Journal of Theoretical Politics

A Theory of Post-Civil War Democratization
Leonard Wantchekon and Zvika Neeman

The online version of this article can be found at:

Published by:

$SAGE

http://www.sagepublications.com

Additional services and information for *Journal of Theoretical Politics* can be found at:

Email Alerts: http://jtp.sagepub.com/cgi/alerts

Subscriptions: http://jtp.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.co.uk/journalsPermissions.nav

Citations http://jtp.sagepub.com/cgi/content/refs/14/4/439

A THEORY OF POST-CIVIL WAR DEMOCRATIZATION

Leonard Wantchekon and Zvika Neeman

ABSTRACT

We model the transition from a chaotic status quo to a more orderly political regime as a two-stage game involving two warring factions and the citizens. The warring factions move first and decide the form of government by (1) inviting an external arbitrator, (2) choosing the people as arbitrator, i.e. democratizing or (3) maintaining the status quo. We analyze the conditions under which democracy is likely to emerge as the outcome of the game. We show that citizens prefer democracy because it generates a sociopolitical order that protects them against 'banditry' and expropriation. Because the citizens' actions generate positive externalities, incentives for democratization are generated in part by the fact that protection against expropriation under democracy also indirectly benefits the warring factions.

KEY WORDS ● civil wars ● democratization ● game theoretical models of social conflict

I. Introduction

This article explores the emergence of democracy in conflict-ridden societies. By democracy we mean a political system in which political power is allocated by means of competitive elections whose outcome reflects citizens' preferences, and both the losing party and the winning party abide by the electoral outcomes. We study political situations in which rival predatory warring factions compete for power and seek to settle an ongoing conflict by designing a power-sharing contract and selecting an arbitrator for such a contract. We assume that the groups can select either an external arbitrator such as a foreign power or an internal arbitrator such as the citizens of the country. We show that although they can never agree to select an external arbitrator, they can agree to select the citizenry as an arbitrator thereby creating democracy. The citizenry favors democracy because it helps generate political order that provides protection against 'banditry'.

Recent studies on civil war and democratization suggest that democracy quite often arises from civil wars. Using measures of democracy provided by Jaggers and Gurr (1999), and civil war data provided by Licklider (1998), Nickerson and Wantchekon (2001) find that nearly 40 percent of all civil wars that took place from 1945 to 1993 resulted in an improvement of democracy.[1] Civil wars gave birth to democracies in, among others, Mozambique, El Salvador, Liberia, Algeria, Guatemala and Nicaragua. The most spectacular improvements were experienced in Mozambique and El Salvador (14 points),[2] followed by Nicaragua (11 points), and then Malaysia (10 points). In other words, warlord politics quite often produce democracy.

That democracy often arises from civil wars indicates the existence of a gap between normative theories of democracy and the current experiences of democratization. Even though democracy is defined as a system that embodies the will of the people, the evidence reveals that the will of the people might well be absent at its creation. And, even though democracy is perceived as the power of the people, the people's involvement in its creation might be very limited. As Rustow (1970: 355) indicates, democratization is usually set off by a prolonged and inconclusive elite political struggle followed by a 'deliberate decision on the part of political leaders to accept the existence of diversity in unity and, to that end, to institutionalize crucial aspects of democratic procedures'.[3] The question then becomes: why would political forces involved in an 'inconclusive' conflict settle on democracy and not on other forms of power sharing? Przeworski (1996) addresses this question, first by defining democracy as an incomplete power-sharing contract in which ultimate or residual power changes hands with a positive probability. This is contrasted with dictatorship in which residual power never changes hands. Przeworski then argues that a dictatorial contract is not an attractive option for political groups in conflict because it gives one group a decisive advantage in the face of an open conflict.

---

1. Nickerson and Wantchekon (2001) measure the change in democracy from just before the conflict began to five years after the cessation of conflict. The democracy score is created by subtracting the Polity 98 autocracy score from the democracy score creating a scale from −10 (autocracy) to +10 (democracy). In some cases, data were not available because of instability during one of the measurement periods. That nearly 40 percent of the civil wars that took place during the Cold War resulted in an increase in the level of democracy is quite remarkable since the logic of Cold War politics prevented both the United States and the former Soviet Union from pushing their allies to democratize.

2. Mozambique went from −8 before the war in 1981 to an average of 6 during the five post civil war years (1992–97). El Salvador went from −6 in 1979 to 8 in 1991–96.

3. Other elite-driven theories of democracy include O'Donnell and Schmitter (1986: 15–16). They claim that transition to democracy is often the outcome of a division within the authoritarian regime between hard-liners or radicals, on the one hand, and soft-liners or moderates, on the other.

Przeworski's argument is a helpful point of departure but has at least two limitations. First, it makes no mention of the role and the interest of the citizenry in the process of democratization. Second, it neglects the crucial issue of contract enforcement. Whereas in an economic environment it is reasonable to assume that there is a court acting as the ultimate arbitrator, there is no obvious analogue of an external arbitrator of agreements among political elites. The way out of this problem is often to delegate some power to a third party that acts as the ultimate arbitrator and enforcer. But this delegation of authority may jeopardize the contract, and cooperation may fail to materialize. This may happen if, for example, the arbitrator is suspected by one of the parties to be biased towards the other party. In the present article we derive a rationale for democracy by explicitly focusing on the interests of the citizenry and analyzing the arbitrator's incentives.

The first premise of our argument is that every political system is an implicit or explicit Hobbesian contract of governance. A political system is a set of arrangements among political actors designed to create political order. The second premise is that a Hobbesian contract requires an enforcer or a sovereign. The role of the sovereign is to maintain political order and allocate and protect the rights that political order makes possible. The sovereign or the enforcer can be a single player such as a king, a military leader or a foreign government. It can also be a small group of players such as the clergy or the armed forces or a very large group of players such as the citizenry. The third premise of the argument is that the sovereign's rule depends on the consent of most (if not all) political actors and that the political actors' consent depends on whether they perceive the sovereign to be effective, fair and neutral. For example, if a political actor believes that the enforcer is likely to be biased against it, this actor has little incentive to participate in the creation of a new government. Even if it agrees to participate, it is likely to choose at some point to withdraw from the agreement and 'rebel' against the enforcer.

Based on these three premises, we show that if the enforcer is a single player, at least one faction will choose not to participate in the process of creation of the new government. However, if the sovereign is a very large set of enforcers, say the citizens of the country, then the factions may become cooperative and political order may be created. This is due to the fact that, in contrast with the citizenry, the external enforcer cannot commit not to help its favored faction while extracting a sizable rent for itself in the process.[4] As a result, political actors might find it in their interest to give the citizenry the power to enforce their power-sharing contract. Thus,

---

4. Wantchekon and Simon (1999) presents an alternative model in which the heterogeneity of the electorate generates elite cooperation.

if democracy is seen as a political system in which political office-holders are chosen through competitive elections, then democracy can be created by warlords.

