratic settings.

On theoretical grounds, those who claim the regime-sustaining role of elections emphasize the possible benefits that elections produce with respect to regime survival. As I discussed in the previous Chapter, elections can play an information generating role as well as a constraining role (Schedler 2013, 144–145). These possible fruits of

elections shape and characterize important elements of authoritarian politics before and after elections: cooptation policies, elites' perception about the regime's invincibility and their decision to cooperate/defect from the regime, and power-sharing between dictators and their allies (Brownlee 2007, 3; Gandhi and Lust-Okar 2009; Magaloni 2008, 728). In contrast to these possible benefits, those who argue about the regime-destabilizing role and the democratizing role of elections are primarily interested in whether elections per se have causal leverage on regime change and democratization (Brownlee 2009; Donno 2013; Howard and Roessler 2006; Lindberg 2009; Teorell and Hadenius 2009). In other words, the central focus is placed on the way in which elections create a momentum and bring changes. Among others, one plausible mechanism that has been suggested in the literature is that elections that allow competition might work as a focal point, facilitate opposition coordination, and lead to regime turbulence or democratic transitions (Beissinger 2007; Bunce and Wolchik 2009). In sum, two interrelated, but different dynamics can be at work with respect to elections in nondemocratic settings, but they are not necessarily contradictory of one another.

Empirical evidence for these two views is even more perplexing since the research design as well as the measurement of relevant variables in previous research has been brought into question. First, some of the most influential studies on the power of elections have tried to identify which elections are likely to result in democratic changes (Donno 2013; Howard and Roessler 2006). Certainly, they identified factors that might give elections a democratizing role. However, it does not necessarily mean that those studies were able to show that elections per se have causal forces (Gandhi and Lust-Okar 2009, 416). By design, the power of elections is best assessed when a researcher compares cases in which elections are held with otherwise identical cases without elections. However, Donno (2013) and Howard and Roessler (2006),

for instance, compared elections in nondemocratic settings, and consequently the impact of elections themselves remains unclear. Second, past empirical research had to rely on an indirect and unreliable measure of electoral competition due to the lack of data (Brownlee 2009; Howard and Roessler 2006). However, with a recent data collection effort (Hyde and Marinov 2012), researchers today are able to separate the possibility of electoral competition from actual competitiveness of elections in dictatorships, which in turn contributes to more plausible hypothesis testing.

In the sections that follow, I begin with a brief review of the literature on the consequences of elections in nondemocratic settings. I then offer a theory that explains how ex ante electoral competition and ex post competitiveness of elections affect the survival of dictatorships as well as the chances of democratic transitions. In the third section, I summarize the data set that I created to test my theory. Fourth, I present findings from my empirical analyses of the consequences of elections. The last section concludes.

#### 3.2 Literature Review

Since the end of the cold war, a growing number of dictatorships have held elections while resisting democratization. Although these regimes were not completely new in a historical perspective (Diamond 2002; Przeworski 2009; Schedler 2006), the spike in the number of election-holding dictatorships urged scholars to understand them. Earlier studies described them as a distinct type of dictatorships and labeled those regimes, for example, as electoral authoritarianism, competitive authoritarianism, hybrid regimes, or partial democracies (Collier and Levitsky 1997; Diamond 2002; Levitsky and Way 2002; McFaul 2002; Schedler 2002). As Figure 3.1 shows, the number of years in which dictatorships held elections has been relatively sta-

<sup>&</sup>lt;sup>1</sup>Here, elections include elections for Constituent Assembly, executive elections, and legislative elections. For each dictatorship, I counted whether or not at least one of the three types of elections

ble over time after WWII, implying that the use of elections by dictatorships is not a completely new phenomenon. At the same time, as is shown in Figure 3.2, the proportion of dictatorships that held elections declined in 1960s and increased after late 1980s. And this is the fact that motivated recent scholarship on elections in nondemocratic settings.

The logical next step in this line of inquiry is to explain whether elections in nondemocratic settings help the regime survival or cause democratization. On the one hand, some argue that elections play a regime-sustaining role (Chehabi and Linz 1998, 18). For instance, elections can help the regime to collect information about regime support and opposition, and that information can then be used to shape effective redistribution policies (Gandhi and Lust-Okar 2009; Lust-Okar 2008). Overwhelming electoral victory signals the invincibility of dictatorships, which in turn deters challenges from opposition forces (Brownlee 2007; Schedler 2006, 14; Simpser 2013). On the other hand, however, there are views that elections are inherently destabilizing for dictatorships (Huntington 1991, 174–175; O'Donnell and Schmitter 1986, 15). Elections can work as a focal point in which elites split and defect from the ruling circle (Langston 2006; van de Walle 2006) and opposition forces coalesce and challenge the regime (Bunce and Wolchik 2009; Howard and Roessler 2006; Tucker 2007), leading to liberalization of the political sphere (Howard and Roessler 2006) or democratic transitions (Brownlee 2009; Donno 2013).

Empirical evidence of the regime-sustaining role of elections has primarily been found in a set of case studies on Egypt (Blaydes 2011), Jordan (Lust-Okar 2006), Mexico (Magaloni 2006), and Vietnam (Malesky and Schuler 2011). Brownlee (2009) conducted a cross-national test and compared competitive electoral regimes, hege-

were held in a given year. Elections in Figure 3.1 and Figure 3.2 include elections with *ex ante* competition and those without *ex ante* competition that I discuss in a greater detail later.

Figure 3.1: Number of Election-Year in Dictatorships, 1946–2010

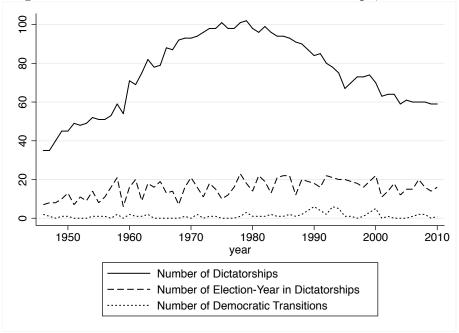
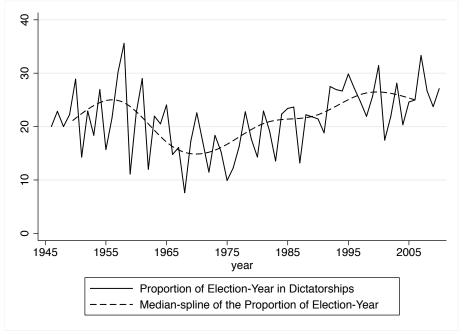


Figure 3.2: Proportion of Election-Year in Dictatorships, 1946–2010



monic electoral regimes, and closed regimes (in which no elections are held). He found a negative, but statistically insignificant effect of competitive regimes on regime breakdown relative to closed regimes. That is, more evidence is required in order to avoid overgeneralization of the theoretical claims (Gandhi and Lust-Okar 2009, 406). With respect to the regime-destabilizing and democratizing role of elections, Howard and Roessler's (2006) cross-national research sampled elections in competitive regimes and found that elections result in liberalization if opposition parties form pre-electoral coalitions. Donno (2013) sampled elections in both competitive and hegemonic regimes and found that the effect of opposition coalitions on democratization is most salient in elections in competitive regimes. Although these studies on democratization through elections shed new light on the dynamics of elections, they only include election-years in the sample, raising a question about the causality of elections. That is, it remains unclear whether elections themselves influence the proclivity of change or some unobserved factors that enable opposition coalition, for instance, give elections a democratizing effect.

On the surface, these views appear competing and mutually exclusive. Empirical evidence is mixed and inconclusive. However, as I discuss below, they are complementary elements of these two bodies of the literature because they look at different aspects of elections in nondemocratic settings. The key, I argue, is to distinguish between *ex post* competitiveness of elections and *ex ante* existence of electoral competition. This forms a crucial building-block of my theoretical explanations.

### 3.3 Theory

In brief, ex post competitiveness of elections refers to the extent to which the ruling circle prevails, which is usually observed by election outcomes including the vote share and the seat share of the ruling party or group. It shapes and conditions

the political arena in which the ruling elites and opposition camps operate between elections. In contrast, the *ex ante* existence of electoral competition affects whether or not individual elections become the moment of regime change, and thereby directly cause democratic transitions. Unlike *ex post* competitiveness, *ex ante* competition is defined and observed separately from election outcomes (Hyde and Marinov 2012, 202) and indicates whether or not competition is allowed in a given election.

According to Hyde and Marinov (2012, 194), an election is deemed allowing competition ex ante if the following three conditions are met: (1) if at least one opposition<sup>2</sup> exists to contest the election, (2) if multiple political parties are legal<sup>3</sup>, and (3) if there is a choice of candidates on the ballot. The three conditions constitute what they describe as "minimalist definition of electoral competition" (192). Elections without ex ante competition have virtually no potential to bring change. Instead, such elections determine who can be inside or outside of the regime, and easily become contests for resources and favors (Lust-Okar 2009; Wintrobe 1998), a co-optation game (Lindberg 2009), or the moment for replacing "older cadres with younger, more loyal ones" (CBC News 2014). The majority of this type of election is found in communist regimes, Africa, and the Middle East. Elections with ex ante competition, in turn, could be lost, although the outcome depends on how the elections are contested. Figure 3.3 depicts the evolution of these two types of elections over time. Elections without ex ante competition had outnumbered those with the minimum level of competition during the time of the cold war. And the latter has increased since the beginning of the third wave of democratization (Huntington 1991) in mid 1970s and became more widespread after the late 1980s while there still

<sup>&</sup>lt;sup>2</sup> "An opposition party or group is one that is not in the government and is not affiliated with the party in power" (Hyde and Marinov 2012, 197).

<sup>&</sup>lt;sup>3</sup>This condition requires "that a party exists, is legal, and that the nongovernment party is an independent political entity" (Hyde and Marinov 2012, 197).

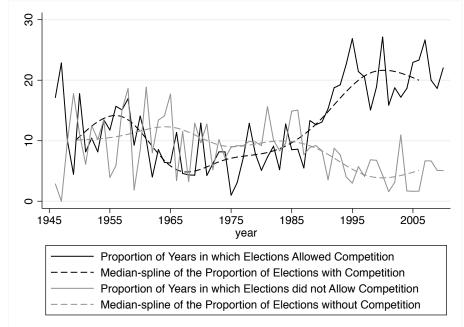


Figure 3.3: Elections and ex ante Competition in Dictatorships, 1946–2010

remain elections that do not allow ex ante competition today.

The above discussion implies that when examining the regime-destabilizing and democratizing role of elections, a researcher needs to directly measure elections with ex ante competition and examine their effect. Since elections without ex ante competition are not, by definition, being lost, they should presumably cause no change. If elections work as a focal point that induces change, we obtain the following set of expectations:

 $H_1$ : Elections that allow *ex ante* competition destabilize dictatorships and are likely to cause regime breakdown.

 $H_2$ : Elections that allow *ex ante* competition not only lead to the fall of dictatorships, but also increase the chances of democratic transitions.

It is important to note that, in the previous research, scholars attempted to identify which elections can be lost and which can be a source of changes. This effort is found in the scholarly discussion and conceptualization of competitive authoritarianism and hegemonic authoritarianism.<sup>4</sup> On conceptual grounds, what makes a dictatorship competitive a authoritarianism hinges on the presence of an opposition and competition in regular elections (Diamond 2002, 29; Howard and Roessler 2006, 376) even if they are unfair and fraudulent (Levitsky and Way 2002, 52). Therefore, elections that are held in this particular type of regimes are hypothesized to be a cause of political liberalization (Howard and Roessler 2006) and democratic transitions (Brownlee 2009). In contrast, hegemonic authoritarianism is characterized by the dominance of the ruling group (Diamond 2002, 29, 32), no effective electoral competition (Howard and Roessler 2006, 367), and no possibility of losing (Roessler and Howard 2009, 108).<sup>5</sup> Clearly, one of the defining features of hegemonic authoritarianism is the absence of ex ante competition. Hence, elections in this type of dictatorship are not supposed to cause any changes. However, the measurement of these two types of regimes was done not by observing each election and making decisions about the existence of electoral competition, but by observing ex post competitiveness and making an inference about which elections would allow competition.<sup>6</sup> The obvious shortcoming of the latter strategy is that we can treat dictatorships as hegemonic authoritarian simply because the margin of the incumbent victory was sufficiently high. Yet, in order to be consistent with the concept, we need to measure the presence and the absence of ex ante electoral competition.

<sup>&</sup>lt;sup>4</sup>Table 3.1 lists the representative definitions of these regimes.

<sup>&</sup>lt;sup>5</sup>Note that Roessler and Howard (2009) raises this point by citing Munck (2006, 33). Yet, for Munck this criterion is proposed to differentiate democracies from nondemocracies.

<sup>&</sup>lt;sup>6</sup>Howard and Roessler (2006, 368) describe these two strategies as "I know it when I see it" formula versus "let the chips fall where they may" formula while acknowledging the possibility of measurement errors that the latter approach might cause.

Table 3.1: Definitions of the Subtypes of Dictatorships

Competitive Authoritarianism

**Diamond (2002, 29):** "One defining feature of competitive authoritarian regimes is significant parliamentary opposition."

Levitsky and Way (2002, 52): "In competitive authoritarian regimes, formal democratic institutions are widely viewed as the principal means of obtaining and exercising political authority. Incumbents violate those rules so often and to such an extent, however, that the regime fails to meet conventional minimum standards for democracy."

Howard and Roessler (2006, 367): "In competitive authoritarian systems, on the other hand, regular, competitive elections are held between the ruling party and a legal and legitimate opposition, which usually chooses to participate, rather than to boycott. But the incumbent regime still uses fraud, repression, and other illiberal means "to create an uneven playing field between government and opposition" (Levitsky and Way 2002, 53) to try to ensure that it ultimately prevails in the electoral contest."

Roessler and Howard (2009, 108): "Competitive authoritarian systems, on the other hand, permit a substantively higher degree of contestation, leading to greater uncertainty in the outcome of the elections between the ruling party and a legal and legitimate opposition, which usually chooses to participate, rather than to boycott the election."

