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# THE TRANSITION FROM AUTHORITARIAN RULE

#### A GAME THEORETIC APPROACH

#### **Daniel Sutter**

#### **ABSTRACT**

I investigate conditions under which a regime and opposition can negotiate the democratic transformation of an authoritarian government using an extensive form game of perfect information. An early final decision by the regime to hold elections, which can be accomplished by delegating this decision to reformist softliners, facilitates transition. The relationship between regime strength and the potential for a negotiated democratization is quite complicated. The weakening of a regime as it relaxes repression, for instance, can block a negotiated transition: a regime can be strong enough to hold on to power but too weak to negotiate. The possibility of a coup by regime supporters following an electoral defeat can, but does not necessarily, foreclose a peaceful transition.

KEY WORDS • democratization • game theory

# 1. Introduction

On 25 April 1974, elements of the Portuguese military overthrew the Caetano regime, ending a dictatorship established in the early 1930s. Unbeknownst at the time, this coup was the first ripple of a rising tide that first spread across Southern Europe, then swept to Latin America and Asia before crashing over the Iron Curtain to reach Eastern Europe. Samuel Huntington (1991) has labelled this tide the Third Wave of democratization. By 1994 more than 30 countries had been swept up in the flood.

The collapse of authoritarian regimes has been the most significant political event of the past 25 years. The scholarly analysis of the Third Wave emphasizes the role of a small number of elites in a negotiated, peaceful transition, in contrast to the previous literature on economic and social prerequisites of democracy. Game theory is an appropriate tool for examining strategic behavior in small numbers situations.

I develop a simple yet general extensive form game of the possible breakdown of authoritarian rule. A transition occurs in two stages in the game,

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liberalization and democratization, with the former a precondition for the latter. Both successful liberalization and democratization require the participation of both the regime and the opposition. Neither player alone can negotiate a transition to democracy and each side possesses alternatives to negotiation. Elections are only one possible outcome of the game. The probable outcome of the founding election determines the value of holding elections to each player. I examine conditions under which the equilibrium of the transition game involves holding elections. Pacts between the regime and the opposition establish the electoral rules (the method of selecting legislators, direct or indirect election of the chief executive, restrictions on parties, and so on), which influence the outcome of the founding election.

I model both the regime and opposition as unitary actors; Przeworski (1991), Colomer (1991, 1995) and Cohen (1994) consider interaction *among* factions on each side (hard-liners and reformers in the regime, moderates and radicals in the opposition). My research complements their efforts by focusing on the conditions under which *potential* for agreement exists, and how aspects of interaction (order of moves, a possible coup d'état) affect this potential. I employ a game of perfect information, which is consistent with the emphasis on potential gains from transition. Unobserved actions or asymmetric information complicate the negotiation of a pact, not the existence of a potential deal.

My simple game yields several insights on transitions. Dahl (1971) takes as axiomatic that an increase in the cost of repression increases the likelihood of polyarchy. I find a complicated relationship between regime strength and prospects for a transition. A weak regime accepts less favorable pact terms only if it makes a final decision to hold elections early in the transition. An earlier final decision by the regime to proceed or maintain the status quo improves the prospects for democratization. I also illustrate the disruptive potential of the 'liberalization effect', the strengthening of the opposition which occurs when an authoritarian regime relaxes repression and begins a political opening. Due to the liberalization effect a regime can be strong enough to maintain power but too weak to liberalize.

The organization of this paper is as follows. The next two sections present and analyze the Basic Transition Game. A democratization equilibrium does not always exist. A strong authoritarian regime (given a precise meaning) is more likely in this game to negotiate a transition to democracy. Section 4 allows the regime to commit itself to hold elections relatively early in the transition, perhaps by delegating this decision to a reformist president. The regime can benefit by making its final decision early in the process. Section 5 considers a possible coup d'état by the regime. A coup does not prevent a democratic transition if it succeeds with a sufficiently small probability. Democratization is less likely when the regime stages a coup following an election loss. A regime unable to refrain from staging a coup can be too strong to democratize and may prefer to dispense with its coup option. Section 6 summarizes my results and

suggests directions for future research. Examples relating my model to recent transitions are interspersed throughout.

#### 2. The Basic Transition Game

An authoritarian regime confronts an opposition in the Basic Transition Game. The game incorporates two essential features of transitions. First, a negotiated transition occurs in two phases, liberalization and democratization (O'Donnell and Schmitter, 1986; Stepan, 1988; Przeworski, 1991). Liberalization involves a relaxation of repression, release of political prisoners, return of political exiles, reduction of media censorship, introduction of legal safeguards, and perhaps economic reforms (Stepan, 1988, p. 6). I employ a procedural definition of democracy emphasizing competitive elections for top offices, consistent with O'Donnell and Schmitter (1986) and Przeworski (1991). Liberalization precedes and can occur without democratization (Stepan, 1988: 6). Second, a negotiated transition requires the participation of both the regime and opposition, as in Przeworski (1991: 61–78). Democracy can emerge as a result of unilateral action by either side, but negotiations require mutual consent.

I model both the authoritarian regime and opposition as single players, simplifying analysis but relegating factional tensions to the background. Discussions of transitions often identify two factions on each side: hard-liners and reformers in the regime, radicals and moderates in the opposition. The generality of payoffs for the regime and opposition allow inclusion of extreme and moderate views on each side. The question from a modelling standpoint is how many factions to include as players in the game. Some game theoretic models have included two players (no factions; Gates and Humes, 1997), and others four players (two factions; Colomer, 1995). Several factors weigh in the decision to restrict attention to two-player games. Without denying differences amongst factions, the primary divergence of interest must be between the regime and opposition. My interest is whether the two sides can reach an agreement on election rules, which makes the simplification of unitary actors on each side reasonable.

Incorporation of factional players would complicate the game and might add little to the analysis. For instance, suppose extreme factions (hard-liners within the regime, radicals in the opposition) always oppose a negotiated transition. If so, these factions are not strategic players – their action is independent of the choices of other players. The opposition of extremists may prevent a negotiated transition, but this simply means the interaction modelled here never occurs. On the other hand, suppose extremists will negotiate but demand more favorable terms than the moderates. The number of groups which must agree for a peaceful transition to proceed determine which factions are pivotal. If all four groups must consent, the extreme groups constrain the negotiations; the moderates will

necessarily agree. Moderates are pivotal and the extremists irrelevant if two groups are sufficient to allow transition. Finally, a preliminary agreement on the part of the regime or opposition might precede the interaction modelled here. So the current game could apply potentially to many different transition situations.