This conclusion raises several questions. Why do the warring factions need an arbitrator? Why do they not simply agree on a moderate share of the spoils of offce? We argue that the factions need an arbitrator because complete power-sharing contracts, that is contracts that will specify the allocation of power in all contingencies, are nearly impossible to design. Thus there is a need for a procedure that would re-allocate power from time to time, especially in the event of unforeseen contingencies. This procedure could be a lot (lottery), i.e. parties could use a coin flip to decide who will have temporary control of the government. However, as Manin (1997) argues, lots work only when political functions are simple and require no special competence. Also, for it to be possible to select rulers at random, an equality of circumstances must pre-exist among members of the body politics, so that the decision may fall on any one of them indifferently. In other words, lots could only work in small communities. Thus democracy is better than a rigid power-sharing arrangement because it adapts more easily to changes in the political environment and it is better than lots because it helps select the most competent ruler through competition for political office.

Political interaction in Italian city republics provides a nice illustration of the idea that the electoral process can be seen as an ancient power-sharing tool for political elites. Magistrates in 11th and 12th century Florence were selected by lottery. According to Manin (1997), this procedure was chosen to prevent 'the domination of city republics by cliques who might prolong their control by securing the choice of members of their own factions.' More importantly, the system of lottery was also seen as an external and neutral mechanism to overcome factional strife. But the practice of lottery became unpopular, and many asked for its replacement by elections. Among them was the political theorist Leonardo Bruni who argued that when citizens must compete in an election and openly put their reputation on the line they have an incentive to behave well.[5] In addition, another Italian political theorist of the time, Francesco Guicciardini, proposed to extend the electorate to include a greater number of citizens to combine the neutrality and impartiality of the lottery with the incentive for good behavior provided by elections. Manin comments that 'Guicciardini's proposal is remarkable

---

5. Przeworski (1996: 22) makes a similar point: 'Since electing governments by a lottery makes their chances of survival independent of their conduct, there are no reasons to expect that governments act in representative fashion because they want to earn reelection: any link between elections and representation is severed.'

for its rather unexpected justification of the extension of voting rights, but more importantly in its search for neutral institutions that could mitigate the divisive effects of competition for office' (Manin, 1997: 54).

The role of the arbitrator in the present model is similar to that of the *podesta* in medieval Genoa as described and analyzed in Greif (1998: 25). The podesta was a 'non-Genoese hired to be its military leader, judge, administrator for a relatively short time, usually a year'. However, as Greif points out, although the *podesta* should be strong enough to prevent each clan from challenging its authority, it should be kept from becoming so strong that it can gain political control. Greif (1998: 48) emphasizes the necessity of deterring the *podesta* from colluding with one clan against the other. The difficulty of such an enterprise explains why the *podesta* remained essentially a short-term solution and could not generate cooperation over a long period of time.

Our article relates to the theoretical and empirical literature on civil war duration and resolution (e.g. Collier, 2000; Walter, 2002: Fearon, 2001), and the references therein). These papers study conditions that facilitate peaceful resolution of civil wars (such as economic decline and a large number of casualties) but do not investigate the nature of political regimes that might emerge from the war. However, since democratization is highly correlated with both negotiated settlements and peacebuilding, our argument could be considered as providing theoretical foundation for the empirical literature on civil war resolution. Our results also contribute to the literature on endogenous property rights by formally demonstrating Olson's (1993) conjecture that the conditions necessary for the emergence of democracy are the same as those necessary for securing property. In our model, citizens prefer democracy essentially because it generates a sociopolitical order that protects them against expropriation.[6] The result is in line with Przeworski's (1996) claim that citizens adhere to democracy because they want to avoid resolving political conflicts through violence and democracy allows them to peacefully change governments.[7]

---

6. Other important studies of the economics of endogenous property rights include Skaperdas (1992), Konrad and Skaperdas (1999), Grossman and Kim (1995) and Hirshleifer (1995). In these models, agents choose to devote resources to fighting, protection against theft and productive activities. The equilibrium outcomes are typically inefficient as too many resources are devoted to fighting and/or protection.

7. Przeworski (1996: 22–4) wrote: 'The miracle of democracy is that conflicting political forces obey the results of voting. People who have guns obey those without them. Incumbents risk their control of governmental office by holding elections. Losers wait for their chances to win office. Conflicts are regulated, processed according to rules, and thus limited. This is not a consensus, not mayhem either. [It is] just a limited conflict; (a) conflict without killing [. . .] Bloodshed is avoided by the mere fact that, à la Aristotle, the political forces expect to take turn'.

The rest of the article is organized as follows. Section II presents the model and the equilibrium outcomes. It is followed by some case studies (Section III). Section IV discusses some theoretical implications and Section V concludes the article. All proofs are relegated to the Appendix.

II. The Model

Consider a location where two rival factions, *L* and *R*, compete for political domination. Residents in this location are divided into three groups: those affiliated with faction *L*, those affiliated with faction *R* and the rest that are affiliated with neither faction. One may think of affiliated individuals as guerilla fighters or government soldiers and of unaffiliated individuals as ordinary citizens. Although we do not impose any restrictions on the groups' sizes in the model, in practice the group of unaffiliated residents may well be much larger than the other two.

We model the transition from a chaotic status quo into a more orderly regime as a two-stage game. In the first stage, the form of government is determined. The two factions simultaneously choose whether to invite an outside enforcer, democratize (choose the people as the enforcer) or maintain the status quo. If the two factions agree on their choice, that choice is implemented. Otherwise, the status quo prevails. In the second stage of the game, individual residents may invest and realize the fruits of their investments.[8]

We make the following assumptions: an individual resident's investment or effort, which is denoted by $e \geq 0$, yields a private benefit that is given by the function $f(e)$ where $f(0) \geq 0$, $f'(e) \geq 0$, $f''(e) \leq 0$ and $f'''(e) \geq 0$, that is, f is non-negative, increasing, concave and has a convex derivative.[9] Individuals suffer a disutility $c > 0$ per unit of exerted effort. Except for the private benefit generated, the individuals' effort also generates a positive externality that is enjoyed equally by all members of society. For example, when an individual resident opens a store or operates some small business, the store or business generates some private income for that individual.

8. Our model differs from Konrad and Skaperdas' (1999) model of property rights and protection in several key aspects. There, the transition from the chaotic status quo to social order is made possible by having unaffiliated citizens create 'private militia' or join a for-profit protection agency. In contrast, in this model transition from the status quo is initiated by warring factions. They choose between an external enforcer who allocates political power between the factions and suppresses banditry and democracy under which (as explained later) one party will be given the full power to eliminate banditry and tax citizens.

9. As will become clearer later, the assumption that $f''' \geq 0$ simplifies the analysis by ensuring that residents' efforts are concave in the level of expropriation. Many concave functions (e.g. $f(e) = e^a$, $0 < a < 1$ and $f(e) = \log(1 + e)$) satisfy this assumption.

But the fact that an additional store or business opened also benefits other members of society who need not travel far to the nearest store, can buy previously unavailable goods, procure previously unavailable services, work where previously they could not, etc. It is of course likely that the private benefit to the individual who opened the store is much larger than the benefit that accrues to other members of society, but the additional benefit to society when *many* individuals open new stores and operate new businesses is likely to be considerable. We model the existence of this 'positive spillover' by assuming that every individual resident enjoys a benefit equal to $\alpha f(e)$ when any other individual exerts the effort e. The 'size' of the externality is captured by the parameter $\alpha > 0$: the larger α is, the bigger the externality becomes.

We assume that the objective function of each faction is to maximize the expected utility of those individuals that are affiliated with it. Ordinary citizens vote for their preferred faction under democracy and engage in productive behavior but have no other 'political' role to play in the model.