Hegemonic Authoritarianism

**Diamond (2002, 29, 32):** "In regimes where elections are largely an authoritarian façade, the ruling or dominant party wins almost all the seats... One clear sign of hegemony is when the president "wins" three-quarters or more of the popular vote."

Howard and Roessler (2006, 367): "Hegemonic authoritarian regimes do hold regular elections as part of their system of governance, but in addition to widespread violations of political, civil, and human rights, the elections are not actually competitive. Because no other party, except the ruling one, is allowed to effectively compete (i.e., the opposition is completely shut out from access to state-owned media coverage, banned from holding political rallies, or forced into exile or in jail), the dominant candidate or party wins overwhelmingly, leading to a de facto one-party state."

Roessler and Howard (2009, 108): "In hegemonic authoritarian regimes the restrictions on opposition parties and their political activities, bias in state-owned media coverage, and other forms of repression so severely circumscribe contestation that the incumbent candidate or party does not face the possibility of losing (Munck 2006, 33), often leading to a de facto one-party state."

Closed Regime

Howard and Roessler (2006, 367): "Closed authoritarian regimes are those in which a country's leaders are not selected through national elections, opposition political parties remain banned, political control is maintained through the use of repression, and there is little space for a free media and civil society."

In order to highlight the concern about the discrepancies between conceptualization and measurement of competitive/hegemonic regimes in earlier studies, Table 3.2 and Table 3.3 present how our measurement of electoral dictatorships varies by moving from ex ante competition to ex post competitiveness. In order to measure ex post competitiveness, I used the World Banks' Database of Political Institutions (Keefer 2012) that is widely used in recent cross-national studies (Brownlee 2009; Donno 2013). By using this data set, we can set 75% of votes (seats) as the threshold of executive (legislative) elections in competitive authoritarianism and hegemonic authoritarianism. That is, if a winner received more than 75% of votes (seats) in an executive (legislative) election, that dictatorship is deemed a hegemonic regime subsequently by presupposing that the victory with this wide margin stems from the absence of ex ante competition. With this procedure, Table 3.2 shows that 4 cases in which ex ante competition was not allowed are wrongly classified as competitive regimes. 30 elections with ex ante competition are considered as elections in hegemonic regimes in which there is no possibility of losing. The discrepancies are even more severe in legislative elections. While 8 cases are wrongly deemed elections in competitive regimes, we treat 109 legislative elections as elections in hegemonic regimes despite the presence of ex ante competition. What this implies is that the approaches that have been undertaken in earlier studies pick up a subsample of elections in competitive regimes in which incumbents are particularly vulnerable. Therefore, what has been found as the democratizing effect of this subset of elections is likely an overestimate of the effect of competitive elections in nondemocratic settings on regime change.

According to the above discussion, some might view that ex post competitiveness of elections no longer has theoretical relevance. While it is true that it is not our preferred approach to use ex post competitiveness to make an inference about and measure the existence of ex ante competition in nondemocracies, an alternative way of interpreting it is to understand ex post competitiveness as the signal about the

Table 3.2: Executive Elections in Dictatorships, 1975–2014

$ex\ ante$	ex post competitiveness			
competition	Competitive	Hegemonic		
Yes	79	30		
No	4			

Table 3.3: Legislative Elections in Dictatorships, 1975–2014

$ex\ ante$	ex post competitiveness			
competition	Competitive Hegemon			
Yes	133	109		
No	8	23		

invincibility of dictatorships. Certainly, ex post competitiveness, which is usually observed as the vote share and the seat share of the ruling group or party, is a noisy signal since it is endogenous to many factors including electoral institutions, the way in which elections were contested (harassment and intimidation of oppositions; opposition's boycott), the intensity of electoral manipulation such as vote buying and gerrymandering, control over electoral commissions, and/or media bias in favor of the regime. Regardless of what are the sources of ex post competitiveness of elections, this is the information that becomes public knowledge, which then shapes the perception of regime supporters and opponents. If the incumbent appears invincible, the stakes are higher for elites in the ruling circle to defect as the regime is likely to survive (Langston 2006, 60). This point is particularly important because serious contenders to the regime are often former allies of the rulers (Bunce and Wolchik 2009, 256; van de Walle 2006, 86). Moreover, dictatorships that show overwhelming electoral victory discourage the formation of opposition coalitions as the opposition camps do

not have a real chance of victory in the future (Donno 2013, 706; van de Walle 2006, 86). Taken together, the following expectation is obtained:

 $H_3$  Dictatorships in which election results demonstrate the invincibility of the regimes are more likely to survive and are less likely to democratize than non-electoral regimes.

This hypothesis implies that dictatorships that appear vulnerable in public because of the presence of viable oppositions are more fragile. It can also be argued, however, that conducting elections reveals information about the regime supporters and opponents (Blaydes 2011; Magaloni 2006). And as the number of detailed case studies has shown, by using that information, those dictatorships might resort to momentary co-optation by distributing goods and patronage in order to prolong their rule (Gandhi and Lust-Okar 2009). If this electoral co-optation mechanism is predominant and is a general phenomenon, we can expect that those seemingly "vulnerable" regimes are in fact more likely to survive than their non-electoral counterparts that do not have this option.

 $H_4$  Dictatorships in which election results signal the vulnerability of the regime are more likely to survive and are less likely to democratize than non-electoral regimes.

In sum, the two seemingly competing effects of elections are complementary elements of the two bodies of the literature because they look at different aspects of elections in nondemocratic settings. The distinction between *ex ante* electoral competition and *ex post* competitiveness of elections makes this point clear. On the one hand, individual elections can serve as a focal point and create a momentum against the regime. On the other hand, what elections bring about can prolong the

life of dictatorships. Separating the direct effect of elections from the effect of the contexts that elections shape echoes the view that "elections are not the entire show in the electoral autocracies" (van de Walle 2006, 85). In order to test the hypotheses above, it is necessary to examine those two aspects of elections on regime outcomes. For that purpose, I agree with Brownlee (2009) and Donno (2013) that we should examine different contexts that are the products of elections. At the same time, I also agree with the approaches taken by Lindberg (2009) and Teorell and Hadenius (2009) that we should investigate the effect of individual elections.

## 3.4 Research Design and Data

In order to test my hypotheses about the consequences of elections in nondemocratic settings, I constructed a data set that covers dictatorships from 1946 to 2010. Empirical tests of the effect of individual elections on regime outcomes require high precision about when elections were held and when a dictatorship began and ended.<sup>7</sup> For that reason, the data are organized by regime-year. It means that if a country experiences the fall of a dictatorship and if that dictatorship is immediately replaced by another dictatorship in a given year, the country in question has an observation for each dictatorship in that year. Information about dictatorships was obtained from Geddes et al. (2013) since their data provide the start date and the end date of each dictatorship. Data on individual elections were gathered from NELDA data set (Hyde and Marinov 2012). Countries that lack sovereign status were excluded from the sample by referring to Gleditsch and Ward (1999).

The first set of empirical tests is to see the impact of electoral competition *ex ante* and *ex post* competitiveness of elections on the survival of dictatorships in general.

<sup>&</sup>lt;sup>7</sup>Because of the high precision about timing of elections and regime failure that we require, constructing a regime-month data set can be an alternative way to set up empirical studies (Schuler et al. 2013). I chose to use regime-year observations so that my findings can be directly comparable to past steadiest that rely on regime-year or country-year data.

Table 3.4: Fall of Dictatorships and the Types of Regime Outcome, 1946–2010

		Democratic	${\bf Another}$	Absence of
	No Change	Transition	Dictatorship	Government
Regime-Year	4612	82	101	40

In order to do so, I created a dichotomous dependent variable that is coded as "0" if a dictatorship survives and is observed on December 31 of the relevant year. It is coded as "1" if a regime collapses at any point in the relevant year. The second set of empirical analyses examines the relationship between elections and democratic transitions. In order to reflect the fact that the end of a dictatorship can lead to either a democratic transition or the rise of another dictatorship, a categorical dependent variable is coded as "0" if a dictatorship survives and is observed on December 31 of the relevant year. This variable is coded as "1" if a dictatorship collapsed and experienced a democratic transition at any point in the relevant year and is coded as "2" if the fall of a dictatorship resulted in another dictatorship or other instances of the absence of governments. Table 3.4 shows that among 223 breakdowns of dictatorships that happened between 1946 and 2010, 82 cases were followed by a democracy, 101 by another dictatorship, 40 by the absence of government, respectively.

<sup>&</sup>lt;sup>8</sup>This part of empirical analyses is equivalent to Brownlee (2009)'s studies. He then subsampled regime-years in which dictatorships broke down and assessed the impacts of electoral regime types on democratic transitions. This approach ignores the possible selection effects and the findings might be biased. This problem can be solved by applying, for instance, censored probit (Reed 2000). However, since poorly identified selection models can cause further problems (Brandt and Schneider 2007) and multinomial logistic regressions can be estimated to test my hypotheses, I did not apply selection models for my hypotheses tests.

<sup>&</sup>lt;sup>9</sup>These "other instances" include countries that are ruled by warlords, are occupied by a foreign country, are deemed provisional, and cease to exit.

The first key independent variable is an indicator for individual elections that allow ex ante competition. Here, elections refer to those for constituent assembly, national executive office, and national legislative office. If there were multiple rounds of elections, I included only the last round.<sup>10</sup> By using the NELDA data set (Hyde and Marinov 2012), I identified the cases in which there were at least one type of those elections in the relevant regime-year. 11 Competitive elections ex ante is coded as "1" if there was at least one such election in which ex ante competition was allowed and is coded as "0" otherwise. Similarly, noncompetitive elections ex ante is coded as "1" if there was an election, but ex ante competition was not allowed. This variable is coded as "0" otherwise. I adopted the Hyde and Marinov's minimalist definition of electoral competition. Therefore, an election is deemed as allowing ex ante competition (1) if at least one opposition exists to contest the election, (2) if multiple political parties are legal, and (3) if there is a choice of candidates on the ballot. 12 Since elections can happen anytime in a year, special treatments should be made in the years in which dictatorships emerged and collapsed. In a year when a new dictatorship was formed, I excluded any elections that happened before that regime began. Likewise, in a year when a dictatorship fell, I excluded any elections that were held after the end of that regime. By doing so, I excluded elections that are not relevant to each dictatorship. Another caution is that some elections unseated and replaced dictators and the date of those elections are considered as the date of regime change. Those elections were counted in the data set, although some exceptions apply. There were some elections that were primarily aimed at

 $<sup>^{10}</sup>$ However, if the first round of elections already ended a dictatorship in Geddes et al. (2013)'s data set, that round was counted. See Table 3.5 for the details.

<sup>&</sup>lt;sup>11</sup>Since the NELDA data set does not distinguish between elections for the upper house and elections for the lower house in the cases of bicameral system, all legislative elections in the national level are included.

<sup>&</sup>lt;sup>12</sup>Each condition is measured in the NELDA data set by variables that are named **nelda3**, **nelda4**, **nelda5**, respectively.

confirming transition processes. These elections usually happened after the date on which dictatorships collapsed. However, in some cases, these elections were used as the date of regime failure. Since they were planned for democratic transitions, we should not assess the impact of these elections on regime outcome in order to avoid tautology or overestimate the democratizing power of elections.<sup>13</sup> Table 3.5 lists the elections that were excluded from the analyses that follow. The decision was made by referring to Geddes et al. (2013)'s rich documentation about the episode of regime formation and failure that is available in their codebook. In order to assess the effect of those individual elections on regime outcomes, these independent variables were not lagged in the analyses.

The second key independent variable provides the information about the extent to which the ruling circle prevails in dictatorships. **Hegemonic regime** *ex post* takes the value of "1" if the ruling party's vote (seat) share in the executive (legislative) elections is greater than or equal to 75% and takes the value of "0" otherwise. <sup>14</sup> Likewise, **competitive regime** *ex post* is coded as "1" if the ruling party's vote (seat) share in the executive (legislative) elections is smaller than 75% and is coded as "0" otherwise. I used data that were collected by Svolik (2012). <sup>15</sup> Since these data represent the information as of January 1 of the relevant year, these variables were not lagged in the analyses.

Control variables include subtypes of dictatorships, economic conditions, decade dummies, and region dummies. Subtypes of dictatorships were obtained from Geddes et al. (2013). Although their data acknowledge hybrids of these subtypes, I used the four parsimonious categories of dictatorships: party-based regimes, military regimes,

<sup>&</sup>lt;sup>13</sup>See Gandhi and Lust-Okar (2009, 416) for the concerns about the causality and its direction of elections on regime change in past research.

<sup>&</sup>lt;sup>14</sup>Following Brownlee (2009, 525), monarchies are coded as hegemonic regimes.

<sup>&</sup>lt;sup>15</sup>I also measured these two variables by using data that were collected by Keefer (2012) in order to replicate some of the findings in the previous studies.

