

# Elections Under Autocracy and the Strategic Game of Fraud\*

Beatriz Magaloni<sup>1</sup>

2006-2007 Susan Louis Dyer Peace Fellow  
Hoover Institution  
Department of Political Science  
Stanford University

DRAFT

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## Abstract

Most autocracies today hold multiparty elections. Yet the behavior of voters and parties in these regimes often appears puzzling. Why do autocrats insist in holding elections and then steal them? Why is there variation in the level of fraud in these elections? When would autocrats submit to clean elections, by for example, delegating the organization and monitoring of elections to independent electoral commissions? Under what conditions would autocrats yield power peacefully if defeated in elections? This paper answers these fundamental questions by developing a theory of autocratic elections and electoral fraud.

Keywords: elections, autocracy, fraud, multiparty competition, democracy

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Most autocracies today hold multiparty elections. Yet the behavior of voters and parties in these regimes often appears puzzling. Why do autocrats insist in holding elections and then steal them? Why is there variation in the level of fraud in these elections? When would autocrats submit to clean elections, by for example, delegating the organization and monitoring of elections to independent electoral commissions? Under what conditions would autocrats yield power peacefully if defeated in elections? This paper answers these fundamental questions by developing a theory of autocratic elections and electoral fraud.

The paper sheds light on the politics of what some scholars call “electoral authoritarianism”, where a democratic façade covers authoritarian rule (Linz, 2000: 34). Schedler (2002) calculates that the most common form of autocracy today is hidden behind elections: “The dream [of these regimes] is to reap the fruits of electoral legitimacy without running the risks of democratic uncertainty.” (p. 37) Diamond (2002) and Levitsky and Way (2002) also highlight the prevalence of electoral authoritarianism. Przeworski *et al* (2000) identify a common form of autocracy where multi-party elections take place and there has never been alternation of political power in office. After the end of the Cold War, this form of multi-party autocracy became the most common in the world, above single-party regimes, military dictatorships, and monarchies (Magaloni, 2007; Hadenius and Toerel, 2006 and 2007).

Despite their commonality, there has not been much theorizing about the dynamics of electoral politics in these regimes. This paper focuses specifically on electoral transgressions, always present in autocratic elections as the following examples suggest. In Zimbabwe the opposition has complained of malfeasances committed by President Robert Mugabe and his party, the Zimbabwe African National Union-Patriotic Front (ZANU-PF). In the 2002 elections, the main opposition leader, Morgan Tsvangirai, claimed that the

elections were rigged and that Mugabe's victory was "daylight robbery." However, the Organization of African Union (OAU) observer team said that the elections had been reasonably clean and credible. Dozens of heavily armed soldiers took positions around the Movement for Democratic Change's (MDC) office in one of the major cities. Mugabe was able to win a massive victory in the subsequent legislative elections that gave him one seat short of the two-third majority needed to modify the constitution.

In Gabon President Albert-Bernard (subsequently El Hadj Omar) Bongo announced the introduction of multi-party elections in 1990. Since then he has been able to rule despite constant allegations of election rigging and intimidation of opposition leaders. Despite the fact that the more than six opposition parties announced the formation of a united front, the Coordination of Democratic Opposition (COD), the opposition failed to unite behind a single candidate, allowing president Bongo to reelect himself in 1992 over thirteen competitors by a narrow 51.18% of the vote. The result was challenged by runner-up Paul M'Ba-Abessole of the National Rally of Woodcutters (RNB), who announced the formation of a parallel government. Post-electoral unrest subsided as Bongo sent the armed forces and began to negotiate with other opposition leaders the formation of a government of "broad consensus." Six opposition leaders were eventually incorporated in the Bongo government. In 1998 he was able to secure a massive victory for a seven year term over a severely divided opposition, which again claimed that the elections were tainted by "massive fraud." His massive victory allowed him to renege on his promise of significant institutional reforms, including the creation of an independent electoral commission.

The Institutional Revolutionary Party (PRI) in Mexico came close to losing power in 1988, when a former ruling party politician, Cuahutémoc Cárdenas, ran against the official party as head of the Democratic Front, a loose alliance formed by most of the pre-existing

left-wing parties. The night of the elections, the computer system mysteriously crashed, and for more than ten days of intense post-electoral negotiations the official election results were not announced. The Cardenistas claimed that the PRI stole the presidential victory from them and engaged in massive demonstrations after the elections. President Miguel de la Madrid ordered the armed forces to occupy basements in some of the main buildings in downtown Mexico City in case the Cardenistas decided to take the National Palace by force. The candidate of the official party, Carlos Salinas, assumed office with the tacit support of the right-wing opposition party, the National Action Party, which decided not to mobilize more forcefully in support of Cardenas' claim of fraud. The Zapatista uprising in 1994 triggered a major electoral reform. Through the 1994 electoral reform the PRI finally tied its hands to not commit fraud by granting true independence to the board of the Federal Electoral Institution (IFE). In the 2000 presidential elections, the PRI lost to the PAN and yielded power peacefully after seventy years of uninterrupted rule.

The orange revolution in Ukraine involved similar issues. President Leonid Kuchma retained office in the 2000 elections despite of a "tapegate" scandal that implicated him in the harassment of political opponents and falsification of election results. The outcome of the 2004 election battle was very different. According to official results, the election was won by Prime Minister Viktor Yanukovych by a slim margin, but Victor Yushchenko, who was later confirmed to have been poisoned, denounced the election as rigged. The mass public mobilized massively into the streets supporting Yushchenko's claim of victory with widespread acts of civil disobedience. Television coverage of opposition rallies and opposition statements were for the first time reported after a revolt against government censorship by the broadcast media. The "orange revolution" eventually led the Supreme

Court to annul the elections and call for a repeat of the second round, which Yushchenko won with about 52% of the vote. He was declared victor.

My approach builds on Weingast (1997), who stresses that dictators transgress upon citizens' rights profiting from coordination dilemmas among opponents. In his account, citizens will be able to coordinate against dictators only when they share a "common understanding about the appropriate limits of the state." However, in this approach citizens act in an institutional vacuum and thus we fail to understand how the institution of elections shapes the strategic interaction between the autocrat and his opponents. By bringing parties, voters, and elections in, my theory uncovers the reasons why societal coordination against *electoral transgressions* is so hard to achieve.

I model the game of electoral fraud as a long-term strategic interaction game where the autocrat's and the opponents' actions depend both on short-term gains, including institutional pay-offs, and loyalty costs that are experienced as vote gains or losses in the future. In choosing to contest against the autocrat through elections, opposition party elites inevitably possess mixed incentives: they want to overthrow the autocrat, yet they also seek to preserve the legislative seats they are entitled to under the current autocratic institutions, and to build a successful electoral organization for the future.

The logic of the electoral game is such that the autocrat can preclude his opponents from coordinating against transgressions by selectively rewarding them for behaving as "loyal opposition" and acquiescing to the electoral fraud. Institutional details thus affect the autocratic equilibrium by shaping the pay-offs to the parties of following different courses of action. Winner-take all presidential elections, I demonstrate, make post-electoral opposition coordination against transgressions easier than legislative elections that are held under some form of proportionality or presidential elections that are held concurrently with the assembly

race. Nonetheless, an equilibrium outcome where the autocrat *peacefully* accedes to an electoral defeat is less likely in presidential elections because all the players, the autocrat included, possess more incentives to grab power by force.

Voters play a fundamental role in this story of strategic interaction. My approach spells out why electoral incentives are not well aligned to fight authoritarianism. Voters under autocracy, I posit, are normally divided along two main issue dimensions: a “distributive dimension”, where parties and voters divide along conventional issues such as taxation, tariffs, and social policy. But there is also a “regime dimension,” where voters divide with respect to their evaluations about the existing political institutions and the dislikes of the dictator. Some are “radical opposition” voters who are zealously committed to bringing democratic change and would punish opposition parties that behave as “loyal opposition” by switching support to other more intransigent opponents. Other voters dislike the dictator but are more concerned about other issues –e.g., economic performance, tariffs, or the exchange rate – than about democratic change. These “moderate voters,” I demonstrate, end up playing an active role in sustaining the autocratic equilibrium because their ranking of the alternatives leads them to stick with a party that behaves as “loyal opponent” instead of punishing it by switching support to more intransigent opponents.

My approach spells out the way in which informational shortages about the extent of the electoral fraud shapes the nature of the strategic interaction. Elections under autocracy normally take place in skewed institutional settings where the autocrat controls every aspect of the organization and monitoring of the elections and there are few independent sources of information to verify the electoral fraud. My approach elucidates how the opposition’s dilemmas become even more acute in this type of limited informational setting, which produces the paradoxical result that *opposition party elites end up being punished at the polls by*

*“moderate voters” for fighting against electoral fraud.* This means that if the opposition electorate is disproportionately “moderate,” at least one of the opponents will invariably find it preferable to collude with the autocrat than to protest fraud.