The other major modelling choice involves information structure. I employ a game of complete information with no uncertainty regarding the payoff structure. The players do not know the exact outcome of an election or attempt by the opposition to provoke a regime collapse (or the outcome of a coup attempt in Section 5); a move by nature determines these events. Nature's moves introduce an element of uncertainty into the game. The players, though, know each other's payoffs and have common beliefs about the probability moves by nature. Alternatively some formal models of transition (Shiu and Sutter, 1996; Gates and Humes, 1997) employ incomplete, asymmetric information games. My emphasis here is on the possibility of a negotiated transition and the effect of strategic factors like the order of moves on the potential for a pact, which makes a game of complete information appropriate. Existence of a potentially beneficial pact does not imply that the regime and opposition will successfully negotiate a transition. Cultural and historical factors, which are difficult to include in a formal model, could prevent a transition.<sup>2</sup> Incomplete information is a well-known source of bargaining inefficiencies. My focus here is on the existence of what we could call gains from transition, analogous to gains from trade in a market transaction. The existence of gains from transition is a necessary but not sufficient condition for a pact; even the most skilled negotiators, however, cannot succeed in the absence of gains from transition.3

I consider transitions stimulated primarily by domestic as opposed to international forces, consistent with Rustow (1970). International forces, however, can affect the regime's payoffs in the game, as discussed later. I abstract from economic and social conditions, consistent with the recent transitions literature. Earlier research focused on the correlates of democracy (Lipset, 1959).<sup>4</sup>

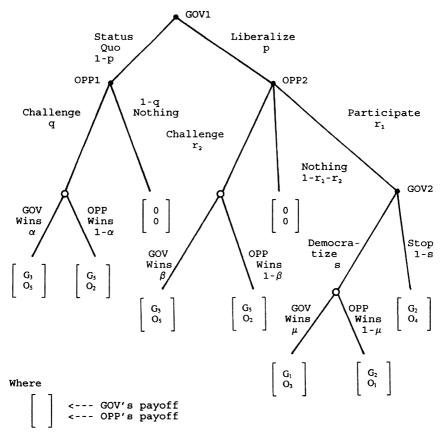
Figure 1 presents the extensive form of the Basic Transition Game between the authoritarian government (GOV) and the opposition (OPP). The structure of the game is reasonably straightforward. Each player must take a positive action

<sup>1.</sup> O'Donnell and Schmitter (1986) stress the role of preliminary pacts in general while Mainwaring (1986) and Gillespie (1991: 141–59) discuss their role in the Brazilian and Uruguayan transitions respectively.

<sup>2.</sup> For example, many scholars suggest that the experience of the Second Republic and the Civil War increased the willingness to compromise of participants in the Spanish transition.

<sup>3.</sup> Consider an analogy to the sale of an automobile. The buyer's willingness to pay for the car must exceed the seller's reservation price for gains from trade to exist. A sale will not occur in the absence of gains from trade.

<sup>4.</sup> Weiner (1987) and Remmer (1991) argue that economic and social conditions have proven of dubious value in understanding recent transitions. Haggard and Kaufman (1995) emphasize the impact of economic crises.



Rankings:

$$G_1 \ge G_2 \ge 0 > G_3 > G_4 > G_5$$
  
 $O_1 > O_2 > 0 > O_3 > O_4 > O_5$  or  $O_1 > O_2 > O_3 > O_4 > 0 > O_5$ 

Figure 1. The Basic Transition Game

(Liberalize for GOV, Participate for OPP) for the first phase of the transition to succeed. In addition, OPP can unilaterally attempt to provoke the collapse of the authoritarian regime (Challenge). Challenge might entail street protests, a general strike, or armed conflict, and if successful results in a transfer of power. GOV moves first and either Liberalizes or does Nothing. OPP has two decision nodes, designated OPP1 and OPP2, corresponding to GOV's initial move. OPP can Challenge or do Nothing at each information state; the latter move ends the game in each case and leaves the status quo unchanged. If GOV initiates reform OPP has a third choice, Participate. Nature determines the outcome if OPP attempts a Challenge. Let  $\alpha$  and  $\beta$  be the probabilities that GOV will defeat

OPP's Challenge in the status quo and after liberalizing respectively. The relaxation of repression with liberalization facilitates a Challenge by OPP, so  $\beta \le \alpha$ . The probabilities  $\alpha$  and  $\beta$  allow characterization of regime strength. Liberalization is complete once OPP Participates. If OPP Participates, GOV chooses between Stop Reform, which ends the game with the regime liberalized, and Hold Elections, in which  $\mu$  is the probability that GOV wins the election. Stepan (1988), among others, emphasizes liberalization can occur without democratization. GOV's Stop Reform move incorporates this possibility.

Pact negotiations set the electoral laws and determine, along with citizen preferences, the probability outcome of the election,  $\mu$ . I do not model the negotiation of the pact determining these rules. Instead I treat  $\mu$  as a parameter and focus on the minimum and maximum values that GOV and OPP will accept to proceed with democratization. This is consistent with my emphasis on the existence of gains from transition; a negotiated transition is possible if values of  $\mu$  exist for which both GOV and OPP choose elections. Many different bargaining games could represent pact negotiations. For example, GOV might offer OPP a set of rules on a take-it-or-leave-it basis. Or the sides might make sequential offers in a model where rejecting the current offer is costly. Since the appropriate bargaining model is not obvious and may well differ across transitions, my general approach has advantages.

Studies of the Third Wave distinguish between transitions by negotiation and regime replacement (O'Donnell and Schmitter, 1986; Share and Mainwaring, 1986; Di Palma, 1990; Karl and Schmitter, 1991; Huntington, 1991). We can easily distinguish these paths in the game in Figure 1. A negotiated transition corresponds to the path of play reaching the election node of the game tree. Strictly speaking, reaching this node is neither a necessary nor a sufficient condition for the emergence of democracy. Democracy can result from the collapse of an authoritarian regime, the OPP wins outcome under Challenge in Figure 1, if factions within the opposition insist on elections to make decisions within the new regime. But an authoritarian regime might emerge if OPP consists of a single dominant faction. Without significant elaboration of the model we cannot be confident that a successful Challenge would lead to a democratic successor regime. And values of  $\mu$  acceptable to both sides may require electoral practices considered undemocratic by international standards. Reaching the elections node completes a successful transition to democracy. Events following the first election involve democratic consolidation.<sup>5</sup> Przeworski (1991: 51–4) warns that assuming a transition's final destination is democracy can bias analysis. My game avoids this bias since elections are only one possible outcome; liberalization, replacement, and maintenance of the status quo are also possible.

<sup>5.</sup> Di Palma (1990) distinguishes transition and consolidation in this manner. Section 5 considers a regime coup following the election, and so addresses the issue of consolidation.

An opening involves potential risk for both sides. For the regime, relaxing repression facilitates a potential Challenge by OPP. The weakening of the regime represented by  $\alpha-\beta$  I call the liberalization effect, and presents a potential obstacle to transition. Participation by the opposition allows the regime to stop the transition short of democratization. OPP cannot play their Challenge option after choosing Participate at OPP2; agreement to play by the transition's rules might involve dismantling the capacity for terrorist operations or ending a rural insurgency.

Utility payoffs are assigned the symbols in Figure 1.  $G_i$  and  $O_i$  are the payoffs of GOV and OPP respectively; subscripts give the ordinal rank of the payoffs (1 is best). Each player's status quo payoff is normalized to zero. I consider some variations on payoffs which correspond to different factions.