Table 3.5: Elections that were Included and Excluded in the Empirical Analyses

Country	Year	Type	Reasons
Included	1001	-JP -	10000011
El Salvador	1994	Executive	The 2nd round was held after the regime failure. The 1st round already indicates transition.
Guatemala	1995	Executive	The 2nd round was held after the regime failure. The 1st round already indicates transition.
Argentina	1973	Legislative	The 2nd round was held after the regime failure. The 1st round already indicates transition.
Poland	1989	Legislative	The NELDA date of the 2nd round is wrong, which should be June 18, 1989.
Syria	1947	Legislative	The GWF date of regime failure seems wrong as the 2nd round was held on July 18, 1947.
Excluded			·
Bolivia	1979	Executive	Elections were followed by military's return to barracks.
Honduras	1971	Executive	Negotiated elections confirmed transition.
Nigeria	1999	Executive	Elections organized by reformist incumbent led to demo- cratic transition.
Paraguay	1993	Executive	Elections organized by reformist incumbent led to democratic transition.
Ecuador	1979	Executive	Elections organized by reformist incumbent led to demo- cratic transition.
Ghana	1979	Executive	Elections completed democratic transition.
Niger	1999	Executive	Elections completed democratic transition.
Bolivia	1979	Legislative	Elections were followed by military's return to barracks.
Ecuador	1979	Legislative	Elections organized by reformist incumbent led to demo- cratic transition.
Germany, East	1990	Legislative	Massive demonstration forced elections in which the incumbent lost.
Ghana	1969	Legislative	Elections were followed by military's return to barracks.
Ghana	1979	Legislative	Elections completed democratic transition.
Honduras	1971	Legislative	Negotiated elections confirmed transition.
Niger	1999	Legislative	Elections completed democratic transition.
Nigeria	1999	Legislative	Elections organized by reformist incumbent led to demo- cratic transition.
Paraguay	1993	Legislative	Elections organized by reformist incumbent led to democratic transition.

personalist regimes, and monarchies. Four dummy variables were created to represent each subtype and personalist regimes were set as the reference category. These variables represent the subtype in the relevant year, and therefore the variables were not lagged. Three variables capture economic conditions. First, the level of economic development is measured by the natural log of GDP per capita. Economic growth represents annual change in GDP per capita. These data were taken from Bolt and van Zanden (2013), which is the update of Maddison (2008). The third economic variable is the country's dependence on oil revenue. The data were obtained from Haber and Menaldo (2011). All economic indicators were lagged by one year. Dummy variables that represent geographic regions were also taken from Haber and Menaldo (2011). Region dummies include (1) Eastern Europe and Post-Soviet, (2) North Africa and Middle East, (3) Subsaharan Africa, (4) Latin America, and (5) Asia. Finally, dummy variables that capture decades were introduced. By setting years after 2000 as the reference category, I incorporated six dummy variables that represent decades from 1940s to 1990s.

Finally, following Carter and Signorino (2010), I included in the following analyses a cubic polynomial of the duration of dictatorships. Although the Geddes et al. (2013) data cover years from 1946 to 2010, they provide the start date if a regime was formed before 1946. Therefore, the duration of dictatorships is left-censored and dictatorships that were observed in 1946 can have different duration values depending on their start date. The duration is counted for each dictatorship, and not for the nondemocratic period. That is, if a dictatorship falls and another dictatorship follows, they are considered two separate dictatorships. This approach has been widely accepted in the recent studies since it does not ignore leadership changes in dictatorships (Przeworski 2007) while it takes into account cases in which leaders change but the same political coalition sustains (Svolik 2012, 185). In the analyses that follow, standard errors were clustered by dictatorships, and not by countries.

## 3.5 Findings/Results

In order to test my hypotheses about the effects of elections on the survival of dictatorships, I estimated logistic regressions. The first column of Table 3.6 (Model 1) shows the baseline model that includes economic indicators, decade dummies, region dummies, and time dependence. The second column (Model 2) estimates the model that incorporates regime type variables. And the third column (Model 3) presents the full model in which the effect of elections with ex ante competition and ex post competitiveness are assessed. The results show that, consistent with my theoretical expectations, dictatorships are more likely to break down in the regimeyears in which elections with ex ante competition are held than in the regime-years with no elections  $(H_1)$ . In a sharp contrast with this pattern, ex ante noncompetitive elections have no impact on the regime survival. Not surprisingly, dictatorships that demonstrate invincibility are less likely to lead to collapse than non-electoral regimes  $(H_3)$ . Dictatorships in which viable oppositions exist are also found to outlast nonelectoral regimes  $(H_4)$ . Consistent with the findings in previous research, party-based regimes are more durable while military regimes are more likely to fall. Economic growth decreases the likelihood of breakdown. Dependence on oil revenue prolongs the life of dictatorships as well. The fourth column (Model 4) estimated the full model in which the measures of ex post competitiveness are based on the DPI data set that the findings in the recent studies rely on (Brownlee 2009; Donno 2013). By using the DPI data, the sample was restricted to years from 1975 to 2007. The parameter estimate on ex post hegemonic regimes is negative, but is not statistically significant. This was caused by the change from the Svolik data to the DPI data for the measurement of this variable, and not by the change in the sample size. $^{16}$  In

<sup>&</sup>lt;sup>16</sup>Results are available upon request.

Table 3.6: Elections and Breakdown of Dictatorships, 1946–2007

Dependent Variable =				
Regime Failure	Model 1	Model 2	Model 3	Model 4
Competitive Elections ex ante			1.701*** (0.235)	1.685*** (0.230)
Noncompetitive Elections ex ante			-0.300 (0.416)	-0.821 (0.610)
Hegemonic Regime ex post			-0.704** (0.337)	-0.457 (0.312)
Competitive Regime ex post			-0.760*** (0.294)	-0.541** (0.270)
Military Regime		0.736*** (0.190)	0.728*** $(0.279)$	$0.879^{***}$ $(0.259)$
Party-Based Regime		-0.973*** (0.218)	-0.699*** (0.269)	-0.724** (0.326)
Monarchy		-0.981** (0.438)	-0.579 (0.577)	-0.785 $(0.698)$
Lagged per capita GDP (Natural Log)	-0.081 (0.131)	-0.093 (0.126)	-0.018 (0.163)	-0.290 (0.180)
Lagged Economic Growth	-0.032*** (0.012)	-0.037*** (0.013)	-0.029* (0.016)	-0.044*** (0.017)
Lagged Dependence on Oil Resource	-0.025* (0.015)	-0.028* (0.015)	-0.026* (0.015)	-0.011 (0.013)
Duration	-0.024* (0.014)	0.014 $(0.014)$	0.025 $(0.021)$	$0.042^{**} $ $(0.021)$
Duration <sup>2</sup>	$0.000 \\ (0.000)$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Duration <sup>3</sup>	-0.000 (0.000)	-0.000 (0.000)	$0.000 \\ (0.000)$	$0.000 \\ (0.000)$
Constant	-1.343 (1.062)	-2.114* (1.094)	-2.636** (1.335)	-0.008 (1.286)
N	4256	4256	3760	2518
N of clusters	262	262	235	176
Pseudo $\mathbb{R}^2$	0.047	0.081	0.120	0.153
Log pseudolikelihood	-769.032	-741.215	-529.277	-406.245
Decade dummies	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes
Sampled Period	1946-2007	1946-2007	1946 – 2007	1975 – 2007

Logistic regression. Two-tailed tests. Standard errors are clustered by dictatorships.  $^*p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01.$ 

sum, the first set of empirical analyses show support for the idea that the regimedestabilizing role of elections and the regime-sustaining role of elections are not mutually exclusive, but complementary.

The second step of the empirical analyses is to see if ex ante electoral competition and ex post competitiveness of elections affect democratic transitions in the way that

I hypothesized. For that purpose, I estimated multinomial logistic regression models for which the dependent variable has three distinct categories: "the regime survival (base category)," "democratic transitions," and "another dictatorship" that includes the absence of governments. The first two columns (Model 1) of Table 3.7 show the estimation results from the full model. Elections that allow ex ante competition increase the probability of democratic transitions  $(H_2)$  as well as the probability of shifts to another dictatorship. Not surprisingly, elections that do not allow ex ante competition decrease the chances of democratic transitions. Turning to the effects of ex post competitiveness of elections  $(H_3, H_4)$ , the coefficients on the two independent variables are negative. They are statistically significant for transitions to another dictatorship, but are not statistically significant for democratic transitions. That is, although Model 3 in Table 3.6 shows that electoral regimes tend to be more stable than non-electoral regimes, those regimes do not necessarily affect the likelihood of democratic transitions—a particular type of regime outcomes. As for the control variables, military regimes are more likely to experience democratic transitions and party-based regimes are less likely to be replaced by another dictatorship. Economic factors were found unrelated to democratic transitions. Model 2 in Table 3.7 presents the results for the sample that was restricted in the same way as Model 4 in Table 3.6. Elections with ex ante competition consistently increase the probability of democratic transitions.

In order to illustrate the main findings, Table 3.8 presents the extent to which the predicted probability changes with respect to the hypothesized factors.<sup>17</sup> If a dictatorship holds an election in which competition is allowed, the probability

<sup>&</sup>lt;sup>17</sup>Table 3.8 is based on simulations using *Clarify* (Tomz et al. 2000). The simulated change in the predicted probability of regime breakdown is based on Model 3, Table 3.6. The simulated change in the predicted probability of democratic transitions is based on the first column of Model 1, Table 3.7. The values of all covariates were set to their median.

Table 3.7: Elections, Regime Failure, and Subsequent Regime Type, 1946–2007

Dependent Variable =	Mo	del 1	Model 2		
Regime Type	Democracy	Dictatorship	Democracy	Dictatorship	
Competitive Elections ex ante	2.916***	0.872***	3.131***	0.331	
	(0.484)	(0.299)	(0.412)	(0.366)	
Noncompetitive Elections ex ante	-17.887***	0.181	-16.138***	-0.699	
•	(0.321)	(0.422)	(0.323)	(0.633)	
Hegemonic Regime ex post	-0.184	-0.775**	-0.711	-0.047	
0	(0.529)	(0.392)	(0.529)	(0.383)	
Competitive Regime ex post	-0.205	-1.024***	-0.536	-0.421	
Compensive Regime car poor	(0.499)	(0.397)	(0.359)	(0.417)	
Military Regime	2.856***	0.083	2.685***	0.113	
winitary regime	(0.773)	(0.353)	(0.675)	(0.331)	
Dente Dene I Denim	,	-0.774**	,	-0.830**	
Party-Based Regime	-0.404 (0.677)		-0.113 (0.699)	(0.364)	
	,	(0.300)	,	,	
Monarchy	-125.116	-0.244	1.382	-1.681	
	(240.149)	(0.584)	(1.254)	(1.054)	
Lagged per capita GDP	0.226	-0.277	-0.054	-0.629**	
(Natural Log)	(0.293)	(0.209)	(0.233)	(0.258)	
Lagged Economic Growth	-0.025	-0.030	-0.040	-0.042**	
	(0.031)	(0.018)	(0.032)	(0.018)	
Lagged Dependence	-0.021	-0.023	-0.016	-0.005	
on Oil Resource	(0.027)	(0.018)	(0.025)	(0.017)	
Duration	0.105*	0.002	0.046	0.043	
	(0.063)	(0.044)	(0.039)	(0.053)	
Duration <sup>2</sup>	-0.002	0.001	-0.000	-0.000	
Daration	(0.002)	(0.002)	(0.001)	(0.002)	
Duration <sup>3</sup>	0.000	-0.000	-0.000	-0.000	
Duration	(0.000)	(0.000)	(0.000)	(0.000)	
Constant	-7.337***	-0.687	-4.643**	2.227	
Constant	(2.538)	(1.727)	(2.204)	(1.756)	
A.Y	,	(1.727)	,	(1.750)	
N $N$ of clusters	$3760 \\ 235$		2518		
N of clusters Pseudo $\mathbb{R}^2$	0.174		$176 \\ 0.212$		
Log pseudolikelihood	-570.112		-442.154		
Decade dummies	-570.112 Yes		Yes		
Region dummies	Yes		Yes		
Sampled Period	1946-2007		1975–2007		

Multinomial logistic regression. Two-tailed tests. Standard errors are clustered by dictatorships.  $^*p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01.$ 

of breakdown increases by 23.5% while the probability of democratic transitions is augmented by 17%. Electoral regimes are, in general, less likely to collapse than non-electoral counterparts by 4%. The findings imply that, as has been suggested by the case studies, elections can help the survival of dictatorships. At the same time, however, the data also reveal that elections can be a moment for change—the

Table 3.8: Changes in the Predicted Probability

			emocratic ransitions	
Competitive elections ex ante	$H_1$ :	+23.5% [+9.5, +40.5]	$H_2$ :	+17.0% [+1.9, +53.2]
Noncompetitive elections ex ante		-1.6% [-8.1, +4.7]		$-1.6\% \ [-7.2, -0.1]$
Hegemonic regimes ex post	$H_3$ :	-4.0% [-11.1, -0.3]	$H_3$ :	-0.1% [-2.7, +2.4]
Competitive regimes ex post	$H_4$ :	-4.2% [-10.7, -0.5]	$H_4$ :	$ \begin{array}{c} -0.2\% \\ [-2.4, +1.5] \end{array} $

Note: The 95% confidence intervals in brackets.

findings consistent with the recent cross-national studies.

#### 3.6 Implications and Conclusions

In this Chapter, I have developed and found empirical support for a theory about the consequences of elections in nondemocratic settings. The earlier studies have proposed two contrasting expectations with respect to elections. Evidence has been mixed and inconclusive. In order to obtain a better understanding about what elections bring about, I argue that electoral competition and competitiveness of elections reflect two distinct causal processes. On the one hand, the presence of electoral competition even in limited degrees can offer an additional venue for changes by functioning as a focal point, which in turn relates to the regime-destabilizing and democratizing role of elections. On the other hand, competitiveness of elections shapes the beliefs and strategic decisions of relevant actors in authoritarian politics. The purported regime-stabilizing role of elections is closely associated with this as-

pect of elections in nondemocratic settings. In this way, my theoretical explanations imply that the two distinct views on elections are in effect mutually complementary. And my empirical tests show that these two faces of elections exist simultaneously.

The existence of two separate forces of elections with respect the survival of dictatorships and democratic transitions has broad implications for future studies about the way in which elections function in dictatorships. As this Chapter shows, there is a manageable portion of authoritarian politics that is in part shaped by elections. Thus, under certain conditions, dictators and their allies should have a strong incentive to keep holding elections. At the same time, however, there appears to exist unmanageable parts of electoral politics that can generate risks for the regime survival. Scrutinizing the trade-off and the dilemma that dictators and the ruling elites might face will form a crucial building-block in answering questions as to when and why some dictators suddenly declare themselves as president-for-life and stop executive elections and when and why some dictatorships close national legislature and quit further legislative elections.