The approach thus demonstrates the reasons why the autocratic equilibrium is tragic and brilliant – tragic in that autocrats employ the instruments of democracy to sustain their rule, and brilliant because opposition party elites *and* voters end up playing an active role in sustaining the equilibrium.<sup>2</sup> To deter an autocratic ruling party from committing electoral fraud, the opposition must be endowed with a high enough number of “radical voters” for whom the regime dimension is significantly more salient than the distributive dimension, which means that voters should possess an unwavering commitment to defeat the autocrat above the disagreements they might have on other issues.

Lastly, my approach provides a theory of endogenous institutional design by exploring the conditions under which the autocrat will delegate the organization and monitoring of the elections to an independent electoral commission, tying up his hands to not commit fraud. I show that two conditions must hold for an electoral reform such as this to take place: the autocrat calculates that he can go on winning elections cleanly; and the opposition, under some particular circumstances, credibly threatens it will rebel against the election results, regardless of whether there is fraud or not, unless the autocrat finds a way to *ex ante* guarantee the transparency of the elections.

The role of an independent electoral commission in ensuring electoral transparency is threefold: first, the independent electoral commission prevents the ruling party from negotiating the vote behind closed doors, constraining the leeway to selectively buy its opponents off by offering seats to them. Second, an independent electoral commission

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<sup>2</sup> A parallel idea of this tragic brilliant autocratic equilibrium can be found in Diaz-Cayeros, Weingast and Magaloni (2001).

provides unambiguous information to the public about the actual election results and this information facilitates opposition coordination against ruling party transgressions. Third, the independent electoral commission also serves to commit an intransigent opposition to the electoral process and to reduce violent post-electoral confrontations. Who is going to follow the opposition into the streets if it was clear that the autocrat could not rig the elections? For this solution to work, the electoral commission must be truly independent such that the autocrat and the opposition have equal representation in its board, it must be given sufficient powers to control the electoral process, and it must be highly regarded by the mass public. In creating an independent electoral commission, a form of rule of law in the electoral realm can emerge, even if the ruling party continues to win elections.

This means that in my approach democracy can emerge either because there is a major institutional change that prevents the autocrat from manipulating the elections, or from a peaceful transfer of executive power even when institutions remain intact. Both the electoral reform or the peaceful transmission of executive power result from of-the-path threats, namely when the opposition is able to credibly threaten a rebellion if the autocrat steals the elections. This scenario is significantly more likely, I argue, when the opposition coordinates *ex-ante* by forming an electoral alliance to contest against the autocrat as a unified electoral force rather than as separate political parties. However, there is one way in which democracy can arise without a credible threat of war, namely when the loyalty costs for the autocrat of governing under fraud become too large such that ruling party voters become seriously dissatisfied to continue to support a party that openly rigs elections. This is another way of saying that autocrats need some form of electoral support to sustain their rule.

The paper is organized as follows. Section one demonstrates that electoral autocracies became the most prominent form of autocracy in the world today. Section two

develops the theory of electoral fraud through the use of a game theory model. The section presents a model where perfect voter information about the election results is presumed. Section four discusses the implications to the game when there is limited voter information about whether there was fraud or not. I end with a conclusion.

## **1. Elections in autocratic regimes**

Most autocracies employ at least some repression to disarticulate the opposition – they murder or imprison its leaders and followers (Arendt, 1968; O’Donnell, 1973; Stepan, 1971; Dahl, 1973; Wintrobe, 1998). Evidence suggests that this strategy often backfires: repression can push the opposition into insurgency, which eventually threatens to overthrow the dictator through civil war (see, for example, Wood, 2000). “Electoral autocracies” do not ban the opposition, but allow elites to organize into independent political parties, although they often resort to the harassment and intimidation against its leaders. This form of autocracy is the most common in the world today.

Figure 1 provides an overview of the distribution of regimes around the world since 1950, drawn from Magaloni (2007). The figure shows clearly how the number of countries that can be considered democratic has increased dramatically in the last decade. But for the purposes of this discussion, the figure separates autocratic regimes into various types. The regimes classified as “hegemonic-party” are different from “single-party” autocracies in that in the former opposition parties are allowed to contest elections while in the later only candidates endorsed by the official party can place their names on the ballot. All of the communist regimes and most of the African autocracies were single-party. Many of these autocracies originally allowed multiparty competition, to ban it after independence leaders were able to win massively in the first elections after independence.

During the peak of autocratic rule in the 1970s many countries ceased to be democratic to be replaced mostly by military dictatorship. But the graph clearly shows that as military and single-party regimes have become less common, the number of hegemonic-party autocracies (autocracies that hold multiparty elections) has increased – by 2000, 62 percent of the autocracies in the world held multiparty elections. This means that the most common route to democracy today is the one modeled in this paper –a transition from multiparty autocracy where dictators must cede power after an electoral defeat.

### Distribution of Regimes Types

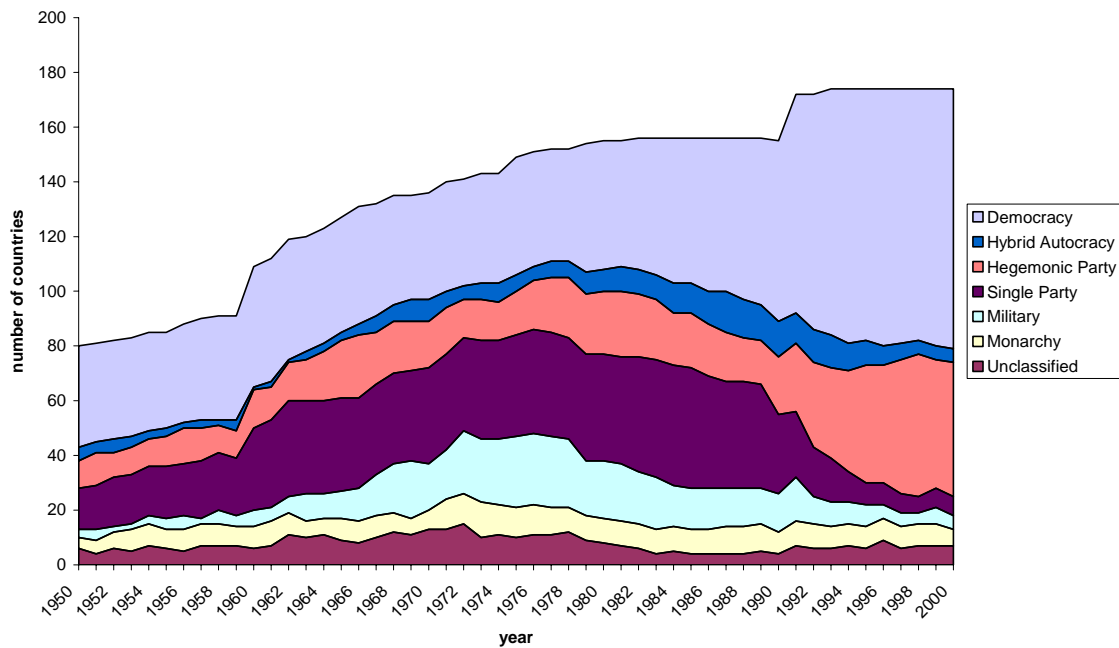


Figure 1

These transitions differ from previous democratic transitions in that parties and voters rather than a “select group of actors” play the decisive role. As suggested by McFaul (2002) the earlier transition literature focused mostly on elite bargaining, stressing that successful democratization was most likely where moderates within the government and the

opposition entered into a “political pact”<sup>3</sup> that limited the agenda of policy choice and excluded the masses. However, the masses play a fundamental role in the electoral transitions primordially in their role of voters.<sup>4</sup> In Magaloni (2006) I study the central dilemmas voters and opposition parties confront in these transitions: first, opponents must defeat entrenched ruling parties through elections despite huge incumbency advantages, including extremely unequal access to state resources, the lack of an independent news media, and serious institutional biases. Second, voters must be able to make “ideological investments” in democratization despite the risk of being punished by the autocrat, who cuts off opponents from the party’s spoils system by withdrawing government transfers from them. Third, opposition forces must be able to overcome their coordination dilemmas to, among other, entice the dictator to abstain from using his immense powers to rig the elections and reverse their outcome.<sup>5</sup> In this paper I focus on the last of these dilemmas.

The model I propose assumes that the opposition is divided, which means that it *plays the game of electoral fraud contesting the elections as separate players* rather than unifying into a single electoral. Divided oppositions are most common in electoral authoritarian regimes. The divisiveness of the opposition might be the product of ethnic cleavages (Ordeshook and Shvetsova, 1994; Cox, 1997); it might also result from fundamental policy differences among opponents (Riker, 1976; Sartori, 1976; Laver and Schofield 1991; Pempel, 1990; Magaloni, 1996); or it might be the product of personal rivalries among opposition leaders. Electoral rules also play a powerful role in shaping incentives to coordinate (Cox, 1997). Electoral

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3 As defined by O’Donnell and Schmitter (1986), political pacts take place among a “select group of actors” that seek to “(1) limit the agenda of policy choice, 2) share proportionally in the distribution of benefits, and 3) restrict the participation of outsiders in decision-making” (p. 41)

4 The literature stressed different “modes of transition” and argued that if the transition was not pacted, it was most likely to fail (Karl, 1990) and Karl and Schmitter (1991).