GOV ranks the outcomes from best to worse as follows: winning a contested election, liberalizing but not holding elections, the status quo, defeating OPP's Challenge, losing an election, being ousted by OPP's Challenge. GOV prefers holding power to relinquishing it. Defeating a Challenge is costly; GOV prefers the status quo, which attains the same end without the costs. Many scholars have pointed out possible gains to an authoritarian (particularly military) regime from a transition, which might include reduced costs of repression, greater popular support due to legitimating rule, and increased foreign assistance. If such gains exist, we have  $G_1 > G_2 > 0$ . Alternatively, liberalization but not democratization could yield gains,  $G_1 = G_2 > 0$ , or the regime might not value reform at all,  $G_1 = G_2 = 0$ . These latter rankings might correspond to hard-liners. Typically, losing an election is less costly than losing a revolution because democracy involves protection of basic rights and the electorally defeated can continue to compete for office, which suggests  $G_4 > G_5$ . But prosecution of human rights violations under the authoritarian regime could mean  $G_4 = G_5$  for the regime leaders.

I assume that OPP prefers gaining power to the status quo, and winning an election is less costly than Challenge, so  $O_1 > O_2 > 0.6$  An unsuccessful challenge is OPP's worst outcome. I allow two seemingly plausible rankings of electoral defeat, liberalization and the status quo. Relaxed repression and the opportunity to organize and compete in elections benefit OPP, in which case  $O_3$ ,  $O_4 > 0$ . But these events also benefit GOV and could possibly worsen OPP's relative position, which suggests  $O_3$ ,  $O_4 < 0$ . For example, a regime strengthened by an electoral mandate might implement a legislative program contrary to OPP's interests. A moderate opposition might have  $O_3$ ,  $O_4 > 0$  while radicals would have  $O_3$ ,  $O_4 < 0$ .

The following probabilities describe the players' behavioral strategies in the game. GOV assigns probability p to Liberalize at GOV1 and s to Democratize at GOV2. OPP assigns probability q to Challenge at OPP1 and  $r_1$  and  $r_2$  to Participate and Challenge respectively at OPP2.

<sup>6.</sup> If the costs of a successful Challenge are sufficiently large that OPP prefers the status quo,  $O_2 < 0$  and Challenge is never a viable option for OPP.

#### 3. Solution of the Basic Game

I solve for the subgame perfect equilibrium (SPE) of the Basic Game. A subgame perfect equilibrium of an extensive form game induces a Nash equilibrium in every proper subgame (Mas-Colell et al., 1995: 274–82). In a game of perfect information an SPE requires each player to choose the action at each decision node which yields the highest payoff given all subsequent equilibrium actions. Subgame perfection rules out noncredible threats off the equilibrium path of play. I consider only pure strategy equilibria; in a game of perfect information, players employ mixed strategies only when indifferent between two actions. I assume indifferent players proceed with the transition or do not challenge the regime.

My main concern is SPEs which reach the elections node, which I henceforth call democratization equilibria. The game is solved backward. Appendix 1 contains details of the solution of this game. GOV chooses Democratize on its second move if their probability of winning the election,  $\mu$ , is greater than or equal to  $\mu^g$  as defined in Table 1. Table 1 presents all the critical values of  $\alpha$ ,  $\beta$ ,  $\mu$  (and later  $\delta$ ) in this paper.

Next consider OPP's choice between Challenge and Nothing at OPP1 and OPP2. OPP Challenges only when the probability GOV wins is sufficiently

Game	Variable	Symbol	Formula	
Basic	α,β	O*	$O_2/(O_2-O_5)$	
	β	$\beta^{\circ}$	$(O_2 - O_4)/(O_2 - O_5)$	
	μ	$\mu^{g}$	$(G_2 - G_4)/(G_1 - G_4)$	
		$\mu^{on}$	$O_1/(O_1-O_3)$	
		$\mu^{\infty}$	$[O_1 - (1-\beta) \cdot O_2 \ \beta \cdot O_5]/(O_1 - O_3)$	
Delegation	μ	$\mu^{gc}$	$[\alpha \cdot G_3 + (1-\alpha) \cdot G_5 - G_4]/(G_1 - G_4)$	
		$\mu^{\tt gn}$	$-G_{4}/(G_{1}-G_{4})$	
Potential Coup	δ	$\delta^{g}$	$(G_4 - G_5)/(G_3 - G_5)$	
	μ	$\mu^{\text{occ}}$	$\frac{(\beta - \delta) \cdot (O_2 - O_5)}{(1 - \delta) \cdot O_2 + \delta \cdot O_5 - O_3}$	
		$\mu^{\rm ocn}$	$\frac{(1-\delta)\cdot O_2 + \delta\cdot O_5}{(1-\delta)\cdot O_2 + \delta\cdot O_5 - O_3}$	
		$\mu^{gcc}$	$\frac{(\alpha - \delta) \cdot (G_3 - G_5)}{G_1 - \delta \cdot G_3 - (1 - \delta) \cdot G_5}$	
		$\mu^{gen}$	$\frac{-[\delta \cdot G_3 + (1-\delta) \cdot G_5]}{G_1 - \delta \cdot G_3 - (1-\delta) \cdot G_5}$	

**Table 1.** Critical Values of  $\alpha$ ,  $\beta$ ,  $\mu$  and  $\delta$ 

small; the cut-off value of  $\alpha$ ,  $\beta$  at OPP1 and OPP2 is  $O^*$ . The relationship between  $\alpha$ ,  $\beta$  and  $O^*$  provides a measure of regime strength. Consider the three possible cases: (a)  $\alpha$ ,  $\beta < O^*$ ; (b)  $\alpha \ge O^* > \beta$ ; (c)  $\alpha$ ,  $\beta \ge O^*$ . GOV is strong in case (c) since it defeats Challenge with sufficient likelihood to deter OPP. GOV is weak in case (a) since OPP considers a unilateral attempt to force a regime change worth the risk. The regime initially deters Challenge in case (b) but Challenge becomes possible with liberalization. OPP Challenges at OPP1 if  $\alpha < O^*$ ; otherwise they do Nothing.

OPP's choice at OPP2 depends on GOV's decision to hold elections and the ranking of Challenge and do Nothing. OPP chooses Participate when GOV holds elections if OPP's probability of winning the election is sufficiently high; this sets an upper bound on  $\mu$  for democratization. The maximum value of  $\mu$  for which OPP Participates is  $\mu^{on}$  when Nothing is the relevant alternative and  $\mu^{oc}$  when Challenge is the relevant alternative. Note that if OPP prefers losing an election to the status quo, OPP Participates even if GOV wins the elections for certain. Moderates in the opposition will allow the regime relatively favorable election terms.

GOV Liberalizes at GOV1 if OPP Participates; GOV is indifferent or prefers to maintain the status quo if OPP does otherwise at OPP2. Proposition 1 establishes conditions for a democratization equilibrium.