# 4. INFORMATIVE ELECTIONS IN NONDEMOCRACIES? ELECTIONS AND POST-ELECTORAL REDISTRIBUTION REVISITED

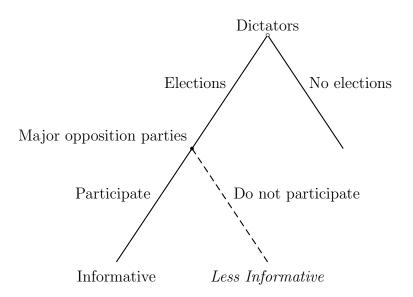
#### 4.1 Introduction

Why do we observe elections in nondemocracies? What motivates dictators to hold elections? Do elections in such settings not lead to democratic transitions? Recent scholarship has reached a general consensus that dictators have limited information about the distribution of support for and potential threats to their regimes. Following this logic, elections play an informational role and are a useful instrument to reveal the geographic distribution of support and opposition. By using information acquired from elections, dictators can strategically redistribute goods to maximize the chances of their survival (Lust-Okar 2008; Gandhi and Lust-Okar 2009). However, is it valid to assume that elections reveal such information exogenously determined in society? The answer, I argue, is that elections generate the information via strategic interaction between the dictator's party, opposition politicians, and voters.

The implicit premise in past research is that elections are *informative* (Blaydes 2011; Cox 2009; Magaloni 2006) and dictators *use* election results to shape post-electoral provision of private benefits. But in the following pages, I argue that the geographic distribution of support and opposition "revealed" by vote returns is *the product* of the strategic interaction between the dictator's party, opposition politicians, and voters with heterogeneous preferences. That is, the empirical association between vote returns and post-electoral provision of particularistic goods in non-democracies reflects strategic calculation by these actors. Moreover, I argue that *not* all elections in nondemocratic settings work the same way in terms of the information

that they provide. Some elections will generate the information that dictators desire and be called *informative* elections while the others will not. One possible factor which distinguishes between *informative* and *less informative* elections is the absence of opposition parties in the electoral contest. As is depicted in Figure 4.1, elections generate information sought by dictators only if most of the major opposition parties participate. In contrast, if the major opposition parties boycott elections, such elections become *less informative*.

Figure 4.1: The Cause of Less Informative Elections in Nondemocracies



Identifying underlying mechanisms that generate *informative* and *less informative* elections provides two theoretical contributions to the comparative politics literature. First, the causal mechanism which links voting and rewarding in nondemocratic settings helps answer the question about targeting post-electoral provision of private

benefits. In this Chapter, I will provide a theoretical explanation about to whom the incumbent party<sup>1</sup> will likely offer particularistic goods. Second, the theory developed in this Chapter enables me to account for both what has been explained and what has been deemed as anomalous in the literature. That is, while informative elections give us an empirical association between votes and the provision of goods in a manner consistent with past research, less informative elections explain instances in which the geographic distribution of support and opposition is not associated with post-electoral provision of particularistic goods in nondemocracies. This statement does not imply that less informative elections are followed by no post-electoral redistribution of goods. Rather, I argue that the incumbent party's decision of offering benefits is not related to voters' preferences as communicated by electoral results.

In the next section I will provide an overview of the information-collection role of nondemocratic elections addressed in the literature and argue that elections in nondemocratic settings are better understood as the information generation process. Also, I emphasize the possibility that elections might not work uniformly in nondemocracies especially when major opposition parties boycott elections. I then summarize theories on distributive politics in old and new democracies which form a building block of my formal analysis. In the third section, I develop a formal model of distributive politics in nondemocratic settings and discuss its implications. One theoretical prediction generated by my model is that when an opposition party competes in elections, the incumbent party is more likely to offer rewards to its core constituencies than weakly opposed voters. The model also predicts that in comparison to the core constituencies and weakly opposed voters, strongly opposed voters are least likely to be the target of goods provision. Moreover, my formal model leads to

<sup>&</sup>lt;sup>1</sup>Throughout this Chapter, terms such as the incumbent party, the ruling party, and the dictator's party are used interchangeably.

the expectation that the incumbent party will not rely on voters' preferences when deciding its target of rewards if the opposition party is absent from the electoral contest. In the fourth section, I test the implications of my theory. I discuss my case selection of Serbia in 1990s, introduce background information about Serbian politics, describe my data, and present results from my empirical tests. The last section concludes.

#### 4.2 Literature Review

## Elections in Nondemocracies as Information Generation Process

Why can elections be a useful instrument for dictators to maintain their rule? In the most abstract sense, the premise is that elections play an informational role (Blaydes 2011; Boix and Svolik 2007; Cox 2009; Magaloni 2006; Rozenas 2010). Elections reveal who might be potential rivals of dictators within and outside the governing group. For example, election outcomes might reveal information about resources available for in-party elites to mobilize and the extent to which out-party elites are popular and willing to challenge the regime. Hence, the information revealed through elections facilitates dictators choosing a strategy to confiscate resources from potential rivals in order to deter future challenges.

An implicit assumption in this information-collection role of elections is that the information revealed through elections is exogenously given. This assumption holds as long as voters expect that elected politicians do not renege on their promise of the provision of goods after elections. If voters anticipate that elected politicians might not follow through on their promises, vote returns will not represent the distribution of support for and opposition to the incumbent party. All these considerations are irrelevant to elections in old or established democracies because electoral accountability is presumably assured. But it would be problematic in new democracies, and

even more so in nondemocracies. I will discuss this point in greater detail below.

Recent research on vote-buying illuminates this point and calls attention to commitment problems. Among others, Stokes (2005) contends that "perverse accountability" is at work in elections in new democracies. The incumbent party's commitment to post-electoral provision of goods is dubious from the voter's perspective. Therefore, in order to induce mutual cooperation between the party and the voter in which the party offers private benefits and the voter votes for the party, both actors commit to a grim trigger strategy. One implication drawn from this body of literature is that the geographic distribution of support and opposition to the incumbent party is not exogenously determined. Instead, in these settings, the generation of information is determined through the strategic interaction between the party and the voters. In sum, we are not able to assume the information-collection role of elections in nondemocracies, but need to scrutinize the mechanism with which the information is generated.

If the information-collection role of elections in nondemocratic settings is dubious, how do we make sense of the empirical association between vote returns and the provision of goods found in earlier research? My answer is to conceptualize elections in nondemocracies as an *information-generation* process, and not an *information-collection* device. For that purpose, building a formal model of elections and distributive politics in nondemocratic settings will shed new light on the working of elections in nondemocracies.

Once we begin with an alternative conceptualization of elections in nondemocratic settings as an *information-generation* process, another question is whether we can think of a uniform strategic interaction between the dictator's party, opposition parties, and the voters. Since choices available to the voters are likely to affect the nature of this interaction, I argue that the competitiveness of elections captured by the presence or absence of opposition parties competing in elections is an important factor.

In many cases, dictators cannot unilaterally decide the level of competitiveness of elections because it is in part the product of a strategic interaction between dictators and opposition politicians. For example, dictators attempt to design and implement electoral systems which disproportionately favor them. Opposition politicians naturally criticize such rules and attempt to negotiate concessions. Also, dictators can try to manipulate vote returns by controlling mass media, intimidating opposition politicians and their supporters, or controlling electoral commissions (Schedler 2002). Under such circumstances, opposition elites often attempt to appeal to the international community, especially international election observers, to increase the fairness of elections. Another option for opposition elites is to boycott elections to discredit the legitimacy of the regime. Regardless of whether dictators prohibit opposition politicians from running in elections by intimidating them or opposition politicians strategically boycott elections to discredit the legitimacy of the regime, the absence of major opposition parties in electoral contests restricts the voters' choice set. If major opposition parties run for seats, voters can vote for the incumbent party, an opposition party, or abstain. However, if the opposition does not compete, the voter's choice would be either to vote for the incumbent party or to abstain. Because of this variation in strategic environment between the dictator's party and the voters, in the following formal analysis, I will examine two different types of strategic interactions and show the variation in the information-generation process of elections in nondemocratic settings contingent on the presence and absence of the opposition parties.

To sum up the argument above, unlike the conventional premise, I argue that elections in nondemocracies are better understood as an information-generation process as opposed to an information-collection device. Moreover, the process by which the information is generated varies depending on the presence or absence of major opposition parties in electoral competition (Figure 4.1). This argument implies that past research has focused on one class of elections in nondemocracies, namely *informative* elections in which these opposition parties compete (Blaydes 2011; Diaz-Cayeros et al. 2003; Magaloni 2006). The following formal analysis shows the possibility of *less informative* elections. And my empirical analysis demonstrates that *less informative* elections lead to little empirical association between vote returns and post-electoral provision of particularistic goods.

#### Redistributive Politics in Old and New Democracies

Theories on party competition and the redistribution of goods first evolved in the literature on balanced-budget redistribution in established democracies. Scholars have identified two distinct types of redistribution strategies that political parties might take: mobilization and persuasion. On one hand, the core voter model expects that incumbent parties allocate more government spending or particularistic goods to the areas or regions where the incumbent finds strong supporters (Cox and McCubbins 1986; Dixit and Londregan 1996). On the other hand, the swing voter model proposes that incumbent parties provide these goods to pivotal or swing voters (Lindbeck and Weibull 1987; Dixit and Londregan 1996). The former scenario is centered on mobilization of incumbent supporters, while the latter is about persuasion of pivotal or swing voters.

More recently, in the context of new democracies, both theories have been further explored in the field of vote-buying. A key theoretical innovation in this body of literature is that it explicitly takes account of commitment problems. That is, theoretical models of vote-buying deal with the possibility that the parties might renege on their offer of particularistic benefits once they win elections. Also, these models allow for the possibility that voters can renege and vote for their preferred parties, ignoring benefits that they received. Stokes (2005) first develops a formal model that describes these commitment problems and concludes that weakly opposed voters—voters who prefer an opposition party to an incumbent party and whose policy preference is close to the midpoint of the policy positions of these two parties—will be the primary target of redistribution of particularistic benefits. However, Nichter (2008) contends that the target of redistribution is not moderate opposition supporters, but potential incumbent supporters—those voters that have a policy preference for the incumbent party, but abstained in the last election. Theoretical propositions generated by the two different models per se are not mutually exclusive because the authors posit different utilities for defecting or not voting for the incumbent party. As a result, when the authors test their propositions against the same survey data from Argentina, their theories are successful in explicating the reasons why about 24.4% of rewarded voters are weakly opposed voters (Stokes 2005) and why 64.5% of rewarded voters are *incumbent supporters* (Nichter 2008).

In this Chapter, I have three objectives to develop our understanding of party competition and redistribution of goods in nondemocratic settings. First, by setting Stokes' (2005) and Nichter's (2008) models as a point of departure, I build a formal model identifying conditions under which the dictator's party opts to employ a mobilization or persuasion strategy. Second, my model is distinct from previous ones in that it explicitly represents electoral competition in nondemocratic settings. Third, as an extension of my model, I provide a theoretical explanation of why less informative elections result in the absence of a relationship between vote returns and redistribution of particularistic goods.

### 4.3 Theory

This section sets Stokes' (2005) and Nichter's (2008) models as a point of departure. By doing so, I will explore the causal mechanism by which the dictator targets some types of voters for the provision of particularistic goods. One fundamental change from the previous models is that voters have three choices in my model: voting for the dictator, voting for the opposition party, and abstaining.<sup>2</sup> This modification allows us to examine all voters in society with respect to their heterogeneous policy preferences. At the same time, it enables us to see the voter's trade-off between voting for the dictator and abstaining. The resulting model identifies different conditions under which the dictator has an incentive to provide particularistic goods to loyal voters, weakly opposed voters, and strongly opposed voters. While some of the findings are consistent with the conclusions of Stokes (2005) and Nichter (2008), the model presented here also shows the condition under which the dictator has an incentive to provide a private benefit to strongly opposed voters.

### Assumptions

Following Stokes (2005, p.319), the model assumes a one-dimensional policy space that maps policy positions of the dictator  $(x_1)$ , the opposition party  $(x_2)$ , and the voter  $(x_i)$  on the programmatic ground. Without the loss of generality, I assume that  $x_1 < x_2$ .  $x^* \equiv (x_1 + x_2)/2$  denotes the midpoint of the policy positions between the dictator and the opposition party. If a voter i casts her ballot, her utility is given by

$$u_i = -\frac{1}{2}(x_i - v_i)^2 + b_i - c_i$$

<sup>&</sup>lt;sup>2</sup>In Stokes (2005), a voter can vote either for the incumbent party or the opposition party. In Nichter (2008), a voter can either vote for the incumbent party or abstain. Note that their models are formed to explain vote-buying in new democracies, and not in nondemocracies.

where  $v_i = \{x_1, x_2\}$ . That is,  $v_i$  represents her vote for either the incumbent party or the opposition party.  $b_i = \{0, b\}$  represents the value to the voter of the reward provided by the incumbent party in exchange for votes, relative to the value of voting according to the voter's preferences. Consistent with Stokes and Nichter, the model assumes a constant and positive b across all voters (b > 0).  $c \ge 0$  is an additional parameter proposed by Nichter (2008, 23) that represents a constant cost of voting across all voters. c can take the value of 0 so that it relaxes Stokes' implicit assumption that voters do not incur any cost of voting. However, in the following analysis, I assume c > 0 in order to distinguish the utility between voting and abstaining.

The model considers an additional case in which a voter abstains. Her utility from abstention is given by

$$u_i = -\frac{1}{2}(x_i - x_1)^2 + b_i.$$

Reflecting the context of nondemocracies, it can be safe to assume that the decision of abstention, from the voter's perspective, preserves status quo (i.e. the survival of the authoritarian government). Therefore, the voter expects to receive programmatic benefit from the status quo policy  $x_1$  relative to her own policy position,  $-\frac{1}{2}(x_i-x_1)^2$ , if she abstains.

The definition of the utility from abstention is different from Nichter's one in two important ways, but is not necessarily mutually exclusive.<sup>3</sup> First, the objective of the present model is to describe the strategic interaction between the dictator and all voters with heterogeneous policy preferences in nondemocracies, while Nichter focuses on the interaction between the incumbent and nonvoting supporters in new

 $<sup>^3</sup>$ For Nichter (2008, 24), the utility of a voter who abstains and receives a private benefit is b while the utility of a voter who abstains and does not receives a private benefit is 0.

democracies. Second, the interpretation of the term,  $-\frac{1}{2}(x_i - x_1)$ , is different. In the present model this term represents a programmatic benefit of the voter from the status quo policy  $x_1$ , whereas Nichter considers it as "an ideological cost of voting... which is greater for individuals whose preferences diverge more from their preferred party's platform" (2008, 23).