5 The logic of this electoral game is modeled in Magaloni (2006 and 2007). In an excellent paper, Hayde and Marilov (2007) study the role international observers play in these elections. Simpser (2007) also studies electoral fraud.

institutions determine the pay-offs of forming larger versus smaller electoral coalitions. The simple-majority, single-ballot system, according to Duverger's law, creates incentives for elites to coalesce, leading to the consolidation of a two party system.<sup>6</sup> The most recent interpretations of Duverger's law all tend to agree that the effective number of parties is predicted primarily by district magnitude rather than by electoral formula (Rae, 1971; Taagepera and Shugart, 1989; Cox, 1991; Reed, 1990; Cox, 1997). Because autocracies possess ample leeway to manipulate electoral rules, the divisiveness of the opposition is partly *endogenous*, a direct consequence of the ruling party's institutional manipulation (Diaz-Cayeros and Magaloni, 2001; Lust-Okar, 2005).

The game can easily be transformed into a two player game for cases where the opposition forms a common electoral front, overcoming their coordination dilemmas *prior to playing the game of electoral fraud*. This was the transition route followed, for example, in Kenya and Senegal, where opponents that had traditionally being severely divided opted to coalesce into a united front. Ukraine is another example of democratization where opponents endorsed a single candidate. This paper suggests that the transition outcome is easier to obtain where there are only two players –the autocratic and one unified opponent -- because the latter forces can more credibly threaten a rebellion if the autocrat steals the elections. If the opposition contests as separate players, as in the overwhelming majority of elections taking place under authoritarianism, the autocrat will be able to profit from coordination dilemmas among opposition party elites *and* voters to more easily get away with electoral fraud.

## 2. A Strategic Game of Fraud With Perfect Information

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<sup>6</sup> See Riker, 1982 for a discussion of Duverger's law and the historical developments surrounding it; and for a recent formulation by Duverger himself see 1986. See also Ordeshook and Riker, 1968.

Three political parties, the ruling party A, and two challengers, B and C, compete in a national election. The number of parties is exogenous.<sup>7</sup> Parties are viewed as unitary actors seeking both policy goals and office. The value of policy is a standard loss function from an ideal point ( $x_i^*$ ) to a campaign promise ( $x_i$ ). Partisan policy preferences are exogenous, as in the Wittman (1973) model, reflecting underlying political coalitions and social forces aligned with each party. Policy promises are made by parties in order to attract votes (Downs, 1957). Parties cannot renege from the policy positions they campaigned on, once they attain office.<sup>8</sup>

Following the unified voting model of Adams, Merrill and Grofman (2005), voters cast their vote for the party which is closest to them, while also taking into account non-policy features. As discussed in more detail below, the non-policy features voters take into account when casting their vote in autocratic elections are primarily the expected financial transfers received from the incumbent and their valuation of the authoritarian status quo relative to their desire to bring about democracy.

#### *a) Party Objectives*

The objective function of parties is given by the values of policy and office, weighted in an additive fashion:

$$U_i = -\alpha D_i(x_i, x_i^*) + O_i(.) \quad (1)$$

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<sup>7</sup> In contrast to the Hotelling (1929) – Downs (1957) model of two party competition, a three party contest implies that parties can be located in a wide range of positions, and will generally not converge towards a median voter, even in one-dimensional policy spaces (Shepsle, 1990). Non-convergent equilibria in three party configurations exist within models that include policy and non-policy (valence) determinants of voting choice (Schofield and Sened, 2006 and Adams, Merrill and Grofman, 2005). In the conclusions to this paper I discuss the implications of having a single unified challenger, instead of a divided opposition.

<sup>8</sup> As discussed by Kedar (2005), it is possible that policies actually implemented are in fact different from the promises, reflecting compromises between parties.

The value of the parameter  $\alpha$  depends on how each party values policy relative to office, and  $D$  denotes a standard Euclidean loss function.

The value of office to the incumbent is a function of an exogenous component which reflects the fixed rents of power; the decision making power produced by the offices controlled (which is derived from vote shares obtained in a legitimate manner ( $V$ ) and votes obtained through fraud ( $F_A$ )); and citizen's loyalty to the party in the future ( $L_A$ ), discounted by a factor  $0 < \delta < 1$ .

$$O_A = \overline{O_A} + S_A(V_A(\mathbf{x}), F_A) + \delta L_A(F_A) \quad (2)$$

The exogenous component of the vote function reflects the notion that there are perks from holding office, which do not hinge on whether the party obtains more or less votes, controls larger shares of the legislature, or loses voter popularity due to its manipulation of the vote. The exogenous value of office can be thought of as the intrinsic value of power to the leaders, the captured economic rents, corruption through public contracts, or outright theft of the treasury by party members.

Office is more valuable as more votes are obtained:  $\delta S_A / \delta V_A > 0$ . Hence parties will maximize votes, rather than simply seeking to win the election.<sup>9</sup> As discussed by Magaloni (2006), winning with large margins of victory enables autocratic incumbents to create an image of invincibility which discourages potential challengers, especially those coming from within the ruling party. The ruling party autocrat also seeks to control constitutional change in order to set the basic rules of the game without the need to forge coalitions with opposition parties. Constitutional change usually requires oversized legislative coalitions.

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<sup>9</sup> Policies  $\mathbf{x}$  are chosen in order to maximize votes. The votes obtained by the party ( $V_A$ ) do not just depend on its own policy position  $x_A$ , but the positions of all the other parties, as denoted by the vector  $\mathbf{x}$ .

The  $S(\cdot)$  function reflects the translation of votes into valuable posts to party members, which can be thought of, as a shorthand, as (legislative) seats. The value of popular support differs in various electoral systems, since votes translate into seats and decision making power, depending on institutional details. Consider two examples. An electoral rule of “proportional representation” could be represented as a linear function  $S_A(\cdot)=V_A$ . A different rule could characterize a presidential election: the party that gets the plurality gets the presidential seat, and the loser gets nothing. Such “winner-take-all” electoral rule would involve:

$$S_i(V, F=0) = \begin{cases} 0 & \text{if } V_i < V_j \text{ for any } j \\ 1 & \text{if } V_i > V_j \text{ for all } j \\ 1/2 & \text{if } V_i = V_j \text{ for all } j \end{cases} \quad (3)$$

Such characterization of institutional rules is somewhat misleading, since there are additional “seats”, even under presidentialism. Parties that lose the presidential race can still attain legislative seats, for example, when presidential elections are held concurrently with legislative ones. The point of this discussion is that the function  $S(\cdot)$  reflects institutional details which determine in part the value of office and how the spoils of office are distributed, as a function of voter support among parties.

Parties must decide whether they will abide to the previously agreed formal and informal rules of the electoral contest. For the sake of simplicity, the strategy sets are binary.<sup>10</sup> The ruling party  $A$  can commit fraud (strategy  $F$ ), or enforce clean elections (strategy  $\text{not}F$ ); while opposition parties can acquiesce with the electoral results, or protest the electoral process. Voters supporting the incumbent party are affected when the rules of

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<sup>10</sup> The specific size of  $F$  is optimized contemporaneously with the choice of policy positions, as determined by (2).

the democratic game are not upheld and electoral fraud is carried out. Their dislike of illegality is reflected in the value of loyalty  $L$ , which enters directly into the value of office to the incumbent. While vote fraud increases the value of office to the incumbent in the short run through the manufactured votes it produces, he must pay a legitimacy loss.<sup>11</sup> One can think of incumbents with great voter loyalty as being viewed by the citizens as legitimate, but that loyalty is eroded when the incumbent violates electoral legality. Citizen disaffection with electoral fraud is modeled as partisan loyalty that decreases when fraud takes place,  $\delta L/\delta F < 0$ .<sup>12</sup>

The utility function for challengers is analogous to that of the incumbent. In particular, the office component of the utility function of challengers is given by:

$$O_B = S_{Bt} (V_B(\mathbf{x}_t), F_B, A_B) + \delta L_{Bt+1} (A_B)$$

Challengers may strategically accept (A) or protest (notA) the results that emerge from the election. An acquiescence strategy can increase the value of office, but future loyalty depends on how parties behave in the strategic game of fraud.  $F_B$  denotes the share of fraud that is suffered by party B, decreasing the value of office ( $\delta S/\delta F < 0$ ). Acquiescing with fraud ( $A_B$ ) increases the value of office when there was an electoral fraud ( $\delta S/\delta A > 0$  if  $F > 0$ ) because the incumbent will reward “silence” with greater access to power. A challenger must assess the costs of protesting and defending democracy vis-à-vis the advantages of complicity. If there is no fraud, acquiescing with the democratic outcome yields no premium in office ( $\delta S/\delta A = 0$  if  $F = 0$ ). The opposition party suffers legitimacy losses depending on the

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11 It is possible, of course, that electoral fraud also damages government performance by producing disinvestment from the business community, or more significantly for poor countries, by producing cut backs of foreign aid.