As will become clear, the crucial assumption of the model is that the warring factions payoffs depend on the productive investment made by the residents of the country, an investment that generates a positive externality. This assumption is likely to be violated when the warring factions control natural resources such as diamond (as in Sierra Leone or Angola) or are involved in drug trafficking (as in Columbia). In this case, the residents' investment has very little effect, if at all, on the warring factions' political decisions. In fact, the continuation of war might, in fact, be more profitable for the factions than its resolution. Obviously, everything else equal, a faction that during the transition to democracy has to give up on a lucrative drug business will be less willing to embrace democracy.[10]

The Status Quo

The status quo situation involves a large degree of lawlessness. We model this by assuming that the two factions may expropriate a non-negative share s^L and s^R, $s^L + s^R \leq 1$, respectively, from the output of every individual who is not affiliated with either faction (and hence is not 'protected'). Thus, affiliated individuals choose their effort to maximize their output minus cost or $f(e) - ce$ and, given the factions' expropriation levels, unaffiliated individuals choose their effort to maximize their retained output minus cost or $(1 - s^L - s^R)f(e) - ce$. It is straightforward to verify that unaffiliated individuals choose the level of effort $e^* (s^L, s^R)$ that solves the first-order

---

10. An empirical investigation of this question is provided by Collier et al. (2001). We thank a referee for this insight.

condition $f'(e^*) = c/(1 - s^L - s^R)$. Note that unaffiliated individuals' optimal efforts decrease with the factions' expropriation levels s^L and s^R. Furthermore, our assumption that $f''' \geq 0$ implies that e^* is concave in s^L and s^R, namely, the effect of the level of expropriation on individuals' effort choices increase with the total level of expropriation.

We assume that in the status quo situation, the two factions choose their level of expropriation simultaneously to maximize the expected utility to those individuals who are affiliated with them, expecting unaffiliated individuals to respond optimally. Thus, we do not explicitly model the conflict between the two warring factions. The existence of conflict is captured through its effect on social order and hence the level of expropriation of unaffiliated citizens. In other words, the cost of the conflict between the two warring factions is simply the effciency loss that is due to lawlessness and banditry.

PROPOSITION 1: *The level of the factions' expropriation under the status quo is positive and equal.*

We denote the level of each faction's expropriation under the status quo by s^{SQ}. The equality of the factions' expropriation levels (and their uniqueness) follows from the fact that the game played by the factions is a symmetric game that has a symmetric pure strategy Nash equilibrium but no asymmetric pure strategy Nash equilibria or mixed strategy equilibria. The result implies that, in equilibrium, both factions are equally predatory. Since by assumption both factions have equal access to unaffiliated residents, both have equal expropriatory power in spite of the fact that they may be of different sizes. That some expropriation occurs in equilibrium is not surprising. Although expropriation reduces the residents' incentives to work and therefore also the positive externality that is generated by this work, for the factions, an expropriated dollar in their coffers (or Swiss bank accounts), is still likely to be better than the size of the positive externality that is generated by the effort that generated this dollar. Moreover, a dollar that is not expropriated by one faction may well be expropriated by the other.

Democracy or Internal Enforcement

Democracy is modeled as both factions agreeing to abide by the results of democratic elections. Such elections would allow one of the factions to form a government and eliminate 'illegal' expropriation. However, the winning faction would be able to continue and expropriate unaffiliated indi-

viduals through taxes.[11] Of course, the losing faction may be tempted to revert to the chaotic status quo by subverting the outcome of the elections. This could be a serious problem. However, the process of transition to democracy, if done properly, should require the two factions to commit ex ante not to challenge the outcome of the elections, whatever it may be. It should ensure that reneging on promises to abide by the results of democratic election will be costly to the factions. This can be done by insisting on at least some de-militarization before the elections, by promising all parties access to some form of power, say by giving them guaranteed seats in parliament, or control of some government offces, and more.

We denote the probability that faction L assigns to winning the election by q^L, and the probability that faction R assigns to winning the election by q^R. The probabilities q^L and q^R reflect the factions' (possibly subjective) opinions about the measure of support they enjoy among unaffiliated individuals, as well as on the number of their affiliated supporters. These probabilities may be based on surveys, independent polls, expert opinions, reading of the local and international press, etc. Note that there is no need to specify which faction will actually win the election because when the factions make their decision about whether to democratize or not, they do not know which of them will win. The only relevant information they have is summarized by q^L and q^R, respectively. After the election is over and a new government is formed, the faction that wins the election determines the level of taxes (expropriation) s^D, and individuals, taking this information into account, determine their efforts.

PROPOSITION 2: *The level of government expropriation under democracy, denoted s^D, is lower than the total level of expropriation under the status quo. That is $s^D < 2s^{SQ}$.*

The intuition for the proposition is the following: individuals who expect to be expropriated will exert less effort. The government, by virtue of its monopoly over expropriation, 'internalizes' a greater share of the reduction in productivity that results from individuals' lower effort than the factions and so expropriates less. Because under democracy there is less overall expropriation than in the status quo, people exert higher effort. Both the winning faction and non-affiliated individuals are better off compared to the situation under the status quo because of the positive externality. The losing faction

---

11. Admittedly, this is a very dismal view of democracy (which renders the fact that democracy may still be chosen in equilibrium quite impressive). Also, to the extent that the government can tax all individuals, democracy would be made even more attractive to the winning faction.

may be worse off because it loses its ability to expropriate individuals, but its loss is mitigated by the fact that non-affiliated individuals work harder and therefore generate a larger positive externality.

External Enforcement

As discussed in the introduction, the third alternative that may be available to the warring factions is to invite an external enforcer who, for a 'price', will install one of the factions in government, eliminate 'illegal' expropriation and generally uphold an authoritarian rule of law. We assume that its promises in secret negotiations notwithstanding, the external enforcer always installs its 'favorite' faction in government. As under democracy, the government expropriates non-affiliated individuals through taxes. However, the external enforcer also gets a cut of the tax receipts. For simplicity, we assume that the external enforcer may also expropriate non-affiliated individuals.

We model this as follows. We assume that the external enforcer may either favor faction R or L. Both factions assess a common prior probability q that the external enforcer favors faction R. The factions obtain conditionally independent private signals that reveal the external enforcer's truly favored faction with probability $p \in (\frac{1}{2}, 1)$. The signal is misleading otherwise. The prior q may be interpreted as the probability assessed by the factions given the history of their relationships with the external enforcer; and the signal p may be interpreted as what the factions learn in secret negotiations with a representative of the external enforcer prior to their decision whether to invite it into the country.

Our assumptions imply that the situation between the external enforcer and the faction it installs in government is identical to the situation between the two factions under the status quo and the following proposition therefore holds.