The dictator obtains v > 0 if she receives a vote and expends b when it pays a reward to a voter. I assume v > b since otherwise buying a vote is not rational behavior for the dictator. Table 4.1 shows the normal form of the stage game. Note that, since the opposition party is present and the voter has an option to vote for it, this game represents *competitive*, and therefore *informative*, elections in nondemocracies.

Table 4.1: Normal Form of a Game between the Dictator and a Voter in Informative Elections

	Dictator			
Voter	Reward	No Reward		
Vote for the Dictator	$-\frac{1}{2}(x_i-x_1)^2+b-c, v-b$	$-\frac{1}{2}(x_i-x_1)^2-c, v$		
Vote for the Opposition	$-\frac{1}{2}(x_i - x_2)^2 + b - c, -b$	$-\frac{1}{2}(x_i - x_2)^2 - c, 0$		
Abstain	$-\frac{1}{2}(x_i - x_1)^2 + b, -b$	$-\frac{1}{2}(x_i-x_1)^2$ , 0		

Payoffs in each cell are for the voter and the dictator, respectively.

In contrast, Table 4.2 depicts non-competitive and less informative elections in which the opposition party is absent in the electoral contest. In this case the voter's choice is constrained to two options: voting for the dictator or abstaining.

The model also adopts Stokes' and Nichter's monitoring assumptions. The dictator monitors, even imperfectly, the behavior of the voter (Stokes 2005, 320). However,

Table 4.2: Normal Form of a Game between the Dictator and a Voter in Less Informative Elections

	Dictator				
Voter	Reward	No Reward			
Vote for the Dictator	$-\frac{1}{2}(x_i - x_1)^2 + b - c, v - b$	$-\frac{1}{2}(x_i-x_1)^2-c, v$			
Abstain	$-\frac{1}{2}(x_i-x_1)^2+b, -b$	$-\frac{1}{2}(x_i-x_1)^2$ , 0			

the probability of monitoring would not be constant across voters (Nichter 2008, 20–21). The dictator monitors the action of opposition supporters with a probability p while she monitors the action of her supporters with a probability q. Consistent with Nichter (2008, 24), I assume q > p. The intuition behind this assumption is that the dictator has to monitor both whether opposition supporters vote and whether they choose her despite their policy preference, but the dictator only needs to monitor whether loyal voters vote. Hence, inequality q > p depicts that monitoring turnout is easier than monitoring turnout and vote decisions.

Note that the different monitoring probabilities (p and q) between the dictator's supporters and opposition supporters is only a valid assumptions in *competitive* elections. When elections are *not competitive*, the voter's choice is restricted to voting for the dictator and abstaining. In such a case, rewarding a voter is nothing more than giving her an incentive to come to the polling station to cast her ballot. Therefore, in this context, monitoring voters is equivalent to what Nichter calls *turnout buying*. Consequently, in *non-competitive* elections, I assume a constant monitoring probability q for *all* voters in society.

Finally, the model follows an assumption of an infinitely repeated game and the dictator commits to a grim trigger strategy. That is, the dictator will give rewards to a voter until she is found to renege, after which she will never offer reward. Also, as

Table 4.3: Types of Voters in Competitive/Informative Elections

Types of Voters	Preference*	Policy Position
Strongly Opposed Voters	$u_i(V_O) > u_i(A) > u_i(V_D)$	$x^* + c/(x_2 - x_1) < x_i$
Weakly Opposed Voters	$u_i(A) > u_i(V_O) > u_i(V_D)$	$x^* < x_i < x^* + c/(x_2 - x_1)$
Loyal Voters	$u_i(A) > u_i(V_D) > u_i(V_O)$	$x_i < x^*$

<sup>\*</sup>  $V_D$ : Vote for the Dictator.  $V_O$ : Vote for the opposition. A: Abstain.

is explicitly stated by Nichter (2008, 24), the model assumes one-sided uncertainty, and consequently "no conditions are analyzed in which [the dictator] chooses not to cooperate." To solve this infinitely-repeated game, I assume a constant discount factor  $\beta \in [0, 1]$  for both the dictator and the voter.

# Analysis

# Competitive Elections in Nondemocratic Settings

I begin with a one-shot game of competitive elections in which a voter's action is perfectly observed by the dictator. The payoffs from this game are depicted in Table 4.1. Since abstaining always gives a larger payoff than voting for the dictator for all voters because of the cost of voting, we are left to examine three different preference orders of action of voters. Table 4.3 lists the three different types of voter. The first group of voters prefers voting for the opposition party  $(V_O)$  to abstaining (A) to voting for the dictator  $(V_D)$ . The second group prefers abstaining to voting for the opposition to voting for the dictator. And the last group prefers abstaining to voting for the dictator to voting for the opposition.

A voter i receives a larger payoff by voting for the opposition party than abstain-

ing if  $u_i(V_O) > u_i(A)$ . Note that  $b = \{0, b\}$ .

$$-\frac{1}{2}(x_i - x_2)^2 + b - c > -\frac{1}{2}(x_i - x_1)^2 + b,$$

or

$$\frac{1}{2}\{(x_i - x_1)^2 - (x_i - x_2)^2\} = (x_1 - x_2)(x^* - x_i) > c$$

or

$$x^* + \frac{c}{x_2 - x_1} < x_i. ag{1}$$

I call voters whose policy preference is found in this range (1) strongly opposed voters.

Second, by solving inequalities  $u_i(A) > u_i(V_O)$  and  $u_i(V_O) > u_i(V_D)$  we find policy preference of weakly opposed voters. Their policy position falls into the range

$$x^* < x_i < x^* + \frac{c}{x_2 - x_1}. (2)$$

Lastly, inequality  $u_i(V_D) > u_i(V_O)$  holds if

$$x_i < x^*. (3)$$

This indicates the range of policy preference of *loyal voters*.

The three types of voters identified above yield a Nash equilibrium in a one-shot game (Table 4.1). The action profile which constitutes this equilibrium is {Vote for the Opposition, No Reward} between a strongly opposed voter and the dictator. In the case of a weakly opposed voter and a loyal voter, the action profile {Abstain,

No Reward generates a Nash equilibrium. These profiles are helpful to identify the voter's optimal strategy of deviation from mutual cooperation—the profile {Vote for the Dictator, Reward}—in the following analysis of infinitely-repeated games.

# The Case of Strongly Opposed Voters

Now I turn to solve the game of an infinite sequence of elections. As is assumed above, the dictator commits to a grim trigger strategy and observes deviation from voting for her with a probability p if a voter is a strongly opposed voter. Optimal deviation strategy of the strongly opposed voter is to vote for the opposition party. Hence, the condition for a subgame-perfect equilibrium (SPE from here on) in which the strongly opposed voter votes for the dictator and receives the reward, supported by a grim trigger strategy is

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - p)EU_{i}(V_{O}, V_{D}, V_{D}, ...) + p \cdot EU_{i}(V_{O}, V_{O}, V_{O}, ...)$$

$$\frac{1}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{1})^{2} + b - c \right] > (1 - p) \left\{ \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{1})^{2} + b - c \right] \right\}$$

$$+ p \left\{ \frac{1}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] - \frac{\beta}{1 - \beta} b \right\}. \tag{4}$$

Inequality (4) simplifies to

$$x_i < x^* + \left(\frac{p\beta}{1-\beta+p\beta}\right)\left(\frac{b}{x_2-x_1}\right).$$

Therefore, the group of strongly opposed voters who will sell their votes in exchange

for particularistic goods has policy preference,  $x_i$ , which lies in the range:

$$x^* + \frac{c}{x_2 - x_1} < x_i < x^* + \left(\frac{p\beta}{1 - \beta + p\beta}\right) \left(\frac{b}{x_2 - x_1}\right). \tag{5}$$

Inequality (5) holds if

$$x^* + \frac{c}{x_2 - x_1} < x^* + \left(\frac{p\beta}{1 - \beta + p\beta}\right) \left(\frac{b}{x_2 - x_1}\right),$$

or

$$b > \frac{1 - \beta + p\beta}{p\beta} \cdot c = \lambda c$$

where  $\lambda = (1 - \beta + p\beta)/(p\beta)$ . Hence the condition under which mutual cooperation emerges between the strongly opposed voter and the dictator is

$$x^* + \frac{c}{x_2 - x_1} < x_i < x^* + \left(\frac{p\beta}{1 - \beta + p\beta}\right) \left(\frac{b}{x_2 - x_1}\right) \text{ where } b > \lambda c.$$
 (6)

# The Case of Weakly Opposed Voters

One difference from the case of strongly opposed voters is that the optimal deviation for the weakly opposed voter is to abstain. Note that we can ignore the term,  $-\frac{1}{2}(x_i - x_1)^2$ , to derive the condition for a SPE since this is constant across all the strategy pairs: {Vote for the Dictator, Reward}, {Abstain, Reward}, and {Abstain, No Reward}. The condition for a SPE in which the weakly opposed voter votes for the dictator and receives the reward is

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - p)EU_{i}(A, V_{D}, V_{D}, ...) + p \cdot EU_{i}(A, A, A, ...)$$

$$\frac{1}{1 - \beta}(b - c) > (1 - p)\left\{b + \frac{\beta}{1 - \beta}(b - c)\right\} + p \cdot b.$$
(7)

Inequality (7) simplifies to

$$b > \frac{1 - \beta + p\beta}{p\beta} \cdot c = \lambda c. \tag{8}$$

In sum, the condition under which mutual cooperation emerges between the weakly opposed supporters and the dictator is

$$x^* < x_i < x^* + \frac{c}{x_2 - x_1} \text{ where } b > \lambda c.$$
 (9)

# The Case of Loyal Voters

Remember that the dictator's monitoring probability is not identical between loyal voters and opposition supporters. Although loyal voters follow the same optimal deviation strategy with the weakly opposed voters, this assumption yields the condition for a SPE in which the loyal voter votes for the dictator and receives the reward:

$$EU_i(V_D, V_D, V_D, ...) > (1 - q)EU_i(A, V_D, V_D, ...) + q \cdot EU_i(A, A, A, ...),$$

and we obtain

$$b > \frac{1 - \beta + q\beta}{q\beta} \cdot c = \phi c \tag{10}$$

where  $\phi = (1-\beta+q\beta)/(q\beta)$ . The condition under which mutual cooperation happens between the loyal voter and the dictator is

$$x_i < x^* \text{ where } b > \phi c.$$
 (11)

Non-Competitive Elections in Nondemocratic Settings

In the case of non-competitive elections (Table 4.2), the strategic interaction between a voter and the dictator produces a different set of payoffs. First, the fact that voters have no option of voting for the opposition party because it is absent from the electoral contest renders voters' policy positions irrelevant to their actions.<sup>4</sup> In other words, there are no distinction across the three types of voters that are meaningful in the case of non-competitive elections. Second, the one-shot game depicted in Table 4.2 results in a Prisoner's dilemma. That is, we find a single Nash equilibrium in which the action profile is {Abstain, No Reward} for all types of voters. Remember that I assume a constant q as a probability of monitoring turnout, the condition for a SPE in which a voter votes for the dictator and receives the reward is

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - q)EU_{i}(A, V_{D}, V_{D}, ...) + q \cdot EU_{i}(A, A, A, ...)$$

$$\frac{1}{1 - \beta}(b - c) > (1 - q)\left\{b + \frac{\beta}{1 - \beta}(b - c)\right\} + q \cdot b.$$
(12)

Equation (12) simplifies to

$$b > \frac{1 - \beta + q\beta}{q\beta} \cdot c = \phi c \tag{13}$$

Table 4.4 summarizes all the conditions for the SPEs discussed in *competitive* elections and *non-competitive* elections. In the next section, I discuss the implications of these findings.

<sup>&</sup>lt;sup>4</sup>That is, we can suppress the term,  $-\frac{1}{2}(x_i-x_1)^2$ , in all strategy pairs in Table 4.2.

Table 4.4: Conditions for SPEs

	Policy Position	$Constraint^{\dagger}$
Competitive Elections		
Strongly Opposed Voters	$x^* + \frac{c}{x_2 - x_1} < x_i < x^* + \frac{p\beta}{1 - \beta + p\beta} \cdot \frac{b}{x_2 - x_1}$	$b > \lambda c$
Weakly Opposed Voters	$x^* < x_i < x^* + \frac{c}{x_2 - x_1}$	$b > \lambda c$
Loyal Voters	$x_i < x^*$	$b > \phi c$
$Non ext{-}Competitive\ Elections$		
All Voters	_	$b > \phi c$
$^{\dagger} \lambda = (1 - \beta + p\beta)/(p\beta). \phi =$	$=(1-\beta+q\beta)/(q\beta). \ q>p$	

# Empirical Implications

By examining the conditions which support the SPEs identified above, in this section I discuss implications of the theoretical model. The model provides numerous implications, but I will focus on three comparative statics following Stokes (2005, 321) and Nichter (2008, 25).

- 1. Targeting in Competitive Elections. All types of voters—loyal voters, weakly opposed voters, and strongly opposed voters—are found to be possible recipients of rewards from the incumbent party. However, the findings also imply that the possibility of receiving particularistic goods varies across these types. This variation stems from the different possibilities of monitoring.
- 1.1. First, when we compare weakly opposed voters and strongly opposed voters, since  $\frac{p\beta}{1-\beta+p\beta}$  increases in p (Figure 4.2), the range of targetable strongly opposed voters  $(x^*+c/(x_2-x_1) < x_i < x^*+[p\beta/(1-\beta+p\beta][b/(x_2-x_1)])$  shrinks as p gets smaller ceteris paribus. Note that the range at which weakly opposed voters are located  $(x^* < x_i < x^*+c/(x_2-x_1))$  remains constant even if p varies. This implies that, with a small p or monitoring ability, the incumbent party

is more likely to target weakly opposed voters than strongly opposed voters.<sup>5</sup> Therefore, Stokes' assertion (2005, 321) that weakly opposed voters can be the target of private rewards is maintained as long as p is sufficiently small.