12 In this game “fraud” encompasses two types of behaviors on the part of the ruling party, one consisting of stealing votes from the opposition parties, and the other of enforcing the electoral fraud, even if this implies refusing to step down from office.

composition of its supporters. If it acquiesces with fraud, it will lose the loyalty of its “radical” supporters, who are defined below. But the party might also gain some support from “moderate” voters, who can abandon the incumbent due to their objection to fraud, but find an acquiescent party less strident. If parties falsely accuse the incumbent of a fraud it did not commit, moderate voters might cease to be loyal, provided they know whom to believe. Acquiescence may thus have an ambiguous effect on citizen disaffection, depending on the composition of “radical” or “moderate” supporters of each party.

The incumbent must choose, as in conventional models of party competition, a policy position to attract votes. That policy position will need to trade-off the attraction of voters for opportunistic electoral purposes with the displacement of the party away from its ideal policy preference. The incumbent also picks an optimal level of fraud, which depends on the discounted effect of fraud on loyalty, traded off with the office benefits of obtaining a higher  $S$  than the one generated by votes alone. The first order conditions for the incumbent are given by:

$$\frac{\partial S}{\partial V} \left[ \frac{\partial V}{\partial x_i} + \frac{dV}{dF} \right] - \alpha \frac{\partial D}{\partial x_i} = \delta \frac{\partial L}{\partial F} \quad (4)$$

This expression indicates the two tradeoffs in the party’s objective function. The first is that the marginal value of the votes obtained through positioning the party in the policy space can be added to those obtained through electoral fraud, and they should compensate the loss of utility from committing to a party platform (which is different from the ideal policy position of the party). The second one is that this differential should offset the time discounted loss of legitimacy in the future that emerges from electoral fraud. In what follows I assume that the legitimacy cost of fraud is low enough so that the optimal fraud is positive,  $F^* > 0$ . Refraining from carrying out electoral fraud in the model will not be the consequence

of legitimacy concerns (although those do play a role in determining the size of the optimal fraud), but rather of the strategic game regarding the reaction of opposition parties.<sup>13</sup>

The first order conditions for the challengers are similar:

$$\frac{\partial S}{\partial V} \left[ \frac{\partial V}{\partial x_i} + \frac{dV}{dA} \right] - \alpha \frac{\partial D}{\partial x_i} = \delta \frac{\partial L}{\partial A} \quad (5)$$

It will be convenient, for notation purposes, to express the first order conditions as:

$$\begin{aligned} S'_{x_A} + S'_{F_A} - \alpha D'_{x_A} &= \delta L'_{F_A} \\ S'_{x_B} + S'_{A_B} - \alpha D'_{x_B} &= \delta L'_{A_B} \\ S'_{x_C} + S'_{A_C} - \alpha D'_{x_C} &= \delta L'_{A_C} \end{aligned}$$

where:  $S'_{x_i} = \frac{\partial S}{\partial V} \frac{\partial V}{\partial x_i}$ ,  $S'_{F_i} = \frac{\partial S}{\partial V} \frac{\partial V}{\partial F_i}$ ,  $D'_{x_i} = \frac{\partial D}{\partial x_i}$ ,  $L'_{F_A} = \frac{\partial L}{\partial F_A}$ , and  $L'_{A_i} = \frac{\partial L}{\partial A_i}$

b) *Voters.*

In playing the game of electoral fraud, parties anticipate the electoral consequences of following different courses of action as they impinge in voter choices. The voters' utility function is defined following the unified voting model (Adams, Merrill and Grofman, 2005), as comprised by both policy preferences and non-policy considerations, within a probabilistic voting setting:

$$U_j = -\sum \alpha_j (v_{jm} - x_{im})^2 + \beta_j E(t_j) + \sum \gamma_{ik} f_{jik} + X_{ii} \quad (6)$$

Where  $v$  refers to the voter's ideal policy position,  $x$  refers to each of the parties, and  $X$  is a random utility term.<sup>14</sup> Subscript  $i$  refers to parties,  $j$  refers to individual voters,  $m$  to policy issues and  $k$  to non-policy factors. This voter utility function differs from the median

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13 In this setting the electoral fraud is carried out before the electoral results are known, so it is not an ex post strategy used to keep the party above a certain threshold.

14 The random term ensures that, within a probabilistic voting model, it is possible to derive equilibrium strategies for parties seeking to maximize vote support. In particular, if the values of  $X$  are generated independently from a type I extreme-value distribution (i.e, the conditional logit model), the probability of voting for a party depends on the measured policy and non-policy utilities from each of the parties; and the vote share is the sum of those probabilities. See Adams, Merrill and Grofman, (2005, p.19); and Schofield and Sened (2006, p.45).

voter results yielding party convergence, highlighting instead that voters have affinities towards specific parties which are not subsumed in their issue positions.<sup>15</sup> Parties will tend to diverge due to some anchoring into electorates that have a higher propensity to vote for them for non-policy reasons. This is consonant with the behavioral voting models that emphasize party identification and sociological and demographic features as critical determinants of voter choice (Adams, Merrill and Grofman, 2005). Non-policy determinants can also be viewed as valence issues that separate candidates according to their competence, integrity or moral stance (Schofield and Sened, 2006; Stokes, 1963).

Issues reflect meaningful dimensions of party competition, such as distributive issues where parties and voters divide along conventional topics such as taxation, tariffs and social policy.<sup>16</sup> Non-policy factors in this model are of two types: those that increase the expected income of the voter through a private transfer, and those that affect the legitimacy of parties in the voter's eyes. A voter receives the expected value of a cash transfer  $E(t_j)$  in exchange for voting for party  $i$ . The ruling party controls state patronage, which yields it an advantage vis-à-vis the opposition. Government transfers are monopolized by the incumbent, and are distributed according to a "punishment regime" where the ruling party rewards those who vote for it with financial transfers; those who defected to the opposition get no transfers (DiAx-Cayeros, Weingast, Magaloni, 2001; Magaloni, 2006). There are ways for autocrats to monitor, even if imperfectly, voting behavior (Stokes, 2005). In this setup, clientelistic promises are assumed to be credible.

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<sup>15</sup> The paper does not provide the specific conditions under which the existence of non-convergent equilibria in this type of models might exist, since this is a complex issue that far exceeds the scope of this model. For conditions under which equilibrium policy positions can emerge in these models see Adams, Merrill and Grofman, (2005); and Schofield and Sened (2006); and Roemer (2001).

<sup>16</sup> If the parties are primarily ethnic-based, ethnicity should map into some meaningful policy divisions. For example, ethnic groups tend to be geographically concentrated and their interests are largely shaped by what they produce. Export crop producers possess dramatically different preferences with respect to exchange rate policies than those producing food for the internal market (see Bates, 1989 and Foeken and Dietz, 2000).

The other  $k$  non-policy issues are denoted by  $f$ , and they refer to a host of characteristics that may include party identification, behavioral predispositions and perceptions about the legitimacy of the existing institutions, which lead to voter affinity towards specific parties. I will refer to these characteristics as the affinity of the voter. In this paper I emphasize specifically voters' affinities with respect to the existing political regime. Under autocracy voters' perceptions and positions regarding the legitimacy of the existing political order are arguably the most salient non-policy affinity attributes, reflected in a regime cleavage.<sup>17</sup> Pro-regime voters support order and stability within the existing autocratic institutions and anti-regime voters favor democratization, which requires challenging the existing political order, often through violent means.

Voters who defect to the opposition must be tolerant to the possibility of violence and the disruptions of post-electoral mobilization if they want their votes to be counted fairly. A voter's tolerance for violence reflects to a large extent his affinity towards the regime. The fact that many voters find unrest and turmoil unpalatable gives the incumbent a second advantage, beyond its control of patronage. The parameter  $\alpha$  measures how much the voter weights issue voting; the  $\beta$  parameter measures the value of cash transfers and the  $\gamma$  parameters measure the weight of affinity factors.

Incorporating partisan affinity differentiates the electorate by types, particularly distinguishing the less loyal supporters, who are willing to abandon the incumbent, if it resorts to fraud. Specifically, a voter will not defect to the opposition unless:

$$D_j - \beta E(t) - \sum \gamma (f_j - f_A) > D_A \quad (7)$$

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<sup>17</sup> Comparative empirical evidence that regime cleavages are highly salient in democratizing settings can be found in Moreno (1999).

$D_i$  and  $D_A$  are loss functions with respect to the policy platforms offered by the parties. The policy driven utility differential for voter  $i$  between the ruling party and either of the opposition parties must outweigh the expected punishment of foregone expected financial resources and the non-policy affinity attributes, for this voter to defect to the opposition. This setup clearly shows the two disadvantages that opposition parties face, one related to the control by the incumbent of transfers, and the second related to valence disadvantage factors, in which the threat of instability and unrest looms large.

Voters are presumed to remain loyal to their party in the next elections, on the grounds of their partisan affinity, if it follows the “right” course of action, namely upholding legality. Thus, if elections are clean, all those voters who supported the ruling party at time  $t$  should vote again for this party at time  $t+1$ . By the same token, all those voters who supported opposition party  $i$  should remain loyal to this party if it acquiesced to clean elections or if it challenged electoral fraud. This is a minimal form of “social consensus” about the value of upholding legality, which forms the baseline of voter calculations. But when parties follow the “wrong” course of action the consensus breaks down, generating a realignment of voter loyalty in the future.