PROPOSITION 3: *The total level of expropriation when an outside enforcer is invited into the country is the same as under the status quo.*

It is possible to generalize the model by imposing limits on the external enforcer's ability to expropriate the population directly. For example, if for some reason, the external enforcer is not as skilled in expropriation as the factions or if it does not possess as much information about citizens' assets as the factions do, it will not be able to expropriate as much. Nevertheless, even in the presence of such restrictions, it is still the case that in the second stage of the game, the level of government expropriation under democracy is lower than under external enforcement. The reason is that, as can be seen in the proof of Proposition 1, the best response level of expropriation of the winning faction decreases with the expropriation of the outside

enforcer. The same logic that applied in Proposition 2 applies here as well. Positive expropriation by the outside enforcer will reduce the level of expropriation of the government faction from its level when the external enforcer does not expropriate, which is equal to s^D, but not so much as to imply an overall reduction in expropriation. In fact, the same argument made in the proof of Proposition 2 can be repeated to show that for every positive expropriation level of the outside enforcer s^E, the winning faction will choose to expropriate some s^G such that $s^D < s^G + s^E$. If, in addition, it is also the case that the external enforcer appropriates less than the factions do under the status quo, or $s^E < s^{SQ}$, then it is also the case that $s^G + s^E < 2s^{SQ}$. That is, the total level of expropriation under external enforcement is smaller than under the status quo. Because we model the situation between the external enforcer and its favored faction after it is installed in government in the same way as the situation between the two warring factions under the status quo, the outcomes, as far as unaffiliated individuals are concerned, are identical. If some restrictions are placed on the external enforcer's ability to expropriate unaffiliated individuals, unaffiliated individuals become better off, but as previously explained, the overall level of expropriation is still higher than under democracy. This is because the conflict between the desire to expropriate more (since it increases the direct payment to the government) and the desire to expropriate less (because of its effect on individuals' effort) is resolved in favor of more expropriation as explained earlier.

Thus, the payoff to the faction that is favored by the external enforcer when the latter is invited into the country may be higher than under the status quo and perhaps also higher than under democracy. However, the payoff to the faction that is disfavored by the external enforcer is zero which is lower than what this faction expects to get both under the status quo and under democracy. This is due to our assumption that the external enforcer cannot commit not to help its favored faction while extracting a sizable rent for itself in the process. Thus, a faction that believes that the enforcer favors it may prefer the enforcer to democracy but a faction that believes that it is disfavored by the enforcer prefers democracy or the status quo.

Equilibrium Analysis

A faction's strategy specifies its choice among the options of maintaining the status quo, inviting an external enforcer, and democratizing, as a function of the signal it observed about whether it is favored by the external enforcer and its subjective assessment of the likelihood of winning a democratic election. In spite of the fact that both factions may obtain signals that indicate that they are the ones favored by the external enforcer, it cannot be the case

that, in equilibrium, both factions agree to invite the external enforcer. The reason is related to the well-known phenomenon known as the 'winner's curse' in auction theory. Namely, even if a faction obtains a favorable signal, it realizes that the other faction will agree to invite the external enforcer *only* if it observed a favorable signal too. But if the other faction observed a favorable signal, then the two signals 'cancel each other', because if both factions observed favorable signals, the probability that the external enforcer favors faction R is equal to the prior q. Now, if $q \geq \frac{1}{2}$, faction L will surely prefer the status quo to inviting the external enforcer (because when the external enforcer is invited into the country, with probability q faction L will be disfavored and receive a payoff of zero which is less than what it would get under the status quo, and with probability $1 - q$ faction L will be favored and receive exactly what it would receive under the status quo) and if $q \leq \frac{1}{2}$, for the same reason, faction R will surely prefer the status quo to inviting the external enforcer. We summarize this discussion with the following proposition.

PROPOSITION 4: *There is no equilibrium of the game where the two factions agree to invite the external enforcer.*[12]

The game described here thus possesses two types of equilibria: one where both factions agree to democratize; and the other where one faction chooses to keep the status quo and the other makes the same choice or prefers to invite the external enforcer. This is described in the following proposition.

PROPOSITION 5: *Depending on the parameters of the game* (α, q^L, q^R, q, p), *the game previously described has two types of Nash equilibria. One exists for all parameter values where at least one faction chooses to keep the status quo and the status quo prevails and another equilibrium exists only if both factions assess a probability of at least* p* – *a positive number strictly smaller than one-half – that they will win the election under democracy. In this second equilibrium, both factions agree to democratize.*

Because the rules of the game are such that if one faction insists on maintaining the status quo, there is nothing that the other faction can do about it, an equilibrium where the status quo is maintained always exists. However,

---

12. In the more general case where the outside enforcer's ability to expropriate is limited, as long as $\min\{q, 1 - q\}$ is smaller than the factions' subjective assessments of winning democratic elections, q^L, q^H, it can be shown that inviting the external enforcer is dominated by democracy. This argument does not apply, however, if the external enforcer's power of expropriation is very small.

another type of equilibrium also exists where both factions agree to democratize. It happens when both factions assess a high enough probability of winning the democratic elections; that is when such probability is larger or equal than the share of the payoff to either faction under the status quo out of the payoff to a democratic government discounting for the value of externalities under democracy. That is,

$$p^* = \frac{(\alpha + s^{SQ})f(e^*(s^{SQ}, s^{SQ})) - \alpha f(e^*(s^D, 0))}{s^D f(e^*(s^D, 0))} < \frac{1}{2}$$

Although the faction that loses the election may regret its decision to democratize ex post, ex ante, when it is making its decision, its expected value under democracy is higher. And, once democracy is implemented, the losing faction can no longer change its mind.

It is important to emphasize that the threshold belief above which the factions are willing to democratize, p^*, is smaller than one-half. In other words, the scope for democratization is such that even factions that believe they are more likely to lose than win a democratic election may be willing to risk it. The intuitive explanation for this is that a democratic government could expropriate as much as the warring factions under the status quo do and obtain a payoff that is equal to their joint payoffs, but as shown by Proposition 2, it prefers to expropriate less. It must be then that the payoff to a democratic government is larger than twice the payoffs to the factions under the status quo. Therefore, a risk-neutral faction is willing to democratize even if it perceives a probability of less than one-half of winning a democratic election.

Another important point is that when both factions are sufficiently optimistic about their chances of winning a democratic election the equilibrium outcome under the status quo is pareto-dominated by the outcome under democracy, i.e. all members of society would be better off (ex-ante) under democracy. Yet, the status quo may prevail because democracy in our model requires the cooperation of the two factions. In this sense, a pareto-dominated status quo reflects a 'coordination failure' between the two factions.

Finally, one may wonder why the factions cannot agree on some division of the surplus that is generated under democracy without relinquishing their considerably greater power under the status quo. The reason is that unless the country becomes democratic, the factions cannot jointly commit to reducing the total level of expropriation. Once one faction reduces its expropriation level, the best response of the other faction is to increase its own expropriation level. Although the total level of expropriation is lower than it was before, the faction that reduced its expropriation level is worse off than it was before. The residents who are aware of the incentives of the

warring factions to promise not to expropriate so as to encourage production but then renege on their promises and increase their payoff through expropriation will refuse to increase the level of their productive activity unless they are given a guarantee that expropriation is reduced through the adoption of some form of rule of law. Democracy achieves this purpose.[13]

III. Illustrative Examples

We apply the theory developed in this article to the civil wars in Lebanon (1975–90), and El Salvador (1981–92). The example of Lebanon illustrates Proposition 4 about the impossibility of unanimously agreeing to invite an external enforcer. The example of El Salvador illustrates Proposition 5. Democratization may follow a civil war especially when the latter is so destructive that even if one assesses a low probability of winning a democratic election, the restoration of order, by itself, is preferable to the continuation of war.