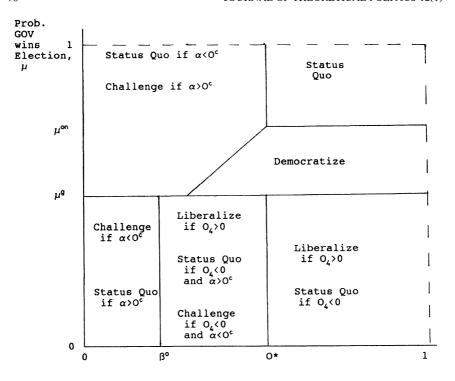
PROPOSITION 1. The subgame perfect equilibrium of the Basic Transition Game involves democratization if the outcome of the election satisfies

- (a)  $\mu^g \le \mu \le \mu^{\infty}$  if  $\beta < O^*$ ; or
- (b)  $\mu^g \le \mu \le \mu^{on}$  if  $\beta \ge O^*$ .

Figure 2 illustrates the dependence of the equilibrium on parameters  $\beta$  and  $\mu$ ;  $\beta$  is plotted on the x-axis and  $\mu$  on the y-axis. A pact establishes the electoral rules and hence  $\mu$ ; given the other parameters of the game, as long as democratization occurs for some values of  $\mu$ , political leaders could possibly negotiate a transition. Figure 2 indicates when democratization is possible. To see this, project vertically from a value of  $\beta$  on the x-axis. If a portion of the Democratize region is intersected, a negotiated transition to democracy is possible. Figure 2 assumes a democratization equilibrium exists for at least some values of  $\beta$  and  $\mu$ , and while representative, is only one possible pattern.

Can the conditions for GOV and OPP to accept elections be satisfied simultaneously? The conditions on  $\mu$  cannot be compared directly since they involve the two players' utility payoffs. A democratization equilibrium does not always exist; in particular, a negotiated transition is impossible when transition is a zero sum game.<sup>7</sup> Several factors affect the existence of gains from transition.

<sup>7.</sup> Let  $G_1 = a = -O_3$ ,  $G_2 = b = -O_4$ , and  $O_1 = c = -G_4$ ;  $\mu^g = (b+c)/(a+c)$  while  $O_1/(O_1 - O_3) = c/(a+c)$ . Democratization requires  $\mu > (b+c)/(a+c)$  and  $\mu < c/(a+c)$ , which is impossible.



Probability liberalizing GOV defeats Challenge,  $\beta$  **Figure 2.** Equilibrium of the Basic Transition Game

- 1. The regime's strength after liberalizing. Examination reveals that OPP demands better terms in a pact when Challenge is the alternative to Participate. And since  $\mu^{oc}$  increases with  $\beta$ , further weakening of the regime beyond  $O^*$  raises OPP's demands, as the positively sloped portion of the upper bound on the Democratize area in Figure 2 illustrates. Note further that the regime's strength after liberalizing is relevant to OPP's decision to participate, illustrating the disruptive potential of the liberalization effect.
- 2. The regime's payoffs from liberalization and winning a contested election. The regime gains  $G_2$  from a successful liberalization and an additional  $G_1 G_2$  from winning a contested election. An increase in the proportion of the gains from reform attributable to liberalization reduces the likelihood of a democratization SPE. When the gains from winning a contested election are zero,  $G_1 = G_2$ , GOV consents only to a sham election,  $\mu^g = 1$ . Note that this also applies if the gain from reform is also zero,  $G_1 = 0$ ; a regime which does not value reform will only

<sup>8.</sup> Consider  $\alpha > O^* > \beta$  and  $\mu^\infty < \mu^g < \mu^{on}$ ; democratization is possible without the liberalization effect.

hold sham elections. 9 Hard-liners are unlikely to allow elections given that they can stop the opening at liberalization.

Foreign nations can increase  $G_1$  by tying aid and other benefits to democratization. Aid must be tied to holding elections, not liberalization, or it can impede full democratization. Two problems with foreign aid may exist: aid may be extended even if elections are not held; or promised assistance may not be extended if elections are held. Jimmy Carter tried tying US aid to respect for human rights but his prospective electoral defeat undermined the credibility of his threats (Spooner, 1994). Tying membership in the European Economic Community to the establishment of democracy beginning with the Birkelbach Report in 1962 provided a credible and effective guarantee (Whitehead, 1986).

3. The payoff each side receives upon losing an election,  $O_3$  and  $G_4$ . The less each side loses in an election, the more likely they are to put their differences to a vote. These payoffs depend on any substantive safeguards contained in the pact. Consider GOV's payoff upon losing the election. A pact could limit the policy options of the successor government, for instance guaranteeing military autonomy over promotions or granting amnesty for human rights violations. But a pact is a political deal, not subject to third-party enforcement like a regular business contract. OPP may renege on such substantive protections and try former regime officials. A repressive regime has more to fear from retaliation for human rights violations. Sutter (1995) examines how an inability to commit itself not to punish former rulers can prevent a negotiated transition. OPP's ranking of losing an election and the status quo is also important. If  $O_3 > 0$ , OPP prefers losing an election for certain to the status quo. Radical opponents are most likely to perceive a regime strengthened by an electoral mandate as a threat to their interests, and require more favorable electoral conditions in a pact.

Examination of  $\mu^g$  reveals that GOV's minimum probability of winning to hold elections does not depend on its own strength ( $\alpha$  or  $\beta$ ). The horizontal lower bound on the Democratize area (GOV's condition) in Figure 2 illustrates this. Intuitively we would expect GOV to accept less favorable terms when weak than when strong. In fact Dahl (1971: 15) considered it axiomatic that 'the likelihood that a government will tolerate an opposition increases as the expected costs of suppression increase'. The probabilities of a successful Challenge determine the costs of suppression in my model, so this result counters Dahl's axiom. Liberalization has already succeeded (OPP has participated) when GOV decides whether to hold elections. Only the gains from winning a contested election, G1 - G2, remain for the regime to capture. Subgame perfection renders GOV's agreement to a pact with  $\mu < \mu^g$  not credible. Dahl's axiom holds only if GOV makes their

<sup>9.</sup> A long-run benefit for OPP from a sham election is establishing the precedent; competitiveness could come later.

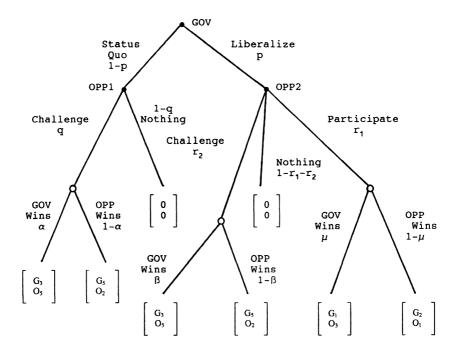


Figure 3. Delegation Game

final choice to hold elections *before* liberalization succeeds, as the next section demonstrates.

# 4. Delegation of Liberalization to Reformers

The authoritarian regime makes the final decision to hold elections in the Basic Game after OPP Participates. Moving last disadvantages GOV when elections constitute an improvement over the status quo but not liberalization. The regime might be better off if it did not move a second time and consequently wishes to decide to hold elections earlier in the transition.

Figure 3 presents the extensive form of the Delegation Game in which GOV no longer makes a second decision to hold elections if OPP Participates. Rather, GOV commits itself initially to hold elections if OPP replies to Liberalize with

Participate. One way the government could make such a commitment is by delegating the decision to hold elections to soft-liners within the regime. Such reformers, perhaps committed to democracy in principle, choose to hold elections even if the regime's chance of winning is low.