When an opposition party accepts an electoral fraud, the party moves closer to the ruling party on the regime valence dimension --it behaves as a “loyal” opposition. By the same token, when the ruling party commits electoral fraud, authoritarianism is harshening and that the ruling party is moving farther away from the opposition in the regime valence dimension. Changes in the legitimacy of each of the parties are thus assumed to be produced by the distribution of voter support among the parties in the future, which are in turn attributable to how voters respond to the ruling party’s electoral fraud and to the opposition’s post-electoral mobilization or lack thereof.

If party B acquiesces to the electoral fraud, it will alienate a subgroup of its supporters who used to be over the threshold  $T_B^*$ , but are now under it. If those voters are still above the threshold  $T_C^*$ , they will vote for the other opposition party C. I label this group *radical opposition voters*,  $R_B$ , who will switch support in the future to the other opposition party that challenges the fraud. To these voters, the disutility of having party B acquiesce to the electoral fraud makes them no longer prefer opposition party B over party C.<sup>18</sup>

By the same token, when opposition party B challenges clean elections, its valence becomes more anti-regime because it endorses unnecessary political violence. Party B will be punished by a subgroup of its supporters,  $M_B$ , whom I call *moderate opposition voters* for whom the disutility of having party B challenge clean elections makes them no longer prefer this party. Voters belonging to  $M_B$  will punish party B by switching support to party C or the ruling party, depending on whether the threshold  $T_C^*$  holds.

When the ruling party commits electoral fraud, it will also lose the affinity of a subgroup of its supporters,  $M_A$ , whom I call *moderate incumbent voters*, because the disutility caused by electoral fraud is larger than the utility differential between the incumbent and the opposition parties that challenged the fraud.

Lastly, there are three sets of “*core voters*” for each party, who do not punish the “wrong course of action”, because the disutility of those actions does not make them prefer a different alternative in the future.<sup>19</sup>

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18 If both opposition parties acquiesce to the electoral fraud, radical voters of both parties might just not turn out, or look for a fringe alternative to both opposition parties.

19 The distinction of various voter types is similar in spirit to Roemer (2001), where parties are composed of factions whose members weight differently the policy and office objectives of the party. In particular, he proposes that party activists might be divided among Opportunists, Reformists and Militants, the first primarily

c) *The Strategic Game*

I can now present the sequence of moves in extensive form, which is inspired in Weingast (1997). The game starts with parties offering policy platforms optimally, and voters choosing parties. The parties' strategic actions in the game of fraud follow once vote shares have been established just prior to the election. The ruling party must decide whether to commit fraud or not; and opposition parties must decide whether they will acquiesce with the results or challenge them.

**Figure 2 Extensive Form Representation of the Game of Fraud**

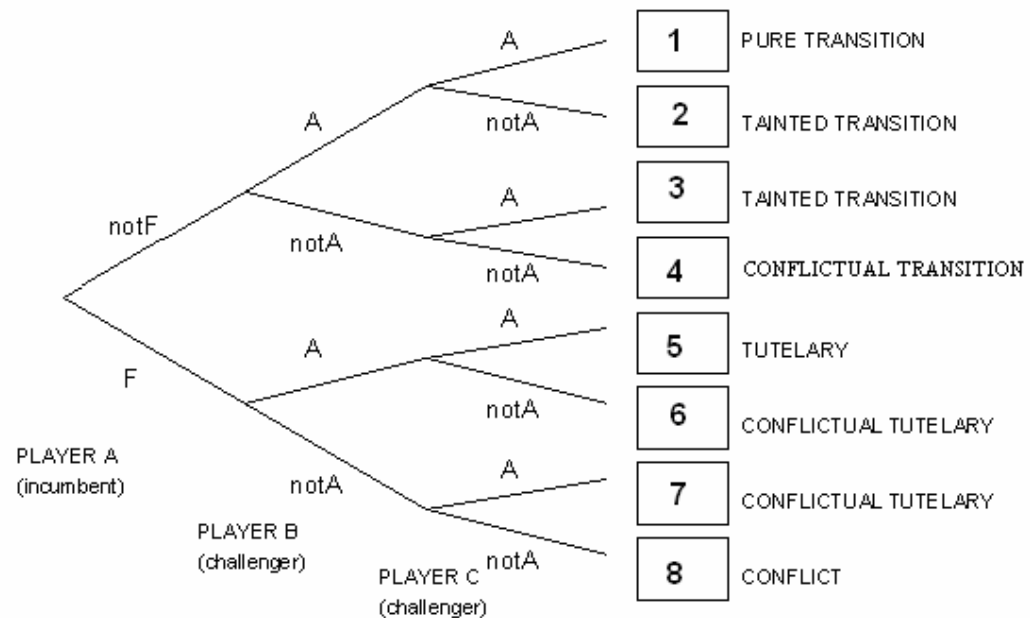


Figure 2 presents the extensive form representation of the game. The game is sequential, which means the incumbent party moves first only knowing its vote support;

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interested in competing in a Downsian manner; the second ones in reflecting the mean position of the members; and the third ones interested primarily in projecting to the public the party's views.

challenger party B moves second knowing the incumbent's strategic choice; and party C moves last. The outcomes are numerated from 1 to 8. In the first four outcomes the ruling party refrains from electoral fraud. I call these "democratic outcomes," although they do not imply by necessity the establishment of democracy, because the autocrat can continue to rule without transforming the existing institutions, the patronage networks or the threats of violence, and can still threaten to steal elections the next time.

The first of the outcomes is a "pure democracy outcome", where alternation in power is not necessary, but elections are accepted by everyone. The second and third outcomes are "tainted democracy outcomes" --the ruling party enforces clean elections, one of the opposition parties challenges these results, and the other accepts them. The fourth outcome is a "protested democracy outcome": despite the ruling party's restraint from fraudulent behavior, both opposition parties protest the results.

The last four outcomes are "autocratic outcomes" that entail that the ruling party resorted to fraud. When there is an electoral fraud, and both challengers consent to it, I call this a "pure tutelary autocracy". In a "conflictual tutelary autocracy" one of the opposition parties becomes an accomplice of the regime, while the other is left to challenge the results alone. The ruling party will be able to get away with the electoral fraud when the opposition fails to act in unison to challenge it.<sup>20</sup> The intuition here is that if at least one of the opposition parties cooperates with the ruling party, social peace is maintained and the armed forces cooperate to enforce the fraud. In the last outcome, both opposition parties coordinate in contesting the results through massive street demonstrations that might get out of hand. Because no opposition party cooperates with the regime, social peace is destroyed and the armed forces could choose to back the ruling party or the opposition or to oust the

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<sup>20</sup> This might not be a reasonable structure depending on the levels of electoral support. If one challenger has, say 60% of the votes, it might have enough strength to, by itself, bring the conflict outcome about.

ruling party through a military coup, so as impose order themselves. The model hence presumes that the support of the armed forces is guaranteed to the incumbent as long as the ruling party is able to maintain social peace. When only one opposition party contests the results, rebellion is unsuccessful. When both opposition parties contest the results, however, social peace completely erodes as a consequence of the parties' feuds.

We can look at the payoffs as the shift in utility levels as compared to a baseline of no fraud and acquiescence ( $\bar{U}_i$ ). The pay-off for the ruling party of electoral fraud is denoted by  $S'_A F = F$ , where  $F$  stands for the votes stolen from the opposition such that  $F = F_B + F_C$ , that affects utility according to its marginal effect. The effect of fraud on the opposition is denoted by the marginal effect multiplied by the size of the fraud ( $S'_B F_B$  and  $S'_C F_C$ ). The losses or gains related to loyalty are represented by the marginal effects on loyalty ( $L$ ) multiplied by the specific groups of voters that might abandon or realign towards the party.  $R$  and  $M$  represent radicals or moderates who may shift their allegiance to the opposition parties. Table 1 presents the payoff structure of the game.