Lebanon

The power-sharing arrangement between Christians and Muslims in Lebanon collapsed in 1975 when fighting erupted between the right-wing Phalangist party and Palestinian guerilla groups. The fighting exacerbated tensions between the Maronite Christians and nationalist Muslims who were pressing not only for a more pro-Palestinian and pro-Arab government but also for a revision of the previous power-sharing arrangement to reflect Muslim population gains. The tensions led to a two-year civil war that prompted intervention by Syria in 1976.

To apply the logic of the Proposition 4 to the Lebanese case, consider the strategic interaction involving a predatory Muslim coalition, an equally predatory Christian coalition and Syria. The focus on predation is a bit unrealistic since the Lebanese conflict has an ethnic and religious tone. However, illegal expropriation of ordinary citizens by armed factions is an

---

13. The model can also be interpreted as describing the reconstitution of democracy to avoid a civil war as in France 1958. Following the 13 May coup in Algeria, the French President Coty dissolved the parliamentary system (the Fourth Republic). It was a strategic move to appease the coup leaders who were calling for a 'Public Salvation Government'. President Coty appointed General De Gaulle who later initiated constitutional reforms and established a Presidential Regime (the Fifth Republic). Thus, the Fifth French Republic was designed to respond to a threat of Civil War (Guichard, 2000).

important element of the Lebanese civil war.[14] Assume for the sake of the analysis that Syria does not have a definite and unambiguous preference for either coalition and that the Syrian government (like the factions) is predatory.

As predicted by Proposition 1, competitive predation generates economic decline and represents a serious disincentive for investment. The conflict (or status quo) caused a large emigration of skilled workers and a loss of human capital, and resulted in a flight of foreign capital. The state's financial situation also deteriorated because of its inability to establish control and collect revenues. The subsequent increase in public debt was financed through the national bank, the increased liquidity of which combined with the lack of investor confidence weakened the Lebanese pound. During the period 1975–82, the Lebanese pound lost 50 percent of its value to the American dollar. During the second half of the war, 1983–90, the pound depreciated by approximately 100 percent. Inflation was also a major problem and peaked in 1988, when it reached 487.13 percent (Sena et al., 1995). In addition, real GDP growth was negative during the first two years of the war, 1975–76. The GDP did rise slightly during certain war years, but overall the real GDP failed to increase significantly during the war. It was at 1826 million Lebanese pounds in 1975, and at only 2690 million Lebanese pounds by 1990. The real per capita GDP fell significantly, from 2463.45 Lebanese pounds in 1975 to 981.80 Lebanese pounds in 1990 (Sena et al., 1995).

Proposition 4 indicates that despite potential advantages, the two factions cannot agree to invite an external enforcer because at least one faction necessarily believes it will be harmed by this move. What happened in Lebanon is that an external enforcer (Syria) was invited into the country against the expressed wishes of one dominant faction (the Christians) who rebelled against it and were consequently repressed. In other words, Syria could only intervene against the will of an important section of the Lebanese population. For instance, in response to the Syrian dominance, General Auon, a

---

14. Barak (2001), for example, writes: 'As the state and its institutions gradually retreated from the public sphere, 'armed people' (musallahin) looted banks and shops, set up roadblocks and checkpoints where passers-by were stopped, intimidated and, occasionally, murdered (particularly when their identification cards revealed that they were members of the 'wrong' community). They also kidnapped and, at times, killed members of other militias or unarmed civilians, and, finally, took over prisons and mental institutions and set their inhabitants free. Drug producing and trafficking in Lebanon, which were previously under a certain degree of government control, now commenced freely, and shipments of small arms and heavy weapons poured into its territory through its borders and via its formal and clandestine, militia-run ports. The central government lost 30 control over the state's borders, and its presence in several regions (particularly the North, South and Biqa') was nominal at best' (p. 15).

Christian military leader, declared a 'war of liberation' against Syria. Aoun's rebellion was defeated, which further established Syria as the dominant power in the country (Sena et al., 1995).

In the aftermath of Aoun's defeat, the Arab league proposed a conference at Taif, Saudi Arabia, where members of the Lebanese parliament would meet with representatives from other Arab countries. Discussion focused on two themes: internal reforms and relations with Syria. The new agreements made the presidency which was traditionally reserved for the Christians largely symbolic[15] and altered the balance between Christians and Muslims in the parliament from a ratio of 6:5 to parity and throughout the government (Norton, 1997: 6–10).

The Taif agreements also made Syria the arbiter of all internal and external Lebanese affairs. The composition of the 1990 national government was determined in Damascus, not Beirut. Syria approved appointees to the open seats in the newly expanded parliament. Pro-Syrian aspirants were named to key positions in the army, security services and intelligence units. Syria made the final decisions on all key political and diplomatic appointments. In short, Syria ensured its interests were protected in Lebanon.[16] In addition, the predatory nature of Syrian domination and the fact that such a domination did not pacify the county[17] is well in line with in Proposition 4. That is, the level of expropriation under the external enforcer is as high as under the status quo.

El Salvador

The civil war in El Salvador during the 1980s was largely the result of gross inequality and repression by the military government. The inequality dates back to the mid-1800s, when government policies concentrated land into the hands of '14 families' to produce coffee 'efficiently'. This high concentration of wealth and power led to a series of peasant and worker uprisings, culminating in the movement led by Agustín Farubundo Marti in the 1920s

---

15. Weakening the presidency and its veto power was aimed to harming the Christians. The presidential veto was their only remaining means of institutional security.

16. Syria's role was further strengthened by the May 1991 'Treaty of Brotherhood, Cooperation, and Coordination'. This treaty established institutions that superseded, and in some cases violated, both the Lebanese constitution and the Taif agreements. Provisions of the security agreement opened the entire Lebanese security structure from fire fighters to intelligence agencies to Syrian penetration. Even more revealing, the agreement authorized punishment for those, including journalists, who criticized or otherwise threatened Syrian interests (Norton, 1997: 6–8).

17. By mid-1981, in addition to the weak Lebanese military, the Syrian army, and Israeli military units, an estimated 43 private armies were operating in Lebanon (Banks and Miller, 1998).

(Paige, 1997; Torres-Rivas, 2001). In 1932, the insurrections were stamped out by a number of military officers who then seized power through a coup d'etat. The next 50 years were characterized by cycles of reform and repression, but inequality and military domination remained constant (Montgomery, 1995; Paige, 1997). In 1980 a coalition of 18 leftist and far leftist groups formed the Revolutionary Democratic Front (FDR) and later the Farabundo Marti National Liberation Front (FMLN), the military affiliate of the FDR. A civil war broke out between government forces and the FMLN.

Both factions were predatory. For instance, the cotton industry was an easy target for FMLN fighters because of its susceptibility to fire and bug infestations. Fighting also led to the abandonment of farms, which were subsequently appropriated by the peasants affiliated with the guerillas. As predicted by Proposition 1, competitive predatory behavior led to under-investment, especially in the agricultural sector. Coffee production decreased by nearly 50 percent, the GDP per capita fell by 28 percent between 1978 and 1982 and there was a massive emigration of the economic elite in the 1980s. The contribution of agricultural export to domestic production fell from 25 percent to well below 5 percent, a very sharp decline that Wood (2000: 57) attributes to increased insecurity over land property and to a shift in the structure of economic production away from export agriculture.[18]

The war was thus extremely destructive and inconclusive. By 1984, both sides realized that an outright military victory was extremely unlikely; however, neither side trusted the other enough to begin negotiations. The government and military feared the FMLN would use the talks to build up military strength while pushing for reductions in the size of the government army. They feared the rebels would leave the negotiations after obtaining a decisive military edge. The rebels feared that negotiations would expose their clandestine organization and enable the military to eliminate leaders through a massive 'dirty war'. In 1990, both warring factions finally agreed to invite the United Nations Secretary General to mediate further negotiations.[19] To be sure, the assassination by the military of the Six Jesuits during the 1989 offensive had led to a sharp decrease in US support for the military

---

18. Wood (2000: 57–8) also attributes the decline of the share of export agriculture to GDP to the nationalization of financial and export marketing sectors and the government economic policies from 1980 to 1989.