Solution of the Delegation Game is as for the Basic Game when  $\mu \geq \mu^g$ ; Appendix 2 contains the details. OPP's choice between Challenge and Nothing is as before and the largest values of  $\mu$  for which OPP Participates are  $\mu^{on}$  and  $\mu^{oc}$  depending on whether Nothing or Challenge is OPP's alternative. The regime's choice at GOV1 is now relevant. Assuming OPP then Participates at OPP2, GOV Liberalizes as long as its probability of winning the election is not too low. The minimum values of  $\mu$  for which GOV Liberalizes are  $\mu^{gc}$  when OPP Challenges at OPP1 and  $\mu^{gn}$  when OPP does Nothing at OPP1. The conditions for a democratization SPE are as follows.

PROPOSITION 2. The subgame perfect equilibrium of the Delegation Game involves democratization if

- (a)  $\mu^{gc} \le \mu \le \mu^{oc}$  if  $\beta < O^*$ ; or
- (b)  $\mu^{gn} \le \mu \le \mu^{on}$  if  $\beta \ge O^*$ .

When democratization occurs in the Delegation Game but not in the Basic Game (when  $\mu^{gc}$ ,  $\mu^{gn} \le \mu^{oc}$ ,  $\mu^{on} < \mu^{g}$ ) both GOV and OPP receive a higher expected payoff than in the Basic Game. The maximum values of  $\mu$  for which OPP Participates are unchanged. Delegation changes GOV's alternative to holding elections from liberalization to the status quo, providing GOV with a greater incentive to hold elections. GOV making its final decision to proceed before OPP decides to Participate has two effects. First, GOV accepts a lower probability of electoral victory than before regardless of OPP's action at OPP1 because at GOV1 the gains from liberalization have not yet been realized. In the Basic Game a regime with no gain from winning a contested election  $(G_1 = G_2)$ accepts only a sham election,  $\mu^g = 1$ . Second, a weak regime now accepts a pact with less favorable terms than a strong regime,  $\mu^{gn} < \mu^{g}$ , because OPP's action at OPP1 is relevant in the choice at GOV1 but not GOV2. Without delegation a weak regime cannot commit to a pact with  $\mu < \mu^g$ ; now GOV's weakness matters and hard-liners who do not value reform at all  $(G_1 = 0)$  may agree to hold elections to avert a Challenge.<sup>10</sup>

Figure 4 depicts the values of  $\alpha$ ,  $\beta$  and  $\mu$  for which the Basic Game and Delegation Game have a democratization SPE. To do this I let the liberalization effect be fixed, with  $\alpha = \beta + k$ . Then as  $\beta$  ranges between 0 and 1,  $\alpha$  varies accordingly (except that  $\alpha$  cannot exceed 1). Figure 4 identifies three areas of

<sup>10.</sup> The line between a negotiated transition and a regime collapse blurs when a weak GOV accepts terms of transition highly favorable to OPP. The 1974 Greek and 1982 Argentine transitions illustrate this effect. In terms of classifying a transition, is the fact that agreement was reached (even on terms unfavorable to the regime) or GOV's weakness the more relevant factor? Not surprisingly, scholars often disagree over the classification of transitions.

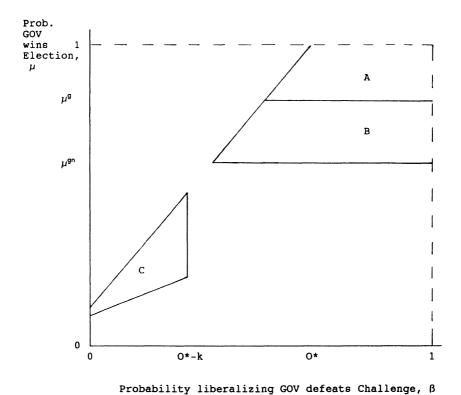


Figure 4. Comparing the Democratization Equilibrium of the Basic and Delegation Games

democratization equilibrium.<sup>11</sup> Region A contains the democratization SPE of the Basic Game; all of these parameter values yield a democratization SPE of the Delegation Game. In regions B and C the SPE of the Delegation Game but not the Basic Game involve holding elections. Region B represents the effect of delegation when GOV is strong; GOV accepts  $\mu^{gn}$  instead of  $\mu^{g}$  with the status quo as the alternative instead of liberalization. Region C shows the impact of delegation when GOV is vulnerable in the status quo. The liberalization effect occurs in the interval  $O^* - k \le \beta < O^*$ . Here the positively sloped upper bound on the democratization region reflects the decrease in  $\mu^{oc}$  as OPP becomes stronger. The lower bound of the region does not become positively sloped until Challenge is chosen in the status quo. In addition, GOV's minimum value of  $\mu$  drops from  $\mu^{gn}$  to  $\mu^{gc}$  at this point as well. As Figure 4 is drawn, a democratization SPE does not exist for some values of  $\beta$  due to the liberalization effect.

GOV may want to cancel elections upon completion of liberalization if  $\mu^{gc}$ ,

<sup>11.</sup> Also I now assume  $O_3 > 0$  so  $\mu^{on} = 1$  in Figure 4, which avoids unnecessarily crunching the relevant areas.

 $\mu^{gn} < \mu < \mu^{g}$ , so committing itself to hold elections may be difficult. If OPP considers the decision to hold elections reversible, the prospects for democratization are as in the Basic Game. A GOV which appoints a soft-liner to lead liberalization in an effort to commit itself to elections must also make his subsequent removal from power difficult. The success of the regime's effort at self-constraint plays an important role in the transition. A thorough evaluation of the role of delegation requires detailed analysis of specific transitions, since formal posts or rules may not reveal the true center of power in the regime. But instances of conflict between reformers and regime supporters not resulting in the reformers' dismissal provides some evidence of credible delegation. Compare in this regard the Spanish, Brazilian, and Chinese transitions. In Spain, Suarez often angered the Right, most significantly by legalizing the Communist Party before the June 1977 elections (Share and Mainwaring, 1986: 180-4; Bermeo, 1987). In Brazil, Geisel also acted against the hard-liners, most prominently in the October 1977 firing of General Frota (Skidmore, 1989: 17-19). On the other hand, in China the Communist Party dismissed Zhao Ziyang in May 1989, prior to Tiananmen Square. Analysts interested in predicting the course of ongoing transitions should consider the degree of independence of reformist leaders.

## 5. The Coup Threat

A coup d'état is a means for GOV to cancel elections once liberalization succeeds or annul the results following its defeat. The 23 February 1981 coup attempt nearly derailed the Spanish transition. An opposition candidate won June 1980 presidential elections in Bolivia but never took office; in July the Bolivian army halted democratization by staging a coup.

I extend the Delegation Game to consider a possible coup following the election. Figure 5 presents the extensive form of the Potential Coup Game. If OPP wins the election, GOV chooses between Attempt Coup or Accept the election results. Nature determines the outcome of a coup; the probability that GOV will succeed is  $\delta$ . GOV assigns probability t to the Attempt Coup move. To conserve notation and allow comparison with earlier games I let the coup outcomes have the same payoffs as the Challenge outcomes, while Accept Results has the same payoffs as when OPP wins the election.