- 1.2. Second, since  $\lambda$  and  $\phi$  are decreasing functions of p and q, respectively (Figure 4.3), and q > p, loyal voters are more likely to be the target than opposition supporters. This proposition is partly consistent with Nichter's finding that the incumbent party is "most effective when targeting unmobilized strong supporters" (2008, 25). Note that the present model analyzes both mobilized and unmobilized loyal voters while Nichter focuses solely on unmobilized loyal voters.
  - 2. Targeting in Non-Competitive Elections. In contrast, the model implies that there is no difference in targeting across the types of voters in non-competitive elections. First, voters' policy positions are no longer a relevant factor by which the dictator makes decisions of rewarding. Second, since monitoring possibility q is constant across all types of voters, it does not differentiate voters. Hence, the incumbent party might offer rewards to some voters, knowing individual policy positions. However, the decision does not depend on their policy positions, ceteris paribus.

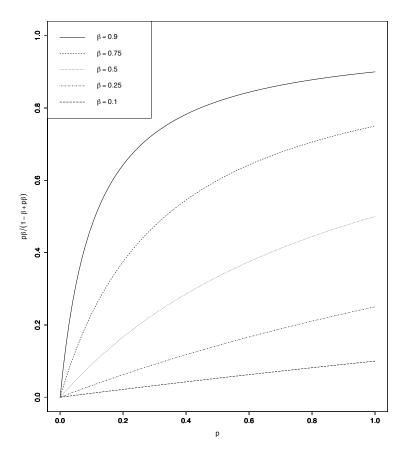
$$\left[x^* + \frac{c}{x_2 - x_1}\right] - x^* > \left[x^* + \frac{p\beta}{1 - \beta + p\beta} \cdot \frac{b}{x_2 - x_1}\right] - \left[x^* + \frac{c}{x_2 - x_1}\right]$$
$$\frac{c}{x_2 - x_1} > \frac{p\beta}{1 - \beta + p\beta} \cdot \frac{b}{x_2 - x_1} - \frac{c}{x_2 - x_1}.$$

Solving for p, we obtain

$$p < \frac{(1-\beta)2c}{\beta(b-2c)}$$
 where  $b > 2c$ .

<sup>&</sup>lt;sup>5</sup>More specifically, the condition under which a weakly opposed voter is more likely to be targeted than a strongly opposed voters must satisfy inequality:





3. The Existence of Less-Informative Elections. If elections are competitive, the resulting vote share of the incumbent party and the opposition party is the product of strategic interaction between the incumbent party and voters. That is, these elections generate the information about the geographic distribution of support and opposition and are deemed informative. In contrast, if elections are not competitive, the incumbent party has no incentive to differentiate voters with respect to their policy preferences. Voters' choice set is restricted to voting for the dictator or abstaining. The resulting distribution of support and opposition deviates from the one that can be obtained if elections

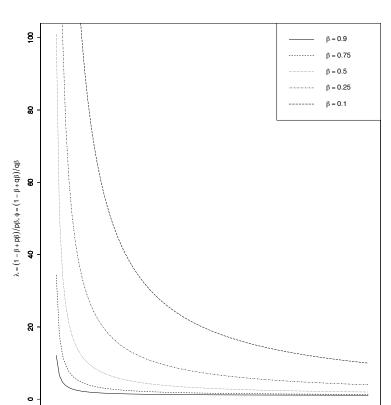


Figure 4.3: Monitoring Ability and Targeting Loyal Voters over Opposition Voters

are competitive, implying the existence of less informative elections.

0.4

p, q

0.6

0.8

1.0

0.0

0.2

- 4. **Monitoring.** In both competitive and non-competitive elections, since  $\lambda$  and  $\phi$  decrease in p and q, respectively (Figure 4.3), the effectiveness of targeting rewards increases as the ability of the dictator to monitor increases. This proposition is consistent with Stokes (2005, 321) and Nichter (2008, 25).
- 5. **Reward Value.** In both *competitive* and *non-competitive* elections, as the value of the private reward, b, increases, the possibility of targeting rewards increases. This proposition is in accordance with Stokes (2005, 321) and Nichter

(2008, 25).

### *Hypotheses*

The implications drawn from my model proposes empirically-testable hypotheses about vote returns and post-electoral provision of particularistic goods in nondemocracies. I focus on hypotheses about targeting in elections in nondemocratic settings.<sup>6</sup> First, since loyal voters are more likely to be the target of the provision of particularistic goods than opposition supporters:

 $H_1$ : If major opposition parties participate in electoral contest, dictators allocate more particularistic goods to incumbent strongholds.

Second, since weakly opposed voters are more likely to be the target of the provision of particularistic goods if the ability of monitoring them decreases:

 $H_2$ : If major opposition parties participate in electoral contest and the ability of monitoring opposition supporters is large, dictators allocate more particularistic goods to opposition strongholds.

Third, since the absence of the opposition party leads to voters' heterogeneous policy positions as an irrelevant factor of the provision of particularistic goods:

 $H_3$ : If major opposition parties are absent from the election, there will be no empirical association between vote returns and the provision of particularistic goods.

In the next section, I will test these hypotheses against subnational-level data obtained from Serbia in the 1990s.

<sup>&</sup>lt;sup>6</sup>Although one of the empirical implications discussed above is related to the monitoring ability, I did not test it in the next section due to the lack of data that measure this concept. However, it is worth scrutinizing whether the variation in invalid votes, for instance, represents the monitoring ability.

## 4.4 Research Design and Data

The last two decades have witnessed a growing number of "competitive" elections in nondemocracies around the world (Howard and Roessler 2006; Magaloni 2010; Schedler 2006). The experiences of Serbia between the collapse of communist rule in 1990 and the transition to democracy in 2000 provide the ideal setting for testing my hypotheses about both *informative* and *less informative* elections and distributive politics in nondemocratic settings. Serbia in the 1990's is also an ideal case because of data-availability given that collecting information about nondemocratic regimes is often quite challenging (Tullock 1987, 31).

In this Chapter, I analyzed time-series cross-section data on vote returns in non-democratic elections and an indicator of post-electoral provision of particularistic goods in Serbia from 1992 to 1999. The unit of analysis is the municipality or opština. Unlike past research which examines election results of one particular year (Diaz-Cayeros et al. 2003; Magaloni 2006), the data I employed cover three consecutive elections for the national legislature. Introducing time-varying election results gives my empirical findings more external validity. Moreover, in one election out of the three covered in this study, the major opposition parties boycotted the elections. Therefore, we can test the hypothesis  $(H_3)$  about the empirical association between vote returns and goods provision in the absence of opposition party participation.

The introduction of multiparty electoral contests in 1990 was marked as the commencement of elections in Serbia.<sup>7</sup> Slobodan Milošević—the leader of Serbian Socialist Party (SPS)—attempted to maximize the vote share by taking initiative to design electoral institutions in favor of his party. Moreover, vote fraud (Goati 2003, 207) and control of the media, local government organizations, and the police

<sup>&</sup>lt;sup>7</sup>I excluded the 1990 election from the following empirical analysis since the vote return data were not available at the municipality level.

Table 4.5: Distribution of Seats and Election Boycott in Serbia

	1990	1992	1993	1997
	December	December	December	September
Election Boycott	No	No	No	Yes
1) Government Parties*	SPS (194)	SPS (101) SRS (73)	SPS (123) ND (2)	SPS (110) SRS (82)
2) Major Oppositions*	SPO DS DZVM (34 in total)	DEPOS DZVM DS (65) (65 in total)	SRS, <u>DEPOS</u> <u>DS</u> , <u>DZVM</u> <u>DSS</u> (123 in total)	SPO (45)
3) Minor Oppositions*	10 parties (22)	4 parties (11)	1 party (2)	5 parties (14)
Total seats	250	250	250	250
Turnout (%)	$71.49\ (76.75)$	69.72	61.34	57.40
Valid votes (%)	$95.26 \ (95.85)$	93.95	95.93	95.97
N of parties	n.a.	104	84	89
Electoral System	$\begin{array}{c} \mathrm{SMD} \\ \mathrm{(2\ rounds)} \end{array}$	List PR (Closed)	List PR (Closed)	List PR (Closed)
N of districts	250	9	9	29

<sup>\*</sup> The number of seats in parentheses. DEPOS, DS, DZVM, and DSS boycotted the 1997 election. SPS: Socialist Party of Serbia, SRS: Serbian Radical Party, DEPOS: Democratic Movement of Serbia, DZVM: Democratic Alliance of Vojvodina Hungarians, DS: Democratic party, DSS: Democratic Party of Serbia, SPO: Serbian Renewal Movement, ND: New Democracy.

(Thomas 1999, 131) were reported. Serbia in this period is therefore deemed a typical example of *electoral authoritarianism* (Thompson and Kuntz 2004). Yet, the SPS was unable to become a single majority party. For this reason, Milošević formed coalition governments throughout the 1990s. Table 4.5 shows the changes in the seat share from the 1990, 1992, 1993, and 1997 legislative elections.

The 1997 election was distinct from the previous elections in that the major opposition parties boycotted. The members of the DEPOS coalition, Democratic Party (DS) and Democratic Party of Serbia (DSS) decided to boycott<sup>8</sup> while Serbian Radical Party (SRS) and the Serbian Renewal Movement (SPO), which was a member

 $<sup>^8\</sup>mathrm{DEPOS}$  dissolved after 1993 and the former members formed Zajedno (Together) coalition in 1996 which ran the local election of the year.

of DEPOS in the 1993 election, competed in the election.<sup>9</sup>

According to my proposed theoretical framework, the first three elections are supposed to be *informative*, and therefore are expected to show an empirical association between vote returns and the provision of particularistic goods. However, since the major opposition parties boycotted the 1997 election, this election provides an instance of a *less informative* election. Consequently, vote returns are not expected to be related to the provision of goods.

In order to test the hypotheses discussed above, I analyzed time-series cross-section data of the Republic of Serbia from 1992 to 1999. The unit of analysis is the municipality (opština). All data used in the analysis were taken from official records of election results of the national legislature (narodna skupština) and annual report of municipalities collected by Statistical Office of Serbia (Republički Zavod za Statistiku Srbije).

The type of goods distributed after elections can take different forms. In past research, scholars focus on, for example, employment in local government (Alesina et al. 2000), resource transfer to local governments (Ansolabehere and Snyder 2003), revenue sharing funds allocated to municipalities (Diaz-Cayeros et al. 2003), expenditures in social spending (Magaloni 2006), and disbursement of infrastructure development resources (Blaydes 2011). In this Chapter, I used an indicator of job allocation in the public sector as the dependent variable, which was measured by the number of employees in the public administration. This approach is valid because post-electoral provision of particularistic goods can take a form of providing jobs by dictators. Gordy (1999, 58) notes:

<sup>&</sup>lt;sup>9</sup>Although there were attempts of election boycotts by some opposition parties in 1990 and 1993 to blame unfair conduct of elections, they finally decided to participate in elections since they believed that the boycott tactic was effective only if it was a unanimous action by opposition parties (Thomas 1999, 73, 183). That is, opposition parties had failed to solve the collective action problem.

...in a state where political party membership has economic consequences, the ruling party does in fact rule. Hence throughout 1995 and 1996, in a period in which SPS's public support continued to decline, its membership increased, and this increase was publicized in ceremonies in which new members were admitted to the party, reports of which appeared in regime-controlled newspapers and on the state television news program. The secret? The leader of a local SPS branch explained, "[W]hat do you expect when SPS has something to offer?" An opposition leader in the same area explained it differently by saying that his party counsels its supporters to join SPS "if a job is in question" and hopes that in the next election the ruling party will have "fewer votes than member." 10

According to my theory, the change in job allocation in the public sector is the function of election results in Serbia. I used the number of employees as the dependent variable while including the dependent variable lagged by one year as an independent variable. The data were obtained from *Municipalities in the Republic of Serbia (Opštine u Republici Srbiji)*.<sup>11</sup>

In order to test the hypotheses developed above, I constructed indices of party control by using official records of vote returns at the municipality level (Republički Zavod za Statistiku Srbije 1993, 1994, 1997). First, I created an index which represents the strength of government parties. For each municipality, I calculated the sum of votes received by government parties and divided it by the number of registered voters. Similarly, to estimate the effect of the strength of major opposition parties, I summed up the number of votes obtained by the major opposition parties defined

 $<sup>^{10}</sup>$ Italic added by the author. The comments of local politicians are cited from Vreme no. 275, January 1996, p.11.

 $<sup>^{11}</sup>$ The original name of the variable is  $dru\check{s}tvenopoliti\check{c}ke$  zajednice i organizacije reported in the section of zaposleni u  $dru\check{s}tvenom$  sektoru po delatnostima.

above and divided it by the number of registered voters. The resulting variable represents the party control of the major opposition parties. Note that, since there are minor opposition parties in the legislature as well as parties which could not obtain seats, these two indicators of party control are not perfectly collinear. Consistent with other models of budgetary behavior (Stasavage 2005; Whitten and Williams 2010), all independent variables were lagged by one year.

Election boycotts happened only in the 1997 election in my sample. The 1993 election record shows that all major opposition parties such as DEPOS, DS, and DSS ran in all municipalities. Therefore, I consider that the effect of election boycott uniformly manifests in the years after 1997. I created a dummy variable which takes the value of "1" in the years between 1997 and 1999. It takes the value of "0" otherwise. To test the hypothesis that *less informative* elections lead to no empirical association between vote returns and goods provision, I constructed a series of interaction terms between this dummy variable of election boycott and the indicators of party control.

I included five control variables in the empirical analysis. The first variable is the percent change in the income per capita and the second is the percent change in the number of unemployed (of both public and private sectors) in the municipality. Since the change in income per capita and the change in the number of the unemployed during a year might affect the change in the public sector employment, I controlled for the impact of both economic factors. The third control variable is population density. A higher population density would represent the level of urbanization across municipalities and a more urbanized municipality would need more local public servants. I constructed this measure by dividing population of each municipality by the land size (km²). All data were obtained from *Opštine u Republici Srbiji (Municipalities in the Republic of Serbia)*.