19. The United Nations role is best understood as that of a (third party) 'arbitrator' rather than an 'enforcer'. Although the UN made several 'binding' recommendations and supervised the carrots and sticks that kept the implementation of the peace agreement going, unlike the 'enforcer' described in this article, it was capable of establishing a reputation to act impartially. We thank a referee for calling our attention to this important distinction and to other important details of the El Salvadorian case.

under the status quo. Without strong US support of their war effort, the military had no choice but to negotiate. The final settlement reached in 1992 included the following terms: the disbanding of rebel forces incrementally over a nine-month period; the government purchase of land for redistribution in rural areas with the beneficiaries repaying the government; the purging of the government officers' corps; the absorption into the regular army of the National Guards and the treasury police; the dissolution of the military intelligence and civil defense units; and the creation of new police forces (Montgomery, 1995).

More importantly, the two warring factions agreed to hold elections. The agreement was possible because (1) each faction assessed a high enough chance of winning either the first or subsequent post civil wars elections and (2) each faction thought their economic interests would be protected under democracy. In particular, the FMLN was looking well beyond the first election and thought that democracy would protect their political rights as well as the economic interests of their constituents.[20] At the same time, according to Paige (1997: 215), ARENA (Alianza Republication Nacionalista) and its constituents (the coffee plantation owners) believed that there was a high enough chance that they will win the first post civil war election and control the government.

However, the stated goal of the parties was 'the creation of a political system where real power is allocated by elections. The winners must be guaranteed that they will obtain genuine control over government decisions. The losers must be guaranteed that opportunities for their political participation would continue and would not subsequently be repressed and eliminated' (Gibb and Smyth, 1990: 1).

In summary, the outcome of the civil war in El Salvador illustrates the result discussed in Proposition 5: democratization can be forced by the economic cost associated with a breakdown of civil order. In other words, the rationale for democratization stems in part from its ability to generate the rule of law as a by-product.

The El Salvadorian case also sheds light on the difference between inviting an external enforcer (like Syria in Lebanon) and an arbitrator (like the United Nations in El Salvador). Once the factions have decided to settle on democracy, an external arbitrator can facilitate its implementation by

---

20. Joaquim Villalobos, one of the leaders of the FMLN, stated: 'Our political forces will be participating with the aim of preventing the taking of land from the peasants, the reversal of judicial reform and the politicization of the training of the new police force [. . .] The question of majority or minority electoral support *does not matter*. In El Salvador, it is important that we continue to reach an agreement whether we are in the majority or in the minority. The confrontation ended only months ago. Perhaps, once it is further behind us we can embark upon a path of *more democratic norms* (Gibb and Smyth, 1990: 1).

providing the resources for successful negotiations and transparent transition to democracy.[21]

IV. Theoretical Implications

The theory developed in this article provides some insight into the ways by which democracy emerges and endures. Literally democracy means the power of the people. However, as Sartori (1965) suggests, this expression is, at best, elliptical. In the context of a top-down democracy, we provide an account of the role played by the people and develop a different view on the meaning of democracy. In our setting, democracy is best understood as essentially a contract to allocate power *fairly* among political elites with the people as the enforcer of such a contract. The power of the people or popular sovereignty is best understood in this context as a gift made by political elites to the people as a reward for their role as the enforcer of the elites' power-sharing agreement. Political elites choose to 'go to the people' because they cannot possibly agree to invite an outside enforcer such as the military or a foreign power.

The power that political elites concede to the people provides the latter with the resources necessary for a successful enforcement of the agreement. It is in the elite's best interest to give away these resources, for otherwise a new political system will not be created, and fighting will continue. Thus, democracy can be seen not as a process in which the people delegate their power to political elites, but instead a process in which political elites *concede* some of their power to the people to secure the implementation of their power-sharing agreements. Obviously, empowering the people in this way is also in the people's best interest.

The theoretical argument of the article implies that a long-term foreign interference in domestic politics cannot be conducive to elite cooperation and democracy. However, a short-term foreign intervention sponsored by a multinational political institution such as the United Nations could generate elite cooperation. This is because the United Nations is more likely to be perceived as a more impartial arbitrator than say, the United States, France or Russia acting on their own.[22]

Our results imply that the heterogeneity of the electorate is a necessary condition for a democratic enforcement mechanism to emerge. (Unless the

---

21. See Doyle and Sambanis (2000) for a comprehensive empirical analysis of the impact of UN peace operations on democratization.
22. See Nickerson and Wantchekon (2000), Doyle and Sambanis (2000) and Walter (1997) for an empirical investigation of this question.

electorate is heterogenous, it cannot be that both factions have a reasonably high likelihood of winning democratic elections.) In other words, ceteris paribus, societies that are highly divided along *very few* ethnic groups are less likely to democratize than those divided along numerous ethnic groups or those with cross-cutting cleavages.[23] Democracy will be more diffcult to establish in countries such as Rwanda or Burundi that have one dominant and one dominated ethnic groups that are mobilized by two ethnic factions. The results also imply that democracy will persist as long as elections remain competitive. In other words, if coalitions harden or if one coalition becomes too small, it will defect and democracy will collapse. The theory also implies that democracy might collapse if there is a shift in the preferences of the electorate from a uni-modal distribution of preferences to a bi-modal distribution of voters' preferences with one group of voters becomes very small.

Democracy and Sociopolitical Order

Another important implication of the argument presented in this article is that democracy is perhaps the most durable solution to the problem of political order. It combines the effectiveness of a single third-party enforcer with the impartiality of the electoral process. This conclusion contrasts with Huntington's views on political order in developing nations. According to Huntington (1968), political order in developing nations requires a strong (military) leader. He maintains

> as society changes, so does the role of the military. In the world of oligarchy, the soldier is a radical; in the middle class world, he is a participant and arbiter; as the mass society looms in the horizon he becomes the conservative guardian of the existing order. Thus paradoxically but understandably, the more backward a society is, the more positive the role of its military. (Huntington, 1968: 221)

Military rule might help generate political order in the short run, but it is unlikely to generate lasting political order and stability. Contrary to Huntington's claims, the political history of Africa, Latin America and the Middle East since the 1950s shows unequivocally that military rule does not bring *lasting* political order and stability. In most third world countries, military rulers are neither impartial arbiters nor benevolent protectors of political order. Instead, they collude with right-wing parties against left-wing parties in Latin America (Chile, Peru, El Salvador and elsewhere). In Nigeria, the federal military government instigated a bloody civil war against the Ibo ethnic minority in 1968. The Algerian military cancelled the 1991 legislative elections which brought the Algerian transition to democracy to a halt and sank the country into a long and bloody civil war. Finally, the

---

23. Lijphart (1977) makes a similar point.

brutality of Samuel Doe's military regime has been the main motive behind the Liberian civil war in the 1990s.