An authoritarian regime weakens as democratization proceeds (Di Palma, 1990: 118–21), so I assume  $\alpha \ge \beta \ge \delta$ . A comparison of the Coup and Challenge situations explains GOV's lower probability of success. When OPP Challenges, GOV's supporters and the security forces are called upon merely to defend the current regime. Overthrowing a new democracy is an offensive rather than merely defensive action. Whereas some supporters would defend the regime against subversion, they may not participate in the ousting of the new, lawful regime. To

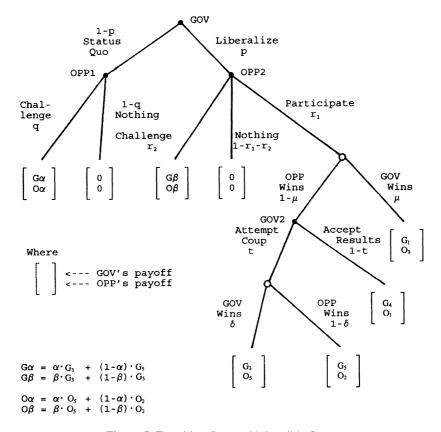


Figure 5. Transition Game with Possible Coup

ensure sufficient support, plotters have to rely more on formal planning, which reduces the likelihood of a successful coup (Sutter, forthcoming).

Again the game is solved backward. Appendix 3 contains the details. GOV attempts a coup if the probability of success is sufficiently high. The critical value,  $\delta^g$ , cannot be compared with the previous critical values of  $\alpha$  or  $\beta$ ;  $\delta^g$  is a function of GOV's payoffs while  $O^*$  depends on OPP's payoffs. The possible coup is not a viable option for GOV when  $\delta \leq \delta^g$ ; solution of the game is then as with the Delegation Game in Section 4. The mere addition of a coup option need not prevent democratization. The critical value of  $\delta^g$  increases with  $G_4$ . Hardliners with many atrocities in their past and much to fear from prosecution by a successor government might have  $G_4 \approx G_5$ . Such a regime is more likely to find a coup attractive since then  $\delta^g \approx 0$ .

A coup functions like an insurance policy for GOV if  $\delta > \delta^g$ , increasing the expected payoff from elections and lowering the minimum acceptable values of  $\mu$  for a pact ( $\mu^{gcc}$  and  $\mu^{gcn}$ ). The coup lowers the value of elections for OPP,

reducing the maximum values of  $\mu$  they accept in a pact ( $\mu^{occ}$  and  $\mu^{ocn}$ ). OPP may still Participate because losing an election weakens GOV; if no weakening occurs OPP will not Participate. The following proposition summarizes the results of analysis of the Potential Coup Game. <sup>12</sup>

PROPOSITION 3. A viable coup option  $(\delta > \delta^g)$  makes GOV more willing and OPP less willing to enter into a pact; overall the likelihood that elections will be held could increase or decrease.

A coup's effect is similar to GOV's decision to hold elections in the Basic Game. GOV can avoid the relatively low payoff of losing the election by staging a coup, while in the Basic Game GOV must give up the high payoff from liberalization to hold elections. The disruptive effect of a coup is greatest when  $\delta \approx 1$  since  $\delta$  almost certainly exceeds  $\delta^g$ . Only a moderate opposition which prefers losing an election to the status quo would Participate in this case.

A coup option can make GOV worse off. GOV's equilibrium expected payoff is lower than in the Delegation Game whenever a possible coup prevents a transition. At the beginning of the game the regime might like to promise not to overturn an unfavorable election result, but such a promise is not credible if  $\delta > \delta^g$ . The possible coup raises GOV's expected payoff for any value of  $\mu$  for which OPP Participates in both games.

A regime with  $\delta \approx 1$  may be too strong to democratize. If the probability of a successful coup falls the longer liberalization proceeds, then the length of a transition will be an increasing function of the regime's initial strength. Democratization may have to wait until a coup is no longer viable. The lengthy transition in Brazil is a case in point. Share and Mainwaring (1986: 183) note that 'Brazil's armed forces presented a more constant if less dramatic threat to democratization' than in Spain. Selcher (1986: 85) maintains that barring a breakdown of social order insufficient support for a coup existed after 1982. Democratization finally proceeded and the regime accepted Tancredo Neves' selection as president by the Electoral College in January 1985.

## 6. Conclusions and Directions for Future Research

Scholars of the Third Wave offer many classifications of types of transitions, generally distinguishing regime-led and opposition-led transitions (O'Donnell and Schmitter, 1986; Share and Mainwaring, 1986; Huntington, 1991; Karl and Schmitter, 1991). Rather than emphasizing differences, I stress the common element of mutual agreement in negotiated transitions. Regardless of who makes the first offer, both the buyer and seller of a good must agree on the price; the

<sup>12.</sup> Some may object that t = 1 does not constitute a democratization equilibrium. But a failed coup attempt does not prevent democratization, as the Spanish case illustrates.

same applies to negotiated transitions. I focus on the gains from transition which must exist to negotiate a pact. The distinction between regime-led and opposition-led transitions is less useful than a distinction between mutually agreed upon and unilateral regime changes. Furthermore, the terms of transition may depend on the strength of the authoritarian regime. Classifying transitions according to the characteristics of the new regime, for instance, obscures the more significant element of agreement.

Regime strength affects the prospects for democratization in several ways. I have identified four strengths of regimes; Table 2 summarizes the prospects for democratization in each case. The relationship between regime strength and democratization is not monotonic. The strongest regime identified does not face a challenge in either the status quo or after liberalizing and can stage a coup if it loses an election. Such a regime is too strong to democratize unless the opposition prefers liberalization to the status quo. A slightly weaker regime does not possess a viable coup option but is strong after relaxing repression and has a much better chance of democratizing. An initially strong regime which becomes vulnerable after relaxing repression faces the liberalization effect has a difficult time negotiating a pact. The regime's initial strength implies it requires favorable terms to enter a pact while the opposition is also strong when deciding to participate and demands favorable terms. An initially vulnerable regime is more likely to negotiate a transfer of power, provided the regime makes a final decision to hold elections early in the transition. A regime can commit itself to hold elections by appointing a reformist president and making his subsequent dismissal difficult.