Another two control variables are dummy variables which indicate if a municipality belongs to an autonomous province of Serbia, that is, either Vojvodina or Kosovo. These dummy variables were included in the analyses in order to control for unobserved factors that are unique to each province. On the one hand, Vojvodina is located in the northern part of Serbia where Hungarian minorities reside. Those Hungarian minorities formed minority parties (including DZVM) and were consistently in opposition to the authoritarian governments in Serbia. On the other hand, Kosovo is found in south and more than 90% of population are ethnic Albanians. The majority of those Albanian citizens consistently boycotted elections in part because they attempted to achieve independence of Kosovo from Serbia. In Serbia during 1990s, out of 190 municipalities, 45 municipalities belonged to the Vojvodina autonomous province and 30 municipalities were found in the Kosovo autonomous province.

### 4.5 Findings/Results

In this Chapter I applied OLS regressions with panel-corrected standard errors and a lagged dependent variable. First, I included all independent variables and control variables except population density (Model 1). Since population density had missing values in some municipalities, I ran another model which includes this variable (Model 2). The purpose of this step was to see if the parameter estimates are sensitive to the listwise deletion. Model 1 and Model 2 assumed common AR1 process across panels. Second, in Model 3 and Model 4 I tested the same empirical models from Model 1 and Model 2 with an alternative assumption of error process, respectively. I assumed panel-specific AR1 process in Model 3 and Model 4. The results were not sensitive to this alternative model specification.

Table 4.6 shows parameter estimates of all independent variables and interaction

Table 4.6: Post-Electoral Provision of Particularistic Goods in Serbia, 1992-1999

OLS with Panel Corrected Standard Errors Hypothesis<sup>1)</sup> Independent Variable Model 1 Model 2 Model 3 Model 4 0.593\*\*\* 0.523\*\*\* Incumbent Strength  $H_1(+)$ 0.345\*\* 0.298\*\* (0.156)(0.131)(0.178)(0.169)0.581\*\*\* 0.731\*\*\*0.711\*\*\* $H_2(+)$  $0.615^{***}$ Opposition Strength (0.204)(0.185)(0.243)(0.234)62.493\*\*\* 70.790\*\*\* 72.799\*\*\* 64.076\*\* Election Boycott (25.709)(22.275)(25.897)(23.920)-0.490\* -0.476\*-0.633\*\* -0.661\*\* Incumbent Strength × Election Boycott (0.294)(0.268)(0.292)(0.285)Opposition Strength -0.655\*\* -0.620\*\* -0.717\*\* -0.673\* × Election Boycott (0.312)(0.302)(0.365)(0.357)Income per capita (percent change) -0.012-0.016-0.288-0.313(0.251)(0.251)(0.240)(0.236)The Number of the Unemployed -1.662-2.146-2.510-3.710(percent change) (3.776)(3.548)(3.494)(3.343)Population Density -0.002-0.002\*(0.002)(0.001)-8.599\*\* -9.431\*\*\* -8.756\*\* -10.082\*\*\* Vojvodina (3.991)(3.560)(4.017)(3.550)Kosovo 7.698 7.3365.360 5.352(7.900)(7.073)(5.669)(4.784)0.999\*\*\*1.000\*\*\* 1.005\*\*\* 1.001\*\*\* Lagged Dependent Variable (0.010)(0.011)(0.007)(0.007)-41.506\*\* -36.592\*\* -57.709\*\*\* -50.931\*\*\* Constant (18.359)(16.479)(14.797)(19.162)Assumptions on error process AR1Panel Specific AR1 1206 1131 1206 1131 N of municipalities 189 178 189 178 Wald  $\chi^2$ 30.251846.09 26.2988.65 Prob.  $> \chi^2$ 0.000 0.000 0.000 0.000

Dependent variable is the number of employee in the public administration.

Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>1)</sup> Expected signs of the coefficients are in parentheses.

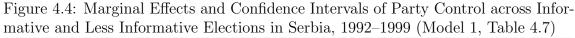
Table 4.7: Marginal Effects of Party Control across Informative and Less Informative Elections in Serbia, 1992–1999

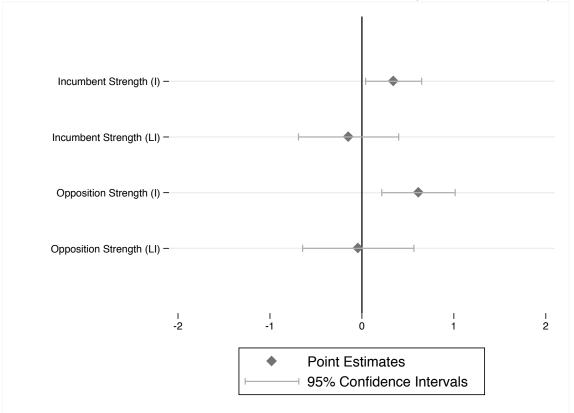
	$Hypothesis^{1)}$	Model 1	Model 2	Model 3	Model 4
Informative Elections					
Incumbent Strength	$H_1(+)$	.345**	.298**	.593***	.523***
		(.156)	(.131)	(.178)	(.169)
Opposition Strength	$H_2(+)$	.615***	.581***	.731***	.711***
		(.204)	(.185)	(.243)	(.234)
Less Informative Elections					
Incumbent Strength	$H_3(\beta=0)$	145	178	040	138
	, ,	(.488)	(.367)	(.853)	(.531)
Opposition Strength	$H_3(\beta=0)$	040 (.861)	039 (.868)	.015 (.954)	.038 (.888)

<sup>1)</sup> Expected signs of the coefficients are in parentheses.

terms. Overall, the results are not sensitive to a possible sampling bias. In order to facilitate the comparison of the effect of key independent variables between informative elections and less informative elections, Table 4.7 reports the estimated effects of these variables. For less informative elections, I calculated the marginal effect of each independent variable and standard error. First, Table 4.7 (upper panel) provides support for the mobilization of core voters  $(H_1)$ . Also the sign of the coefficient for opposition stronghold is positive and statistically significant. This finding is consistent with  $H_2$ . Although we do not have a direct measure of the ability to monitor opposition supporters in Serbia, the findings suggest that the ability to monitor strongly opposed voters was not that small, and therefore SPS had incentive to target these voters. Second, once the election boycott occurred, however, vote returns and job allocation are not supposed to be related  $(H_3)$ . Table 4.7 (lower panel) shows the marginal effect of party control variables in the absence of the major opposition

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.





parties. Consistent with my expectation, the effect of the strength of the incumbent parties and the major opposition parties disappears after the *less informative* elections.

Turning to Figure 4.4 that displays the parameter estimates and the 95% confidence intervals of Model 1 graphically, it is clear that the pattern between the incumbent strength and job allocation is present after *informative* elections (Row 1), but is not after *less informative* elections (Row 2). The same applies to the opposition strength (Row 3 and Row 4).

### 4.6 Implications and Conclusions

Although recent scholarship illuminates the role of elections in nondemocracies, the validity of the assumption about the information collection role of such elections had not been thoroughly explored. In this Chapter, I introduced an alternative view of elections in nondemocratic settings as information generation processes. I argue that the geographic distribution of support for and opposition to the incumbent party is not exogenously given as has been assumed, but it is generated via strategic interaction between the party and voters in elections. That is, unlike the premise of past research that elections per se are informative, I maintain that elections become informative once competitiveness of elections increases even in nondemocracies.

This alternative view of nondemocratic elections as information-generation processes provides implications for empirical association between vote returns and post-electoral provision of particularistic goods in nondemocracies. One theoretical improvement that is achieved by this new insight is that it identifies conditions under which the dictator's party offers private benefits to some group of voters over another, while maintaining the possibility that any type of voters with respect to their policy preferences are possible targets for the provision of private benefits. Moreover, the theory developed in this Chapter provides an explanation of why the absence of the opposition from nondemocratic elections renders voters' heterogeneous policy preferences irrelevant to the incumbent party's allocations of private benefits, which has been a mere anomaly in light of past theoretical explanation.

Empirical analysis of the implications of my theoretical model with data obtained from Serbia in the 1990s largely confirms the association between vote returns and the provision of particularistic goods. First, loyal or core constituencies were primarily offered private benefits. Second, strongly opposed voters were also targeted because the ability of monitoring them was not low for the Socialist Party of Serbia. Finally, once major opposition parties boycotted elections, the empirical association between vote returns and the allocation of private benefits disappeared, which is consistent with my theoretical expectation.

#### 5. CONCLUSIONS

The three preceding Chapters were all aimed at answering one of the most important questions about authoritarian politics today: why do dictatorships hold elections? In what follows, I summarize the core findings of each Chapter. I then discuss my future agenda.

In Chapter 2, I developed a theory about the causes of contested elections in dictatorships. An implicit premise in the literature has been that anticipated benefits with respect to regime survival give dictators an incentive to hold elections. However, whether dictators are able to benefit from elections is not perfectly predetermined. Given the uncertainty that is inherent in holding contested elections, the literature on the role of elections remains inconclusive about the causes of those elections. In order to better understand when and why dictators decide to hold elections, I argue that the distinction should be made between the types of elections, and more specifically, who get elected. On the one hand, elections for the effective executive can be used to prevent violent ouster of dictators, and thereby can work as an institutionalized means of leadership succession. On the other hand, legislative elections select regime allies and are primarily aimed at cooptation and elite unity. On a sample of dictatorships from 1946–2008, I found strong support for my theory about the causes of contested elections.

In Chapter 3, I proposed a theory about the consequences of elections in non-democratic settings. Earlier studies are largely divided into the two distinct views about the effects that elections generate. One body of the literature suggests that elections destabilize dictatorships and increase the probability of democratic transitions. Another body of the literature claims that elections prolong the tenure of

dictatorships. While these views look competing and mutually exclusive on the surface, I argue that they are in effect complementary with each other. The reason is that the two bodies of the literature look at different aspects of elections in non-democratic settings. On the one hand, individual elections can create a momentum for changes since they work as a focal point in which ruling elites split, opposition forces unite, and these actors challenge the regime. On the other hand, election results play an informational role and can shape authoritarian politics in a way that helps the survival of dictatorships. I tested my hypotheses about the consequences of elections with data that cover dictatorships after World War II and found robust evidence that supports both claims.

In Chapter 4, I revisited the information collection role of elections in nondemocratic settings. An implicit assumption in past research has been that elections are informative and dictators use election results to shape the post-electoral provision of goods and patronage. I argue instead that the geographic distribution of support and opposition "revealed" by vote returns is not exogenously given, but is the product of the strategic interaction between the ruling party, opposition politicians, and voters with heterogeneous preferences. In other words, unlike the premise of past research that elections per se are informative in dictatorships, I maintain that elections become *informative* once competitiveness of elections increases. Moreover, I contend that not all elections in nondemocratic settings work the same way with respect to the information that they provide. Some elections generate the information that dictators desire and should thus be called *informative* elections while others do not. One possible factor which distinguishes between informative and less informative elections is the absence of opposition parties from the electoral contest. I built a formal model in order to show the causal mechanism that I outlined above. I also tested implications that are drawn from my theoretical model by analyzing a municipality-level data set of Serbia during 1990s. My findings showed strong support for the post-electoral redistribution of goods after *informative* elections as well as the existence of *less informative* elections which generate very different post-electoral distribution of goods.

Chapter 2 and Chapter 3 of the dissertation provide new insights on the causes of elections as well as the consequences of elections. Remaining issues that I will explore in future work are the reasons why some dictatorships keep holding contested elections while others do not and the timing of elections in dictatorships. The vast majority of dictatorships repeat elections while there are a small number of cases in which, for instance, elected dictators became president-for-life (e.g., Jean-Claude Duvalier in Haiti and Niyazov in Turkmenistan). It might be the case that becoming president-for-life creates succession problems and causes the possibility of violent ouster as is implied by Chapter 2. Otherwise, according to Chapter 3, it is plausible that dictators who face small risks in manipulating ex ante competition have little to no incentive to close the electoral arena. Empirical tests of these claims require a data set with high precision in election records, and therefore it is left for the future project. This data set in effect allows us to examine whether or not dictators manipulate election timing in their favor. To my knowledge, there have been no studies that answer this question in a systematic way. But this question is worth exploring because the manipulation of election timing is likely to undermine the effectiveness of foreign aid and election monitoring that are intended to promote democratic transitions and the protection of human rights.

Another possible and straightforward extension to this dissertation is to study local elections in dictatorships. It seems unlikely that elections at the local level directly cause democratic transitions, since the opposition victory in a city or village might not have much leverage to the regime as a whole. Yet, some of the earlier

case studies point to their importance with respect to the behavior of elites inside and outside of the ruling circle (Langston 2006). In this regard, those elections can be considered another important element that shapes authoritarian politics, which in turn affects regime survival and democratization.

Lastly, all three Chapters speak to how elections are related to important matters in authoritarian politics: institutionalization of leadership selection and cooptation (Chapter 2), the relationship between dictators and elites (Chapter 3), and distributive politics (Chapter 4). Implications on these issues will improve our understandings of interworking of dictatorships, and help explain the variation in the effectiveness and the stability of a wide range of economic and social policies that are implemented in dictatorships—for instance, fiscal, monetary, labor, land, regional development, health, welfare, education, environmental, and housing policies. Hence, with the knowledge that is obtained from this dissertation and by further scrutinizing the dynamic of policymaking in dictatorships, future research can better explain a wide variety of issues including rapid economic growth in China, improved access to safe water in Argentina, hyperinflation and bankruptcy in Zimbabwe, miserable life expectancy in North Korea, and decreased childhood disease immunization rates in Nigeria.

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### APPENDIX A

## PROOF OF THE GAMES FOR CHAPTER 4

## Informative Elections

# Types of Voters

Since the voter has three different options, six preference orders are logically possible. However, abstaining always gives larger utility than voting for the dictator by assumption, we only need to examine three preference orders:

1. 
$$u_i(V_O) > u_i(A) > u_i(V_D)$$

2. 
$$u_i(A) > u_i(V_O) > u_i(V_D)$$

3. 
$$u_i(A) > u_i(V_D) > u_i(V_O)$$

where  $V_D$  denotes voting for the dictator,  $V_O$  voting for the opposition party, A abstaining, respectively.