**Table 1 Payoff for Game with Perfect Information**

<b>Democratic Outcomes</b>	Party A	Party B	Party C
Pure Transition (1)	$\bar{U}_A$	$\bar{U}_B$	$\bar{U}_C$
Tainted Transitions (2) (C Protests)	$\bar{U}_A + \delta L'_A M_C$	$\bar{U}_B$	$\bar{U}_C - \delta L'_C M_C$
Tainted Transitions (3) (B Protests)	$\bar{U}_A + \delta L'_A M_B$	$\bar{U}_B - \delta L'_B M_B$	$\bar{U}_C$
Contested Transition (4)	$\bar{U}_A + \delta L'_A (M_B + M_C)$	$\bar{U}_B - \delta L'_B M_B$	$\bar{U}_C - \delta L'_C M_C$
<b>Autocratic Outcomes</b>			
Tutary Autocracy (5)	$\bar{U}_A + S'_F (F - 2C)$	$\bar{U}_B + S'_B (C - F_B) - \delta L'_B R_B$	$\bar{U}_C + S'_C (C - F_C) - \delta L'_C R_C$
Conflictual Tutary (6) (C Protests)	$\bar{U}_A + S'_F (F - C) - \delta L'_A M_A$	$\bar{U}_B + S'_B (C - F_B) - \delta L'_B R_B$	$\bar{U}_C - S'_C F_C + \delta L'_C (M_A + R_B)$

Conflictual Tutelary (7) (B Protests)	$\bar{U}_A + S'_F(F - C) - \delta L'_A M_A$	$\bar{U}_B - S'_B(F_B) + \delta L'_B(R_C + M_A)$	$\bar{U}_C + S'_C(C - F_C) - \delta L'_C R_C$
Conflict (8)	$E[W_A]$	$E[W_B]$	$E[W_C]$

The payoffs all assume that one opposition party by itself is not able to force the incumbent to refrain from electoral fraud. But when the two opposition parties coordinate protesting the election, the payoff is no longer constructed on the basis of voters and their impact on office and loyalty. I denote the payoff for the parties in the conflict outcome as  $E(W_i) = p_i \hat{O}_j - (1 - p_i) C_i$ , where  $\hat{O}_i$  is the diminished value of holding power obtained through force;  $p_i$  stands for the probability that party i will succeed in its quest to power through post-electoral conflict, and  $C_i$  are the costs of conflict to the party. Depending on the relative strength of the authoritarian government and whom the armed forces choose to back, office could go either way, or the military themselves might step in, so that the sum of the probabilities of attaining power to the parties are less than one:  $\sum P_i < 1$ . Votes no longer shape the payoffs when office is grabbed by force.

*d) Solution of the game with perfect information.*

There are then four possible equilibria for this game, depending on the specific values of the parameters.

1. *Transition to Democracy (through threat of conflict).* A transition to democracy is possible when the incumbent is not willing to risk conflict,  $E[W_A] < \bar{U}_A$ , but challengers can credibly threaten to go down this course of action:  $E[W_i] > \bar{U}_i + S'_i(C - F_i) - \delta L'_i R_i$  for both B and C.

The reason why a transition to democracy -rather than some form of protested transition- ensues is that in the subgame of no fraud opposition parties have no reward from falsely claiming to have suffered fraud:  $\bar{U}_i > \bar{U}_i - \delta L'_i M_i$ , given that  $L' > 0$  and  $M > 0$ . This is because moderate voters know in this full information scenario that a party is lying when it cries foul. That is good news for democrats, since this means that if the ruling party has to play a strategy of no fraud its behavior will be rewarded. The game with limited information below produces a different result where opposition parties can challenge clean elections.

2. *Conflictual Tutelary Autocracy*. If at least one of the opposition parties is not willing to risk conflict,  $E[W_i] < \bar{U}_i + S'_i(C - F_i) - \delta L'_i R_i$  for some  $i$ , a tutelary autocracy will emerge, provided the incumbent is better off making fraud,  $S'_F F > S'_F C + \delta L'_A L$ ; and the discounted value of the sum of available defectors (radical voters from both opposition parties, and the moderates of the incumbent) is higher than the value of the bribe from office for the party:  $\delta L'_i (R_i + R_j + L) \geq S'_i C$ . Tutelary Autocracy is always conflictual, because opposition parties have no incentives to coordinate in acquiescence given that opposition parties will be sanctioned by their radical voters if they acquiesce to the fraud:  $\delta L'_i R_i > 0$ .

3. *Transition to Democracy (through incumbent restraint)*. When the conditions of tutelary autocracy hold, except that the incumbent no longer finds it profitable to engage in electoral fraud, because the value of concession and lost loyalty is too high,  $S'_F F \leq S'_F C + \delta L'_A L$ , a transition to democracy emerges. Thus, beyond the “train crash” scenario that can bring about a transition to democracy, there is a different route, which is more of like a “velvet revolution.” Even when opponents are not willing to risk conflict, the autocrat must

compare the payoff from enforcing fraudulent elections to the payoff of cleaning up its act, which the structure of the game suggests will be rewarded by voters, and lead to strategic acquiescence on the part of the challengers. If the value of fraud becomes too small, the concessions to opponents prohibitively large, the future is not heavily discounted, and the legitimacy effect of retaining moderates is high, it is possible to have an autocratic incumbent willingly submitting itself to democratic rules. In this case the autocrat just finds that he is better served by democracy than by electoral fraud.

4. *Conflict*. This outcome emerges as equilibrium when the incumbent prefers the gamble of conflict to the a transition to democracy:  $E[W_A] \geq \bar{U}_A$ ; and opposition parties prefer the gamble of conflict to acquiescing with electoral fraud:  $E[W_i] > \bar{U}_i + S'_i(C - F_i) - \delta L'_i R_i$ . For Conflict to be the equilibrium of the game, *all* of the players must consider the pay-off they will obtain from a violent gamble to be higher than what they can obtain by following a different course of action. For obvious reasons, this condition is more likely to be true for the ruling party than for the opposition because the end result of the Conflict is likely to depend on the relative strength of each of the parties and on what the armed forces choose to do. If the autocratic party calculates that the armed forces will be able *and* willing to repress the opposition, it will probably choose to risk Conflict. However, if the ruling party fears it will lose the support of the armed forces if social peace is destroyed, it might decide to not risk conflict. The autocrat is not likely to risk Conflict unless its utility from playing by the democratic game is very low (i.e. it lost the elections overwhelmingly). The temptation to hold onto power by force might be enhanced by the electoral rules that determine how votes translate into seats. Presidential elections that are winner-take-all maximize the stakes of losing, increasing the autocrat's incentive to retain power by force.

Thus, one key quandary in the game of electoral fraud is that the ruling party can steal the elections because at least one of its opponents possesses strong incentives to play as “loyal opposition.” If the autocrat anticipates that one of the opponents will tacitly acquiesce to the fraud, he will rig the elections as long as the gain --in seats, votes or both-- it obtains from stealing the elections compensates the electoral loss fraud entails and the cost of “illegitimacy” for governing under fraud. This means that the game allows for the possibility that the autocrat commits fraud even winning, although the incentives to steal the elections increase when incumbents can actually lose power.

To illustrate the nature of the opposition’s dilemma, suppose that the ruling party chooses to commit fraud against both opposition parties but that the fraud hurts the stronger challenger B the most. The weaker challenger, party C, is then confronted with the decision to challenge the fraud that mostly affected its competitor and risk civil strife as a result, or to collude with the ruling party and tacitly acquiescing to the fraud.

Opposition parties competing against an autocratic ruling party thus possess mixed incentives: they seek to sanction the autocrats’ transgressions, but they also want to preserve their votes and legislative seats and this requires colluding with the autocrat. The game highlights that the autocrat will be more effective in co-opting one of its opponents as votes translate into more seats and as seats are more valuable, such as when they confer some real policy influence. However, even if under the dictatorship the legislature plays no role, opposition parties might find their seats attractive because of the spoils they confer (e.g., elite salaries, elegant cars or fancy trips).

Electoral rules also shape the opposition’s incentives. When office is divisible (as with legislative elections held under proportional representation rules or presidential elections that are held concurrently with the assembly race), the autocrat will better be able

to obtain the cooperation of one of its opponents by selectively offering legislative seats and some policy influence. The implication of this result is that proportional representation rules or concurrent presidential elections make the outcome of clean elections less likely, although elections are less likely to erupt into Conflict.

However, legislative seats and policy influence are not the only reason why the opposition has incentives to act as “loyal opposition.” The game underscores that electoral incentives are not well aligned to fight authoritarianism. Opposition parties are interested in building an electoral organization into the future and their response to the electoral fraud will also be shaped by the electorate’s expected reaction to their course of action. In the game, opposition parties that acquiesce to the electoral fraud get punished in the next elections by their radical supporters –these abandon them in favor of whichever opponent challenged the fraud. However, moderate and core voters will remain loyal even if their party colludes with the autocrat because the disutility caused by their party’s behavior is not enough to make them support a different alternative. Some of these voters would rather see the autocrat reelected than the other opposition party. Others simply do not care about fraud as much as they care about other issues such as taxation or social policy.

An implication of these results is that the more an opposition party’s electoral base is composed of radical voters and the more this party values the future, the higher the incentives to challenge fraud. However, if a party’s electoral base is disproportionately moderate or core, incentives will not be there to mobilize more forcefully against the fraud, because there will not be a high enough electoral punishment if they act as “loyal opposition.”