V. Conclusion

This article offers a solution to the puzzle of democratization by violent political groups with no normative commitment to liberal democracy. We show that post civil-war democratization is possible if the political preferences of the citizenry are diverse enough so that each political group assesses a high enough chance of winning post civil-war elections. Citizens prefer democracy to the status quo because (1) under the status quo, warlords engage in un-coordinated 'illegal' expropriation that destroys any incentive to invest or to engage in any productive activity, and (2) under democracy, political parties have an incentive to ban illegal expropriation to reap part of the benefits generated from an increase in productive investments. Thus, incentives for democratization are generated in part by the fact that protection against expropriation under democracy benefits both the warring factions and ordinary citizens.

Analysis of the evolution of democratic institutions and the extent to which they are successful requires dynamic game theoretical analysis that is left for future research. This framework could help explain how the people use the power they have been granted to influence public policies, control public offcials or develop democratic culture. However, we believe the question of the *choice* of democracy as a system of government can be properly understood in the relatively static environment such as the one developed here.

APPENDIX

Proof of Proposition 1. We show that under the status quo, there exists a unique Nash equilibrium in expropriation, and that in this equilibrium, both factions choose the same level of expropriation. Faction L chooses s^L to maximize its objective function $(\alpha + s^L)f(e^*(s^L, s^R))$, and faction R chooses s^R to maximize its objective function $(\alpha + s^R)f(e^*(s^L, s^R))$. For any fixed s^R, the derivative of faction L's objective function with respect to s^L is given by

$$(\alpha + s^L)f'(e^*(s^L, s^R))\frac{\partial e^*(s^L, s^R)}{\partial s^L} + f(e^*(s^L, s^R))$$

Recalling that non-affiliated individuals' optimization implies that

$$f'(e^*) = \frac{c}{1 - s^L - s^R} \geq 0$$

which increases with s^L and observing that $f''' \geq 0$ implies that $e^*(\cdot, s^R)$ is concave in

s^L for every s^R,[24] that is $\partial e*(s^L, s^R)/\partial s^L \leq 0$ decreases with s^L (but increases in absolute value) implies that the derivative of faction L's objective function and by symmetry also of faction R's is decreasing in s^L, and s^R, respectively. Therefore, for every s^R, faction L has a unique best response, s^L, that satisfies

$$(\alpha + s^L)f'(e*(s^L, s^R))\frac{\partial e*(s^L, s^R)}{\partial s^L} + f(e*(s^L, s^R)) = 0 \qquad (A1)$$

and similarly for faction R. Rearranging these two equations we obtain,

$$s^L = -\alpha - \frac{f(e*(s^L, s^R))}{f'(e*(s^L, s^R))\partial e*(s^L, s^R)/\partial s^L}$$

and

$$s^R = -\alpha - \frac{f(e*(s^L, s^R))}{f'(e*(s^L, s^R))\partial e*(s^L, s^R)/\partial s^R}$$

The fact that $f'(e*) = c/(1 - s^L - s^R)$ implies that $e*(s^L, s^R)$ depends only on the sum of s^L and s^R from which it follows that

$$\frac{\partial e*(s^L, s^R)}{\partial s^L} = \frac{\partial e*(s^L, s^R)}{\partial s^R} \quad \text{for every } s^L, s^R \geq 0.$$

Therefore, in every pure strategy Nash equilibrium, $s^L = s^R$.

Finally, the uniqueness of this pure strategy Nash equilibrium follows from the fact that the derivatives of the factions' payoff functions with respect to s^L and s^R, respectively, also decrease with s^R, and s^L, respectively, which implies that faction L's best response level of expropriation s^L, decreases with s^R and vice versa. Therefore, there is a unique solution to (A1) satisfying $s^L = s^R$. Inspection of (A1) also reveals that for every mixed strategy of faction R, there is a unique best response for faction L. The same is true for faction R. Therefore, the game does not admit any mixed strategy equilibria. ∎

Proof of Proposition 2. The derivative of the government's payoff with respect to s^D is given by

$$(\alpha + s^D)f'(e*(s^D, 0))\frac{\partial e*(s^D, 0)}{\partial s^D} + f(e*(s^D, 0))$$

For the same reasons as in the proof of Proposition 1, the derivative decreases with s^D. The fact that for every s, s', $e*(s, s')$ depends only on the sum of s and s' implies that, for $s^D = 2s^{SQ}$,

---

24. Specifically, it can be verified that

$$\frac{\partial^2 e*(s^L, s^R)}{\partial(s^L)^2} = -\frac{c(cf''' - 2(1 - s^L - s^R)f'')}{(f'')^2(1 - s^L - s^R)^4}$$

$$\leq 0$$

if $f''' \geq 0$.

$$(\alpha + s^D)f'(e*(s^D, 0))\frac{\partial e*(s^D, 0)}{\partial s^D} = f(e*(s^D, 0))$$

$$= (\alpha + 2s^{SQ})f'(e*(s^{SQ}, s^{SQ}))\frac{\partial e*(s^{SQ}, s^{SQ})}{\partial s^L} + f(e*(s^{SQ}, s^{SQ}))$$

$$= s^{SQ}f'(e*(s^{SQ}, s^{SQ}))\frac{\partial e*(s^{SQ}, s^{SQ})}{\partial s^L}$$

$$< 0$$

where the second equality follows from the factions' first-order conditions under the status quo (A1), and the last inequality from the fact that $e*$ decreases with s^L. It follows that it must be the case that $s^D < 2s^{SQ}$. ∎

Proof of Proposition 3. The proof is straightforward. The situation between the external enforcer and the faction it installs in government is identical to the situation between the two factions under the status quo. ∎

Proof of Proposition 4. Suppose to the contrary that such an equilibrium exists. Since given q, at least one of the factions would not want to risk inviting the external enforcer (faction L if $q \geq \frac{1}{2}$ and faction R if $q \leq \frac{1}{2}$), it follows that at least one faction would not want to invite the external enforcer upon observation of the low signal either. It must therefore be the case that if at all the external enforcer is invited only when both factions observed a positive signal. But then, at least the faction that would have preferred not to invite the external enforcer under q should realize that the enforcer will arrive exactly when the other faction observed a high signal too. Updating upon this information, the probability that the external enforcer favors the faction is identical to the prior probability q, and so at least one faction should object to inviting the external enforcer. ∎

Proof of Proposition 5. Note that $p*$ is given by the solution to

$$p*(\alpha + s^D)f(e*(s^D, 0)) + (1 - p*)\alpha f(e*(s^D, 0)) = (\alpha + s^{SQ})f(e*(s^{SQ}, s^{SQ}))$$

where the left-hand side describes the expected payoff under democracy and the right-hand side describes the payoff under the status quo. Solving for $p*$, we obtain

$$p* = \frac{(\alpha + s^{SQ})f(e*(s^{SQ}, s^{SQ})) - \alpha f(e*(s^D, 0))}{s^D f(e*(s^D, 0))}$$

Now, since $s^{SQ} < s^D < 2s^{SQ}$,

$$p* = \frac{(\alpha + s^{SQ})f(e*(s^{SQ}, s^{SQ})) - \alpha f(e*(s^D, 0))}{s^D f(e*(s^D, 0))} < \frac{s^{SQ}}{s^D}\frac{f(e*(s^{SQ}, s^{SQ}))}{f(e*(s^D, 0))}$$

The fact that under democracy the government can choose to expropriate $2s^{SQ}$ but prefers not to implies that

$$(\alpha + 2s^{SQ})f(e^*(s^{SQ}, s^{SQ})) < (\alpha + s^D)f(e^*(s^D, 0))$$

Upon rearranging, it follows that

$$\frac{\alpha + 2s^{SQ}}{\alpha + s^D} \frac{f(e^*(s^{SQ}, s^{SQ}))}{f(e^*(s^D, 0))} < 1$$

Finally, the fact that $(\alpha + 2s^{SQ})/(\alpha + s^D)$ decreases with α implies that

$$\frac{2s^{SQ}}{s^D} \frac{f(e^*(s^{SQ}, s^{SQ}))}{f(e^*(s^D, 0))} < 1$$

from which it follows that $p^* < \frac{1}{2}$. ∎

REFERENCES

Banks S. Arthur and Thomas C. Muller, eds. (1998) *Political Handbook of the World: 1998*. Binghamton, NY: CSA Publications Binghamton University.