## Strongly Opposed Voters

The condition which satisfies  $u_i(V_O) > u_i(A) > u_i(V_D)$  is obtained by examining the condition under which  $u_i(V_O) > u_i(A)$  since inequality  $u_i(A) > u_i(V_D)$  holds by assumption.  $u_i(V_O) > u_i(A)$  if and only if:

$$-\frac{1}{2}(x_{i}-x_{2})^{2}+b-c>-\frac{1}{2}(x_{i}-x_{1})^{2}+b$$

$$\frac{1}{2}(x_{i}-x_{1})^{2}-\frac{1}{2}(x_{i}-x_{2})^{2}>c$$

$$\frac{1}{2}(x_{i}^{2}-2x_{i}x_{1}+x_{1}^{2}-x_{i}^{2}+2x_{i}x_{2}-x_{2}^{2})>c$$

$$\frac{1}{2}\{(x_{1}^{2}-x_{2}^{2})-2x_{i}(x_{1}-x_{2})\}>c$$

$$\frac{1}{2}\{(x_{1}+x_{2})(x_{1}-x_{2})-2x_{i}(x_{1}-x_{2})\}>c$$

$$\frac{1}{2}\{(x_{1}-x_{2})(2x^{*}-2x_{i})\}>c$$

$$(x_{1}-x_{2})(x^{*}-x_{i})>c$$

$$x^{*}-x_{i}<\frac{c}{x_{1}-x_{2}}$$

$$x^{*}-\frac{c}{x_{1}-x_{2}}< x_{i}$$

$$x^{*}+\frac{c}{x_{2}-x_{1}}< x_{i}$$
(1)

Note that  $x^* \equiv (x_1 + x_2)/2$  and  $x_1 - x_2 < 0$  by assumption. Define the voter whose policy preference  $x_i$  lies in the range  $x^* + \frac{c}{x_2 - x_1} < x_i$  as strongly opposed voters, because her policy preference is most far away from the dictator's policy position  $x_1$  relative to other types of voters on the one-dimensional spectrum.

#### Weakly Opposed Voters

The condition which satisfies  $u_i(A) > u_i(V_O) > u_i(V_D)$  is obtained by examining the conditions under which  $u_i(A) > u_i(V_O)$  and  $u_i(V_O) > u_i(V_D)$  hold simultaneously. From equation (1), we now know  $u_i(A) > u_i(V_O)$  if and only if:

$$x_i < x^* + \frac{c}{x_2 - x_1} \tag{2}$$

 $u_i(V_O) > u_i(V_D)$  holds if and only if:

$$-\frac{1}{2}(x_i - x_2)^2 + b - c > -\frac{1}{2}(x_i - x_1)^2 + b - c$$

$$\frac{1}{2}(x_i - x_1)^2 - \frac{1}{2}(x_i - x_2)^2 > 0$$

$$(x_1 - x_2)(x^* - x_i) > 0$$

$$x^* - x_i < 0$$

$$x^* < x_i$$
(3)

Equations (2) and (3) show another group of voters whose policy preference falls into the range  $x^* < x_i < x^* + \frac{c}{x_2 - x_1}$ . I call this group of voters weakly opposed voters in comparison to strongly opposed voters.

# Loyal Voters

The condition which satisfies  $u_i(A) > u_i(V_D) > u_i(V_O)$  is given by solving  $u_i(V_D) > u_i(V_O)$ . From equation (3) this inequality holds if and only if:

$$x_i < x^* \tag{4}$$

I call this group of voters loyal voters.

### Equilibria

## Strongly Opposed Voters

For strongly opposed voters, the optimal choice is to vote for the opposition party. Remember that the dictator monitors the action of the voter with a probability p. Therefore, in infinitely repeated plays, the voter has two sequences of strategy to

play. First, she can vote for the opposition party in the first stage and if it is not found by the dictator (with a probability 1-p), she can switches to voting for the dictator in subsequent periods. Second, she can vote for the opposition party in the first stage, but it is monitored by the dictator. In such a case, the voter keeps voting for the opposition party knowing that the dictator will never offer reward regardless of her action.

In an infinite sequence of elections, given that the dictator commits to a grim trigger strategy and keeps offering a reward, expected utility of a strongly opposed voter from keep voting for the dictator is:

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) = \left[ -\frac{1}{2} (x_{i} - x_{1})^{2} + b - c \right] + \beta \left[ -\frac{1}{2} (x_{i} - x_{1})^{2} + b - c \right] + \cdots$$
$$= \frac{1}{1 - \beta} \left[ -\frac{1}{2} (x_{i} - x_{1})^{2} + b - c \right].$$

Expected utility of a strongly opposed voter from voting for the opposition party in the first period but the defection is not monitored by the dictator, and then switches to voting for the dictator is:

$$EU_{i}(V_{O}, V_{D}, V_{D}, ...) = \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \beta \left[ -\frac{1}{2}(x_{i} - x_{1})^{2} + b - c \right] + \cdots$$
$$= \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{1})^{2} + b - c \right].$$

Expected utility of a strongly opposed voter from voting for the opposition party in the first period and the defection is monitored by the dictator, and then keeps voting for the opposition party in subsequent periods is:

$$EU_{i}(V_{O}, V_{O}, V_{O}, ...) = \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \beta \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} - c \right] + \cdots$$

$$= \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} - c \right]$$

$$= \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] - \frac{\beta}{1 - \beta} b$$

$$= \frac{1}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] - \frac{\beta}{1 - \beta} b.$$

The condition for a subgame-perfect equilibrium (SPE) in which a strongly opposed voter votes for the dictator and receives the reward, supported by a grim trigger strategy is

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - p)EU_{i}(V_{O}, V_{D}, V_{D}, ...) + p \cdot EU_{i}(V_{O}, V_{O}, V_{O}, ...)$$

$$\frac{1}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{1})^{2} + b - c \right] > (1 - p) \left\{ \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] + \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{1})^{2} + b - c \right] \right\}$$

$$+ p \left\{ \frac{1}{1 - \beta} \left[ -\frac{1}{2}(x_{i} - x_{2})^{2} + b - c \right] - \frac{\beta}{1 - \beta} b \right\}. \tag{5}$$

The right hand side of equation (5) is

$$\begin{split} & \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] + (1 - p) \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_i - x_1)^2 + b - c \right] \\ & + p \left\{ \frac{1}{1 - \beta} \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] - \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] - \frac{\beta}{1 - \beta} b \right\} \\ & = \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] + (1 - p) \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_i - x_1)^2 + b - c \right] \\ & + p \left\{ \frac{1}{1 - \beta} \left( \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] - (1 - \beta) \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] - \beta b \right) \right\} \\ & = \left[ -\frac{1}{2}(x_i - x_2)^2 + b - c \right] + (1 - p) \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_i - x_1)^2 + b - c \right] \\ & + p \frac{\beta}{1 - \beta} \left[ -\frac{1}{2}(x_i - x_2)^2 - c \right] \end{split}$$

Therefore, equation (5) is equivalent to

$$\frac{1}{1-\beta} \left[ -\frac{1}{2} (x_i - x_1)^2 + b - c \right] - (1-p) \frac{\beta}{1-\beta} \left[ -\frac{1}{2} (x_i - x_1)^2 + b - c \right] 
> \left[ -\frac{1}{2} (x_i - x_2)^2 + b - c \right] + p \frac{\beta}{1-\beta} \left[ -\frac{1}{2} (x_i - x_2)^2 - c \right]$$

$$\frac{1-\beta+p\beta}{1-\beta} \left[ -\frac{1}{2}(x_i - x_1)^2 + b - c \right] > \frac{1-\beta+p\beta}{1-\beta} \left[ -\frac{1}{2}(x_i - x_2)^2 - c \right] + b$$

$$\left[ -\frac{1}{2}(x_i - x_1)^2 + b - c \right] > \left[ -\frac{1}{2}(x_i - x_2)^2 - c \right] + \frac{1-\beta}{1-\beta+p\beta} b$$

$$-\frac{1}{2}(x_i - x_1)^2 + \frac{1}{2}(x_i - x_2)^2 > \left( \frac{1-\beta}{1-\beta+p\beta} - 1 \right) b$$

$$(x^* - x_i)(x_1 - x_2) < \frac{p\beta}{1-\beta+p\beta} b$$

$$x^* - x_i > \frac{p\beta}{1-\beta+p\beta} \cdot \frac{b}{x_1 - x_2}$$

$$x_i < x^* - \frac{p\beta}{1-\beta+p\beta} \cdot \frac{b}{x_1 - x_2}$$

$$x_i < x^* + \frac{p\beta}{1-\beta+p\beta} \cdot \frac{b}{x_2 - x_1}.$$

Therefore, the group of strongly opposed voters who will sell their votes in exchange for particularistic goods has policy preference,  $x_i$ , which lies in the range:

$$x^* + \frac{c}{x_2 - x_1} < x_i < x^* + \frac{p\beta}{1 - \beta + p\beta} \cdot \frac{b}{x_2 - x_1}.$$
 (6)

The condition under which equation (6) holds is:

$$x^* + \frac{c}{x_2 - x_1} < x^* + \frac{p\beta}{1 - \beta + p\beta} \cdot \frac{b}{x_2 - x_1}$$

$$c < \frac{p\beta}{1 - \beta + p\beta} \cdot b$$

$$b > \frac{1 - \beta + p\beta}{p\beta} \cdot c = \lambda c.$$
(7)

where  $\lambda = (1 - \beta + p\beta)/(p\beta)$ . Equations (6) and (7) jointly provide the condition under which a strongly opposed voter sells her vote in exchange for private benefits.

## Weakly Opposed Voters

For a weakly opposed voter, the best strategy is to abstain. In infinitely repeated plays, she can abstain in the first stage and if it is not found by the dictator (with a probability 1-p), she can switches to voting for the dictator in subsequent periods. If she is found to renege with a probability p, the voter will keep abstaining in following stages because the dictator commits to the grim trigger strategy.

In an infinite sequence of elections, given that the dictator commits to a grim trigger strategy and keeps offering a reward, expected utility of a weakly opposed voter from keep voting for the party is obtained as follows. Note that voting for the dictator and abstaining both give the same programmatic benefit, and therefore we can suppress the term,  $-\frac{1}{2}(x_i-x_1)^2$ , in the analysis.

$$EU_i(V_D, V_D, V_D, ...) = (b - c) + \beta(b - c) + ... = \frac{1}{1 - \beta}(b - c).$$

Expected utility of a weakly opposed voter from abstaining in the first period but the defection is not monitored by the dictator, then switches to voting for the dictator is:

$$EU_i(A, V_D, V_D, ...) = b + \beta(b - c) + \cdots = b + \frac{\beta}{1 - \beta}(b - c).$$

Expected utility of a weakly opposed voter from abstaining in the first period and the defection is monitored by the incumbent party, then abstaining in subsequent periods is:

$$EU_i(A, A, A, ...) = b + \beta \cdot 0 + \cdots = b.$$

The condition for a subgame-perfect equilibrium (SPE) in which a weakly opposed voter votes for the dictator and receives the reward, supported by a grim trigger strategy is

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - p)EU_{i}(A, V_{D}, V_{D}, ...) + p \cdot EU_{i}(A, A, A, ...)$$

$$\frac{1}{1 - \beta}(b - c) > (1 - p)\left\{b + \frac{\beta}{1 - \beta}(b - c)\right\} + p \cdot b.$$
(8)

And inequality (8) simplifies to

$$b > \frac{1 - \beta + p\beta}{p\beta} \cdot c = \lambda c. \tag{9}$$

Therefore, all weakly opposed voters—voters whose policy preferences lie in the range,  $x^* < x_i < x^* + c/(x_2 - x_1)$ —can be the target of the provision of particularistic goods as long as equation (9) holds.

## Loyal voters

A loyal voter faces the same strategic environment with a weakly opposed voter in that her optimal strategy is to abstain. One difference between them is that the monitoring probability for the loyal voter is q as opposed to p. Note that q > p by assumption.

The condition for a subgame-perfect equilibrium (SPE) in which a loyal voter votes for the dictator and receives the reward, supported by a grim trigger strategy is found to be similar to the condition (9) except the monitoring probability.

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - q)EU_{i}(A, V_{D}, V_{D}, ...) + q \cdot EU_{i}(A, A, A, ...)$$

$$\frac{1}{1 - \beta}(b - c) > (1 - q)\left\{b + \frac{\beta}{1 - \beta}(b - c)\right\} + q \cdot b.$$
(10)

Inequality (10) simplifies to

$$b > \frac{1 - \beta + q\beta}{q\beta} \cdot c = \phi c \tag{11}$$

where  $\phi = (1 - \beta + q\beta)/(q\beta)$ .

#### Less Informative Elections

In the case of *non-competitive* elections, the strategic interaction between a voter and the dictator shows a different picture. First, the fact that voters have no option of voting for the opposition party because it is absent from the electoral contest renders voters' policy position irrelevant to their action. In other words, there is

no distinction across the three types of voters that are meaningful in the case of competitive elections. Second, the one-shot game depicted in Table 2 results in a Prisoner's dilemma. That is, we find a single Nash equilibrium in which the action profile is {Abstain, No Reward} for all types of voters. Remember that I assume a constant q as a probability of monitoring turnout, the condition for a SPE in which a voter votes for the dictator and receives the reward is

$$EU_{i}(V_{D}, V_{D}, V_{D}, ...) > (1 - q)EU_{i}(A, V_{D}, V_{D}...) + q \cdot EU_{i}(A, A, A, ...)$$

$$\frac{1}{1 - \beta}(b - c) > (1 - q)\left\{b + \frac{\beta}{1 - \beta}(b - c)\right\} + q \cdot b.$$
(12)

Equation (12) simplifies to

$$b > \frac{1 - \beta + q\beta}{q\beta} \cdot c = \phi c \tag{13}$$

where  $\phi = (1 - \beta + q\beta)/(q\beta)$ .