The composition of a party’s electoral base is shaped by voters’ distribution along the distributive and non-policy regime dimensions. The stronger the disagreements among

opposition voters along the distributive dimension, the higher the percentage of moderate and core voters who will tacitly endorse a “loyal opposition.” The number of radical opposition voters should increase as the political system becomes more polarized along the regime dimension. More polarization along the regime valence dimension implies that regime-related issues (human right abuses, corruption, insecurity, lack of economic growth, etc.) dominate over policy divisions. Suppose that the dictator is highly predatory –he rules by confiscating property, levying harsh taxation on his subjects, violating human rights and enriching himself and a small group of cronies. Opposition voters are likely to disagree on many grounds, but if the dictatorial nature of the regime is unambiguous and their lives are miserable under the current system, their disagreements are likely to be less important than their dislikes for the dictatorship. By contrast, when opposition voters and parties seriously disagree along the policy issue dimensions, it means that there will be a higher percentage of opposition voters for whom the autocrat is even better than the rival opponent. These disagreements will work to reduce the number of radical opponents. Thus, to entice the dictator from refraining to steal the elections, the opposition must possess a high enough number of radical voters who develop a strong dislike for the autocrat over and above the disagreements they might have on policy issues. Without radical voters, the opposition’s threat of rebellion necessary to entice the autocrat from restraining to steal the elections is less credible.

#### **4. The Game of Fraud with Limited Information**

Thus far I have assumed that voters know the actual election results. This assumption is problematic because, when elections take place under authoritarian conditions, the ruling party tends to control the electoral institutions in charge of organizing the

elections and there are few independent sources of information to verify the results. When there is no credible information about the actual election results, voters need to find ways to infer whether there was fraud or not and they will invariably receive mixed messages from the elite. This problem would call for a revised model of imperfect information, in which parties might be able to signal to voters, through their actions, whether fraud has taken place or not. Although much can be learned from such amendment to the previous game, even a signaling model can exaggerate the degree of information voters have regarding the existence of electoral fraud. Instead of presenting a signaling model, I present a bounded rationality setup from which one can gain insight into the problem of the game of fraud when voters have very limited information.

I posit that voters listen to what party elites declare and use this information to confirm their own preconceptions about the nature of the political regime. Most distrustful of the democratic credentials of the regime, radical opposition voters will not believe elections were clean unless *both* opposition parties accepted the results. More skeptical about allegations of electoral fraud, moderate opposition voters and moderate ruling party supporters do not believe there was fraud unless *both* opposition parties challenge the results. Core voters, for their part, will mimic elites from their own party –if party elites challenge the results, core supporters believe the elections were fraudulent, and if they acquiesce, core voters believe the elections were clean. In this game there is an extreme lack of information regarding the election results; and rather than assuming a great degree of voter sophistication –as in signaling models, in which equilibrium involves both rational strategic choices and consistency of beliefs–, I assume voters simply take cues from their parties as an informational shortcut to decide what the state of the world is.

These simple assumptions about how voters construct their loyalty imply that if only one opposition party acquiesces and the other challenges the results, radical opposition voters will believe there was fraud, even if the elections were clean. When only one opposition party claims fraud and the other acquiesces, moderate opposition voters will believe the acquiescing party and will cease to be loyal to the opposition party that claimed fraud, even when the elections were actually rigged. Core voters remain loyal and will believe what their party tells them. Such game reflecting limited voter information is presented in table 2.

**Table 2. Game of Limited Information**

PARTY A	PARTY B	PARTY C	
		Acquiesce	Protest
Not Fraud	Acquiesce	$\begin{matrix} \bar{U}_A \\ \bar{U}_B \\ \bar{U}_C \end{matrix}$	$\begin{matrix} \bar{U}_A + \delta L'_A M_C \\ \bar{U}_B - \delta L'_B R_B \\ \bar{U}_C + \delta L'_C (R_B - M_C) \end{matrix}$
	Protest	$\begin{matrix} \bar{U}_A + \delta L'_A M_B \\ \bar{U}_B + \delta L'_B (R_C - M_B) \\ \bar{U}_C - \delta L'_C R_C \end{matrix}$	$\begin{matrix} E[W_A] \\ E[W_B] \\ E[W_C] \end{matrix}$

PARTY A	PARTY B	PARTY C	
		Acquiesce	Protest
Fraud	Acquiesce	$\begin{matrix} \bar{U}_A + S'_F (F - 2C) \\ \bar{U}_B + S'_B (C - F_B) \\ \bar{U}_C + S'_C (C - F_C) \end{matrix}$	$\begin{matrix} \bar{U}_A + S'_F (F - C) + \delta L'_A M_C \\ \bar{U}_B + S'_B (C - F_B) - \delta L'_B R_B \\ \bar{U}_C - S'_C F_C + \delta L'_C (R_B - M_C) \end{matrix}$
	Protest	$\begin{matrix} \bar{U}_A + S'_F (F - C) + \delta L'_A M_B \\ \bar{U}_B - S'_B (F_B) + \delta L'_B (R_C - M_B) \\ \bar{U}_C + S'_C (C - F_C) - \delta L'_C R_C \end{matrix}$	$\begin{matrix} E[W_A] \\ E[W_B] \\ E[W_C] \end{matrix}$

The game presented in normal form shows the subgame of no fraud in the upper panel, and the subgame of fraud in the lower panel. The basic differences between the payoffs of this game, compared with the previous discussion, can be summarized as follows: 1) regardless of whether there is fraud or not, radical voters cease to be loyal to any opposition party which acquiesces to the election results and will shift loyalty to the party that challenges the elections in the following round. 2) Moderate opposition voters abandon a party that challenges the results regardless of whether there is fraud or not. In this particular example, moderate voters switch support to the autocrat. 3) Since incumbent moderates do not believe allegations of electoral fraud unless both opposition parties challenge the results, in this second game they do not punish the autocrat for committing fraud because the outcome where they can believe the opposition's allegations of fraud implies the eruption of Conflict, where votes no longer count. Thus, 3) when both parties challenge the incumbent, conflict emerges, irrespective of the material reality of fraud.

### *1) Contesting Clean Elections*

The first implication of introducing limited voter information into the game is that elections invariably become more contentious and violence-prone. Recall that if perfect voter information is assumed, opposition parties never contest clean elections because moderate opposition voters punish slandering. However, if the institutional setting is such that voters can't know what happened in the elections, opposition parties might want to contest clean elections. In this game of limited voter information, even when parties want to avoid the conflict outcome and the incumbent refrains from electoral fraud, a "pure democratic outcome" is not an equilibrium when  $R_C > M_B$  and  $R_B > M_C$ . If the opposition

electorate is disproportionately radical, elections will involve allegations of electoral fraud and post-electoral clashes, regardless of whether the autocrat commits electoral fraud or not.

This strategic situation turns into a Chicken Game for the opposition when the electorate is disproportionately radical. Party B and C *both* possess intense incentives to challenge the results of clean elections. However, under these conditions, if both opposition parties challenge the results, Conflict will result. There are hence two equilibria in this game (Party B acquiesces and Party C challenges and Party B challenges and Party B acquiesces). This Chicken game is played out only if the concessions granted to acquiescing parties under fraud have a greater value than the utility of fraud to the autocrat, which is a condition that is not very likely to be fulfilled, unless the autocrat can win elections overwhelmingly so that the benefit of fraud is marginal.

A second implication is that the ambiguity about the extent of the fraud makes opposition coordination against electoral fraud harder. Suppose that there is fraud and that party B challenges the results, while party C acquiesces. In the game with perfect voter information, opposition voters never punish a party that contests the results of fraudulent elections. However, in the game with imperfect voter information, moderate voters desert the party that challenged the fraud in isolation. The implication is striking: in the game of imperfect voter information the party that challenges a real electoral fraud is invariably punished by its moderate voters, who will believe the autocrat's claim that elections were clean when he bought the other opposition party into acquiescence.

To illustrate this dilemma, consider the following case where the autocrat steals legislative seats from Party B and C so as to retain the legislative supermajority. The opposition parties must consider challenging the results or play as "loyal opposition." If Party B challenges the results and Party C acquiesces, Party B will be punished in the next

electoral round by its moderate voters, although it will keep the support of its radical supporters. If Conflict is a dominated strategy for all players, the equilibria in the game depend on the distribution of voter types. When  $R_C > M_B + C$  and  $R_B > M_B + C$  both opposition parties possess strong incentives to mobilize against the fraud, yet only one ends up contesting the elections, as in the Chicken game above, only that in the fraud subgame. When  $R_C < M_B$  and  $R_B < M_c$ , both opposition parties acquiesce to fraudulent elections. Recall that this form of “tutelary autocracy” where both challengers acquiesce was not an equilibrium outcome in the game with perfect voter information. Here it constitutes an equilibrium only because moderate voters believe the autocrat’s claims of electoral transparency. Thus, the opposition’s allegations of electoral fraud, even when accurate, can produce the paradoxical result of discouraging support for these parties. The result only holds because of the lack of voter information about whether there was fraud. A powerful reason why dictators aspire to control information dissemination and the news media is that lack of information about regime transgressions makes coordination against them harder.

When, then, would an autocrat willingly self-restrain by delegating the organization and monitoring of elections to an independent electoral body? My approach provides an answer to this crucial question. The games demonstrate that when perfect voter information about the election results exists, opposition parties never challenge the results of clean elections. The same is not true in the game of imperfect voter information. In this second game opposition parties possess incentives to challenge clean elections when their electoral base is disproportionately radical. If the autocrat faces an intransigent or radical opposition in the sense described above, elections create a dilemma for the autocrat: the opposition will refuse to endorse the electoral process by contesting the elections regardless of whether there is fraud or not.