Barak, Oren (2001) 'Lebanon: From Collapse to Resuscitation', Working Paper, Harvard University.

Collier, Paul (2000) 'Rebellion as a Quasi-Criminal Activity', *Journal of Conflict Resolution* 44: 839–53.

Collier, Paul, Anke Hoeffer and Mans Södermom (2001) 'On the Duration of Civil War', Paper presented at the World Bank Workshop on Civil Wars and Post-Conflict Transitions, 18–20 May.

Doyle Michael, and Nicholas Sambanis (2000) 'Peacebuilding: A Theoretical and Quantitative Analysis', *American Political Science Review* 94(4): 179–201.

Fearon, James (2001) 'Why Do Some Civil Wars Last So Much Longer Than Others?', Paper presented at the World Bank Workshop on Civil Wars and Post-Conflict Transitions, 18–20 May.

Gibb, Tom and Frank Smyth (1990) 'Is Peace Possible in El Salvador?', Report, Washington, D.C.: Washington Conference on Latin America.

Greif, Avner (1998) 'Self-Enforcing Political Systems and Economic Growth: Late Medieval Genoa', in Robert Bates and Avner Greif (eds) *Analytical Narratives*. Cambridge: Cambridge University Press.

Grossman, Herschel and Minseong, Kim (1995) 'Swords or Plowshares? A Theory of the Security Claims to Property', *Journal of Political Economy* 103 (Dec.): 1275–88.

Guichard, Jean-Pierre (2000) *De Gaulle face aux crises: 1940–1968*. Paris: Cherche Midi.

Hirshleifer, Jack (1995) 'Anarchy and Its Breakdown', *Journal of Political Economy* 103 (Feb.): 26–52.

Huntington, Samuel (1968) *Political Order in Changing Societies*. New Haven and London: Yale University Press.

Jaggers, Keith and Ted Robert Gurr (1999) 'Polity 98 Project Regime Characteristics, 1800–1998' [http://www.bsos.umd.edu/cidcm/polity].

Konrad, Kai and Stergios Skaperdas (1999) 'The Market for Protection and the Origin of the State', Working Paper, Center for Economic Policy Research, University of California, Irvine.

Licklider, Roy (1998) 'Civil War Data 2.1'[http://rci.rutgers.edu/˜licklide].

Lijphart, Arend (1977) *Democracy in Plural Societies*. New Haven: Yale University Press.

Manin, Bernard (1997) *The Principles of Representative Democracy*. Cambridge; New York: Cambridge: Cambridge University Press.

Nickerson David and Leonard Wantchekon (2001) 'Opposing Interventions Facilitate Post Civil War Democratization', Working Paper, Yale University.

Montgomery, Tommie Sue (1995) *Revolution in El Salvador: From Civil Strife to Civil Peace*. Boulder, CO: Westview Press.

Norton, Richard (1997) 'Lebanon: with Friend like These', *Current History* 1 (Jan.): 6–12.

O'Donnell, Guillermo and Philippe Schmitter (1986) 'Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies', in Guillermo O'Donnell, Philippe Schmitter and Laurence Whitehead (eds) *Transitions from Authoritarian Rule*. Baltimore, MD: Johns Hopkins University Press.

Olson, Mancur (1993) 'Democracy, Dictatorship and Development', *American Political Science Review* 87 (Sept.): 567–76.

Paige, Jeffery M. (1997) *Coffee and Power: Revolution and the Rise of Democracy in Central America*. Cambridge, MA: Harvard University Press.

Przeworski, Adam (1996) 'Why Do Democracies Survive in Affluent Countries?', Working Paper, New York University.

Reno, William (1998) *Warlord Politics and African States*. Boulder, CO: Lynne Reiner.

Rustow, A. Dankwart (1970) 'Transitions to Democracy: Toward a Dynamic Model', *Comparative Politics* 2 (Apr.): 337–63.

Sena, Eken, Paul Cashin, Nuri Erbas, Jose Martelino and Adnan Mazarei (1995) *Economic Dislocation and Recovery in Lebanon*. Washington, D.C.: International Monetary Fund.

Sartori, Giovanni (1965) *Democratic Theory*. Based on the author's translation of *Democrazia e definizione*, 2nd edn. New York: Praeger.

Shumpeter, Joseph A. (1942) *Capitalism, Socialism, and Democracy*. New York: Harper & Brothers.

Skaperdas Stergios (1992) 'Cooperation, Conflict, and Power in the Absence of Property Rights', *The American Economic Review* 82(4): 720–39.

Torres-Rivas, Edelberto (2001) 'Civil War and Insurrection in El Salvador', in Michael, Doyle, Ina Johnstone and Robert Orr (eds) *Keeping the Peace*. Cambridge: Cambridge University Press.

Walter, Barbara F. (1997) 'The Critical Barrier to Civil War Settlement', *International Organization* 51: 335–64.

Walter, Barbara F. (2002) *Committing to Peace: The Successful Settlement of Civil Wars*. Princeton, NJ: Princeton University Press.

Wantchekon, Leonard and Mario Simon (1999) 'Democracy as an Arbitration Mechanism', Working Paper, Yale University.

Wood, Elisabeth (2000) *Forging Democracy from Below: Insurgent Transitions in South Africa and El Salvador*. Cambridge: Cambridge University Press.

LEONARD WANTCHEKON is an Associate Professor of Politics at New York University and Research Affiliate with the Department of Economics at Yale University. He received his PhD in Economics from Northwestern University. He has published several articles in political economy, democratization and formal political theory in the *Quarterly Journal of Economics*, *Comparative Political Studies*, *Journal of Conflict Resolution*, *Constitutional*

Political Economy and *Journal of Theoretical Politics*. ADDRESS: 269 Mercer Street, New York, NY 10003, USA.

ZVIKA NEEMAN is an Assistant Professor of Economics at Boston University, and a Senior Lecturer of Economics and member of the Center for Rationality and Interactive Decision Theory at the Hebrew University in Jerusalem. He received his PhD in Managerial Economics and Decision Sciences from Northwestern University in 1995. He has published several articles in economic theory, information theory and mechanism design in the *Review of Economic Studies*, *Journal of Economic Theory*, *Journal of Law Economics and Organization*, *Game and Economic Behavior* and the *Journal of Theoretical Politics*.