 Table 2. Regime Strength and Prospects for Democratization

Regime Strength	Conditions	Prospects for Democratization		
Very strong – not vulnerable to a challenge, can stage a coup if lose election	$\alpha, \beta \ge O^*$ $\delta > \delta^g$	Low because too strong		
Strong – not vulnerable to a challenge but cannot stage a coup	$\alpha, \beta \ge O^*$ $\delta \le \delta^g$	High		
Not vulnerable to a challenge to the status quo, vulnerable when liberalizing	$\alpha \ge O^* > \beta$ $\delta \le \delta^g$	Low due to the liberalization effect		
Weak – vulnerable to a challenge to the status quo	$O^* > \alpha, \beta$ $\delta \le \delta^g$	High if regime can commit itself to elections early in transition		

Future research could proceed in several directions. One extension would incorporate factions on each side. Inclusion of factional players on each side could provide insight on when bilateral negotiations can occur. Adding players, however, complicates the analysis and extension beyond two players on each

side is probably intractable. I have included a liberalized regime as a possible outcome. But Przeworski (1991: 66) notes, 'Liberalizers ... try to hold on as long as they can, but at some point they must decide whether to go backward to authoritarian restoration or forward to democratic emancipation'. This implies liberalization may only be a short-run equilibrium. A repeated version of this game could address the timing of liberalization and democratization. For example, a regime which anticipates weakening in the future would want to negotiate now, while still strong. But if the opposition anticipates such weakening, it may simply raise its demands sufficiently to prevent a transition. Endogenizing the opposition's strength would allow examination of the long-term (in)stability of authoritarian regimes and move to unify the literatures on collective dissent and transitions.

#### **APPENDIX 1**

The choices at GOV2 and OPP1 are straightforward. The expected payoff to OPP from Participate at OPP2 is

$$s \cdot [\mu \cdot O_3 + (1 - \mu) \cdot O_1] + (1 - s) \cdot O_4$$
 (A.1)

The expected payoffs for GOV from Liberalize and Status Quo at GOV1 are respectively

$$r_2 \cdot [\beta \cdot G_3 + (1-\beta) \cdot G_5] + r_1 \cdot \{s \cdot [\mu \cdot G_1 + (1-\mu) \cdot G_4] + (1-s) \cdot G_2\}$$
 (A.2)

$$q \cdot [\alpha \cdot G_3 + (1 - \alpha) \cdot G_5] \tag{A.3}$$

Three cases concerning the values of  $\alpha$  and  $\beta$  exist: (a)  $\alpha, \beta < O^*$ ; (b)  $\alpha > O^* > \beta$ ; (c)  $\alpha, \beta > O^*$ . The solution of the game is as follows.

1. Suppose  $\mu > \mu^g$  so s = 1.

Case (a): q = 1 and at OPP2  $r_1 + r_2 = 1$ . OPP Participates if and only if

$$\mu \cdot O_3 + (1 - \mu) \cdot O_1 > \beta \cdot O_5 + (1 - \beta) \cdot O_2$$
 (A.4)

which yields  $\mu^{oc}$ . If  $\mu < \mu^{oc}$ ,  $r_1 = 1$ . Given this, p = 1 because  $\mu \cdot G_1 + (1 - \mu) \cdot G_4 > 0 > G_3$ ,  $G_5$ . If  $\mu > \mu^{oc}$ ,  $r_2 = 1$ , in which case p = 0 since GOV can more easily defeat Challenge without liberalizing.

Case (b): Same as (a) except q = 0.

Case (c): q = 0 and  $r_2 = 0$  at OPP2. OPP Participates if and only if  $\mu \cdot O_3 + (1-\mu) \cdot O_1 > 0$ , which yields  $\mu^{on}$ . If  $\mu < \mu^{on}$ , which is necessarily true if  $O_3 > 0$ ,  $r_1 = 1$  and so p = 1. If  $\mu > \mu^{on}$ ,  $r_1 = 0$  in which case GOV is indifferent between Liberalize and Status Quo because OPP does Nothing either way.

2. Suppose  $\mu < \mu^g$ , so s = 0.

Case (a): q = 1 and  $r_1 + r_2 = 1$ . OPP Participates if and only if

$$O_4 > \beta \cdot O_5 + (1 - \beta) \cdot O_2 \tag{A.5}$$

 $\beta < O^*$  implies the right-hand side of (A.5) is positive. Hence  $r_2 = 1$  if  $O_4 < 0$ . If  $O_4 > 0$ , then  $r_1 = 1$  if and only if  $\beta < \beta^\circ$  where

$$\beta^{\circ} = (O_2 - O_4)/(O_2 - O_5) \tag{A.6}$$

If  $r_1 = 1$ , then p = 1. If  $r_2 = 1$ , then p = 0.

Case (b): Same as (a) except q = 0.

Case (c): q = 0 and  $r_2 = 0$ . OPP chooses  $r_1 = 1$  if and only if  $O_4 > 0$ . If  $r_1 = 1$ , p = 1. If  $r_1 = 0$ , GOV is indifferent between Liberalize and Status Quo. The full specification of the SPE of the Basic Transition Game is given in Table A1.

	E	quilibria			Conditions
p	q	$r_1$	<i>r</i> <sub>2</sub>	s	
l	1	1	0	1	$\mu \ge \mu^{\mathrm{g}},  \alpha, \beta < O^*,  \mu \le \mu^{\infty}$
)	1	0	1	1	$\mu \ge \mu^{g}, \alpha, \beta < O^*, \mu > \mu^{\infty}$
l	0	1	0	1	$\mu \ge \mu^{g}, \alpha \ge O^* > \beta, \mu \le \mu^{\infty}$
)	0	0	1	1	$\mu \ge \mu^{g}, \alpha \ge O^* > \beta, \mu > \mu^{oc}$
l	0	1	0	1	$\mu \ge \mu^g$ , $\alpha, \beta \ge O^*$ , $\mu \le \mu^{on}$
0,1]	0	0	0	1	$\mu \ge \mu^{\mathrm{g}},  \alpha, \beta < O^*,  \mu > \mu^{\mathrm{on}}$
	1	1	0	0	$\mu < \mu^{g}, \alpha, \beta < O^{*}, O_{4} \ge 0$ and $\beta \le \beta^{\circ}$
)	1	0	1	0	$\mu < \mu^{\rm g}, \alpha, \beta < O^*, O_4 < 0 \text{ or } \beta < \beta^{\rm o}$
	0	1	0	0	$\mu < \mu^{g}, \ \alpha \ge O^* > \beta, \ O_4 \ge 0 \text{ and } \beta \le \beta^{\circ}$
)	0	0	1	0	$\mu < \mu^{g}, \alpha \ge O^* > \beta, O_4 < 0 \text{ or } \beta < \beta^{\circ}$
	0	1	0	0	$\mu < \mu^{g}, \alpha, \beta \geq O^{*}, O_{4} \geq 0$
0,1]	0	0	0	0	$\mu < \mu^{\rm g}, \alpha, \beta \ge O^*, O_4 < 0$

Table A1.

#### APPENDIX 2

OPP's decision at OPP1 is unmodified; their choice at OPP2 is as in the Basic Game when s=1. GOV's payoffs from Liberalize and Status Quo at GOV1 are as in (A.2) and (A.3) with s=1. GOV's decision at GOV1 previously was trivial since  $\mu>\mu^g$  ensured Liberalize was preferred to Status Quo. Now this is no longer true. So if OPP Participates GOV compares  $\mu \cdot G_1 + (1-\mu) \cdot G_4$  with 0 if  $\alpha \ge O^*$  and  $\alpha \cdot G_3 + (1-\alpha) \cdot G_5$  if  $\alpha < O^*$ . This yields the critical values of  $\mu^{gn}$  and  $\mu^{gc}$  respectively. The complete specification of the SPE of the Delegation game is given in Table A2.