The autocrat's dilemma can't be solved simply by promising to uphold clean elections because this promise is not fully credible: if the autocrat loses, it will almost invariably be better off rigging the elections. The only way to commit an intransigent opposition to the electoral process is if the autocrat credibly ties its hands ex ante to not commit fraud. One way of doing this is by delegating the organization of the elections to an independent electoral commission that is trusted by all major political players and that is not controlled by the autocrat. In delegating the organization of the elections to this type of institution, the autocrat can commit the opposition to the elections. Who is going to follow them into the street if there is certainty that the elections were clean?

However, the incentives to delegate the organization of the elections to an independent electoral commission arise only when the autocrat can reasonably expect to win clean elections and he wants to evade a violent post-electoral conflict. If the autocrat anticipates losing, he will be better off retaining his control of the electoral process that will allow him to negotiate the vote behind closed doors. An independent electoral commission is thus hard to obtain—in the world of competitive autocracies, there are many “electoral commissions” but most are token institutions controlled by interior ministries. A truly independent electoral commission removes the autocrats' ability to negotiate the vote behind closed doors and can only arise when each of the major political players is given equal representation in its board.

An independent electoral commission can play various fundamental roles. First, the commission can provide clear information about the actual election results, which can work to facilitate opposition coordination against the autocrat's transgressions. Second, the independent electoral commission also precludes the autocrat from negotiating the vote behind closed doors, which allows him to selectively co-opt the “loyal opposition”. Third, an

independent electoral commission can serve to commit an intransigent opposition to the electoral process and reduce post-electoral violence. Who will follow the opposition into the streets to protest the elections when it is unambiguous to all voters that the autocrat did not steal the elections? Of course, this argument only works if the electoral commission is truly credible and independent.

#### **4. Conclusion**

This paper studied the politics of autocratic elections and electoral fraud. It builds on Weingast's (1997) seminal contribution about how dictators profit from coordination dilemmas to transgress citizens' rights and why democracy presupposes some societal consensus about the appropriate limits of the state. In his approach, however, elections play no fundamental role in shaping the strategic interaction between the autocrat and his opponents. Why, that is, elections are held and how these shape the players' strategic interaction is not clear.

Fearon (2000) suggests a reason why elections are chosen as instruments to allocate power. "In a democratic equilibrium, if the ruling party cancels or blatantly rigs the elections, out of power factions infer that the terms of the bargain are about to be unilaterally changed to their advantage. Because the signal is public, like a traffic light, they gain assurance that other out-of-power individuals or factions will also protest."(p. 12). Thus, in this approach the convention of holding elections as such is valuable primarily as a device for coordinating rebellion against would-be dictators –if elections are rigged, the presumption is that everyone would rebel.

This approach would hardly make sense of why societal coordination against electoral fraud so often fails. Fearon (2000) is aware of this problem when he mentions the

problem of what he calls partially rigged elections, where coordination fails because the “signal is not public and unambiguous.” However, in reality most fraudulent elections are “partially rigged” not only because there is often imperfect voter information about whether there was fraud or not, but *because voters do not all assess electoral malpractice in an equally objective manner*. Voters most often judge claims of electoral fraud through their own partisan lenses, and their assessments about the severity of these accusations are largely shaped by how they stand with respect to the existing political institutions. This is especially the case in authoritarian settings, where there is ample disagreement about the value of elections. Although all might agree that these should in principle be clean, there is significant heterogeneity with respect to the relative importance of this principle in relation to other issues.

My approach introduces a more reasonable degree of heterogeneity with respect to how voters assess electoral misconduct and how allegations of electoral fraud weight in relation to other issues voters might care about such as taxation, social policy, or ethnicity. “Radical voters” are extremely intolerant of electoral misconduct and will not hesitate to punish a party that fails to mobilize against it. “Moderate voters,” by contrast, are more intolerant to unjustified accusations of electoral fraud than to autocratic abuses because they are concerned about political stability. “Core opposition voters”, for their party, might truly object electoral malpractice but they would not punish their party for acting as “loyal opposition” simply because the disutility of acquiescing to the electoral fraud does not outweigh the disutility they would obtain from supporting a different opponent that might be less tolerant to electoral corruption. An important issue to highlight is that what leads these core voters not to punish the electoral fraud is not necessarily that they disagree about the desirability of counting votes fairly but that other distributive issues that are relevant to

them preclude them from punishing their party for acquiescing to the fraud by switching support to the other opponent. These mean that electoral incentives are not necessarily well aligned to fight authoritarianism because only radical voters can credibly punish an opposition party for failing to mobilize against the electoral fraud.

Thus, my results show that even if there is public information about the electoral fraud and some minimal “social consensus” about the value of upholding legality, opposition parties competing against an autocrat will have a hard time coordinating against electoral fraud. What is needed to sanction transgressions is a high enough number of radical voters who develop an unwavering desire to get rid of dictatorial abuses and that they place this desire above and over the disagreements they might have on other distributive or ethnic issues and their value of political stability.

Another key reason why opposition coordination is hard to achieve, I argued, is that the dictator can always offer legislative seats and possibly some policy influence to the “loyal opponent,” which will have to choose between the pay-off of a gamble of a rebellion if it unites with the opposition camp to challenge the fraud, or to collude with the autocrat to defend its institutional pay-offs. This result parallels Gandhi and Przeworski’s (2006), who argue that dictators can co-opt potential opponents by offering limited policy influence and a place in the legislature. I move beyond their approach, however, in suggesting how dictators can further use these institutional pay-offs to divide their opponents and preclude them from coordinating against all sorts of electoral malpractice.

My approach also makes explicit the implications of various informational settings in the game of fraud. The assumption that it is always unambiguous when the ruling party rigs elections is highly questionable, especially in authoritarian settings where the autocrat controls every aspect of the organization of the elections and there are no independent

sources of information to verify the fraud. Electoral fraud is often carried out in secret and is most of the time negotiated with parts of the opposition behind closed doors. Autocrats often control the mass media, which means that the oppositions' statements about the electoral fraud might not be broadcasted and that the results of opinion polls might be kept secret.

My theory allows for basically two ways to democratize an electoral authoritarian regime. The first possibility is that the authoritarian political institutions remain basically unchanged until the autocrat is defeated and is forced to leave office peacefully because the opposition can credibly threaten to rebel otherwise. This was the transition route followed, for example, in Ukraine or in Kenya and Senegal. In each of these cases, the opposition formed an electoral alliance behind a single candidate rather than competing as separate players.

These cases have the common element that the opposition parties endorsed a single candidate, which meant that it was able to unite before playing the game of electoral fraud. To capture the strategic situation of these particular cases, the "game of electoral fraud" can be easily transformed into a two player game by erasing the pay-offs and strategies to the third player. It can easily be shown that the transition outcome is easier to obtain in the two player game because the opposition can more credibly threaten a rebellion if the autocrat steals the elections. The threat of rebellion is more credible simply because the autocrat can't divide its opponents by selectively offering legislative seats to those who acquiesce with the electoral fraud. Another difference between the two and three player games is that in the former voters will receive unambiguous signals from the opposition elite about whether there was fraud or not, whereas in the latter voters will almost invariably hear different stories depending on whether a party chooses to acquiesce or to challenge the elections. A

third difference between a three and a two player game is that in endorsing a common candidate, opposition elites implicitly give up the desire to attract votes for their individual partisan organizations in the next electoral round, making all the opposition players play the game as a one-shot deal.

My approach suggests a second, more tortuous route to democratization that entails the transformation of the existing electoral institutions such that the autocrat credibly ties his hands to not commit electoral fraud. This was the Mexican democratization route (Magaloni, 2006). My theory argues that an autocratic ruling party will create institutions to restrain its ability to commit fraud when it knows it can go on winning elections cleanly and an intransigent opposition can credibly threaten it will rebel against the election results, regardless of whether there is fraud or not, unless the ruling party creates such institutions. After these types of “political pacts” the ruling party can go on winning elections, yet having established the conditions for elections to take place under democratic conditions.

An independent electoral commission can play a powerful role in democratizing an electoral authoritarian regime. This type of institution can provide clear information about the actual election results to facilitate opposition coordination against potential ruling party transgressions. An independent electoral commission also serves to commit an intransigent opposition to the electoral process and to discourage post-electoral violence. To work as a guarantor of electoral transparency, the electoral commission must be truly independent from the government; both the ruling party and the opposition must have equal representation in its board; and it must be given enough power to control the electoral process. However, this set of institutions only comes about because a political bargain is struck between the ruling party and the opposition when the former comes to realize that unbiased elections constitute the best means to pursue its goals.

My results are consistent with Maravall and Przeworski (2003), who offer the following, highly persuasive view of how that rule of law emerges: “Rule of law emerges when, following Machiavelli’s advice, self-interested rulers willingly restrain themselves and make their behavior predictable in order to obtain a sustained, voluntary cooperation of well-organized groups commanding valuable resources” (p. 3).

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