Equilibria				Conditions	
p	q	<i>r</i> <sub>1</sub>	$r_2$		
1	1	1	0	$\alpha, \beta < O^*, \mu^{\infty} \ge \mu \ge \mu^{gc}$	
0	1	1	0	$\alpha, \beta < O^*, \mu \le \mu^{\infty}, \mu < \mu^{gc}$	
0	1	0	1	$\alpha, \beta < O^*, \mu > \mu^{\circ c}$	
1	0	1	0	$\alpha \geq O^* > \beta, \mu^{\infty} \geq \mu \geq \mu^{gn}$	
0	0	1	0	$\alpha \ge O^* > \beta,  \mu \le \mu^{\circ c},  \mu < \mu^{gn}$	
0	0	0	1	$\alpha \ge O^* > \beta,  \mu > \mu^{\circ c}$	
1	0	1	0	$\alpha, \beta \geq O^*, \mu^{\circ n} \geq \mu \geq \mu^{gn}$	
0	0	1	0	$\alpha, \beta \ge O^*, \mu \le \mu^{on}, \mu < \mu^{gn}$	
[0,1]	0	1	0	$\alpha, \beta \ge O^*, \mu > \mu^{\text{on}}$	

Table A2.

### **APPENDIX 3**

Suppose t = 1. OPP's expected payoff from Participate then is

$$\mu \cdot O_3 + (1 - \mu) \cdot [\delta \cdot O_5 + (1 - \delta) \cdot O_2] \tag{A.7}$$

GOV's expected payoff from Liberalize, assuming  $r_1 = 1$ , is

$$\mu \cdot G_1 + (1-\mu) \cdot [\delta \cdot G_3 + (1-\delta) \cdot G_5] \tag{A.8}$$

Three cases must be considered: (a)  $\alpha$ ,  $\beta < O^*$ ; (b)  $\alpha > O^* > \beta$ ; (c)  $\alpha$ ,  $\beta > O^*$ .

Case (a): q = 1 and  $r_1 + r_2 = 1$ . OPP Participates if (A.7) exceeds  $\beta \cdot O_5 + (1-\beta) \cdot O_2$ . The condition for  $r_1 = 1$  can be written

$$\mu \cdot [O_3 - \delta \cdot O_5 - (1 - \delta) \cdot O_7] + \delta \cdot O_5 + (1 - \delta) \cdot O_7 > \beta \cdot O_5 + (1 - \beta) \cdot O_7$$
(A.9)

 $\beta < O^*$  and  $\delta < \beta$  imply the coefficient of  $\mu$  is negative. Hence (A.9) yields  $\mu^{\rm occ}$ ; if  $\mu \le \mu^{\rm occ}$ ,  $r_1 = 1$ . GOV Liberalizes if (A.8) exceeds  $\alpha \cdot G_3 + (1-\alpha) \cdot G_5$ . Simplification yields a critical value of  $\mu^{\rm gcc}$ ; if  $\mu \ge \mu^{\rm gcc}$ , p = 1 and democratization occurs.  $\mu > \mu^{\rm occ}$  or  $\mu < \mu^{\rm gcc}$  rules out democratization.

Case (b): q = 0 and  $r_1 + r_2 = 1$ . The critical value for OPP to Participate is still  $\mu^{\text{occ}}$ . If  $r_1 = 1$ , GOV Liberalizes if (A.8) is positive, which yields a critical value of  $\mu^{\text{gcn}}$ . We must have  $\mu^{\text{gcn}} \le \mu \le \mu^{\text{occ}}$  for a democratization equilibrium.

Case (c):  $q = r_2 = 0$ . OPP Participates if (A.7) is positive, which yields an upper bound of  $\mu^{\text{ocn}}$ . We must have  $\mu^{\text{gcn}} \le \mu \le \mu^{\text{ocn}}$  for a democratization equilibrium.

To see that  $\mu^{\rm gcc} < \mu^{\rm gc}$ , note that  $\delta \mu^{\rm gc}/\delta G_4 = [\alpha \cdot G_3 + (1-\alpha) \cdot G_5 - G_1]/(G_1 - G_4)^2 < 0$ . The coup replaces  $G_4$  with  $\delta \cdot G_3 + (1-\delta) \cdot G_5$  in  $\mu^{\rm gc}$ ;  $\delta > \delta^{\rm g}$  implies  $\delta \cdot G_3 + (1-\delta) \cdot G_5 > G_4$  and so  $\mu^{\rm gcc} < \mu^{\rm gc}$  follows. Similar analysis applies for  $\mu^{\rm gn}$  and  $\mu^{\rm gcn}$ . To see that  $\mu^{\rm occ} < \mu^{\rm oc}$ , note that  $\delta \mu^{\rm oc}/\delta O_1 = [(1-\beta) \cdot O_2 + \beta \cdot O_5 - O_3]/(O_1 - O_3)^2$ , and is positive if  $\mu^{\rm oc} < 1$ .  $\delta \cdot O_5 + (1-\delta) \cdot O_2 < O_1$  and so  $\mu^{\rm occ} < \mu^{\rm oc}$  follows. The case of  $\mu^{\rm on}$  and  $\mu^{\rm ocn}$  is similar.

The range of values for which a democratization equilibrium exists with  $\alpha$ ,  $\beta < O^*$  in the Delegation Game is  $\mu^{oc} - \mu^{gc}$ ; the comparable range in the similar case of the Potential Coup Game is  $\mu^{occ} - \mu^{gcc}$ . The difference can be written

$$(\mu^{oc} - \mu^{occ}) - (\mu^{gc} - \mu^{gcc})$$
 (A.10)

The sign of (A.10) is ambiguous. A similar expression can be derived for the cases  $\alpha > O^* > \beta$  and  $\alpha$ ,  $\beta > O^*$ .

The full conditions for a democratization SPE of the Potential Coup Game are given in Table A3.

	Ed	quilibria			Conditions
p	q	$r_1$	$r_2$	t	
	1	1	0	1	$\delta > \delta^{\epsilon},  \alpha, \beta < O^*,  \mu^{\text{occ}} \ge \mu \ge \mu^{\text{gcc}}$
	0	1	0	1	$\delta > \delta^{g}, \alpha \geq O^* > \beta, \mu^{occ} \geq \mu \geq \mu^{gcn}$
	0	1	0	1	$\delta > \delta^{g},  \alpha, \beta \geq O^{*},  \mu^{\text{ocn}} \geq \mu \geq \mu^{\text{gcn}}$
l	1	1	0	0	$\delta \leq \delta^{g}, \alpha, \beta < O^{*}, \mu^{oc} \geq \mu \geq \mu^{gc}$
	0	1	0	0	$\delta \leq \delta^{g}, \ \alpha \geq O^{*} > \beta, \ \mu^{\infty} \geq \mu \geq \mu^{gn}$
l	0	1	0	0	$\delta \leq \delta^{g}, \alpha, \beta \geq O^{*}, \mu^{on} \geq \mu \geq \mu^{gn}$

Table A3.

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