

Power-sharing, Agency and Civil Conflict

Power-sharing Agreements, Negotiations and Peace Processes

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Executive Summary

Power-sharing arrangements aim to reduce the risk of civil conflict by guaranteeing potentially warring parties a role in a country's government, thus lessening the stakes of political contestation. In this way, power-sharing reduces the risk that spoilers will resort to violence if they do not succeed in the process of democratic electoral contestation. While power-sharing can reduce the incentive of electoral losers to renege on their commitment to democracy, we argue that this depends on the nature of the relevant groups, as well as on the political institutions that are chosen. The degree to which power-sharing agreements are able to promote civil peace thus depends in part on the relative military capacity of the fighting parties, as well as on the potential role of 'spoilers'. The ideal environment for power-sharing to shape peace is when the sides are evenly balanced and the costs of war are relatively high. In contrast, when groups are less evenly matched and the costs of war low, power-sharing implies non-proportional distributions of power and positive incentives for spoilers. Under such conditions, power-sharing may increase rather than reduce the risk of civil conflict.

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1. Introduction

Civil conflict is a curse of much of the developing world. In order to prevent the occurrence or recurrence of armed conflict in societies at risk, it is commonly recommended that all parties to previous conflict and any potential spoilers be included in power-sharing arrangements such as grand coalitions, federal institutions, and proportional allocations of government positions and benefits. In other words, give all relevant parties a share of the political pie. These features, it is commonly believed, may reduce the risk of conflict by lessening the stakes of democratic political contestation. Yet, power-sharing arrangements often consist of a bundle of different institutional mechanisms, each of which may have more or less desirable effects, and some of which may even work at cross-purposes. Such institutions may, however, at the same time have unintended and sometimes undesirable effects on the provision of public goods as well as on civil conflict. Some potentially detrimental effects of power-sharing institutions stem from their rigidity and from perverse incentives they may generate for politicians. These issues are the topics of this paper.

Existing scholarship on power-sharing institutions include cross-national quantitative studies as well as historical case studies of societies wracked by civil conflict. There has, however, been little rigorous theoretical recognition of the fundamental problems in collective decision making and in the agency relationships between politicians and their constituents. Moreover, the prevalent theoretical conceptions and empirical measures of the political institutions of power-sharing have been too simple. Finally, the empirical literature has suffered from selection bias, as studies have focused much more on societies that have actually experienced civil conflict than on societies that have faced similar challenges but avoided overt conflict. For all these reasons, power-institutions are worth a closer and more rigorous examination.

This paper begins to address this agenda. We begin by identifying and distinguishing the most important features of power-sharing institutions, such as inclusiveness (embodied in such governance practices as grand coalitions), proportionality, and devolution of power (federalism). We then raise the questions of whether power-sharing is likely to be democratic and effective in promoting civil peace and societal development. In essence, we shall argue, power-sharing implies the pursuit of one conception of democracy, which we shall refer to as *ex post* fairness, at the expense of others, such as *ex ante* uncertainty or performance sensitivity. Finally, we develop a game-theoretic model of power-sharing and show that its ability to promote civil peace depends in part on the resource distribution between the potential “spoilers.” Our results show that in societies that are divided into antagonistic groups of roughly equal resources, and where the costs of conflict are high, power-sharing will be more likely than more majoritarian institutions to promote civil peace. Where groups are less evenly matched, however, power-sharing may have less obvious and beneficial consequences. Through these models, we will seek better to understand the consequences of power-sharing versus other governance institutions in societies prone to civil conflict.

2. The Threat of Civil Conflict

Civil conflict is by far the dominant form of armed conflict in the contemporary world (Gleditsch et al., 2002), and its costs are enormous (Collier et al., 2003). In recent years, civil war has left approximately 800,000 dead in Rwanda alone, 350,000 in Angola, and

150,000 in Liberia.¹ Building peace by preventing civil conflict is therefore a paramount objective for national and international policy makers, and this concern has been central to many of the most prominent recent political events in the Middle East, Central Asia and Africa (including Iraq, Lebanon, Afghanistan, and Sudan).

Peace-building involves manifold challenges. The most pressing of these is typically to prevent a return to overt violence. Peace agreements themselves are not enough, as each of the above cases testifies. In each of these cases (Rwanda, Angola, and Liberia), peace agreements were signed, in some cases several such documents. Yet, these agreements failed, and a horrendous human toll continued to fall on these societies. Peace-building therefore requires ongoing efforts to contain and prevent violence as well as the establishment of viable civilian institutions for the long haul. These challenges can be particularly profound in societies that have already experienced conflict or that are susceptible to such conflicts, and the search for remedies is therefore particularly critical under such circumstances.

Thus, peace-building requires not only committed efforts to end an ongoing conflict, but also the painstaking design of credible institutions for civilian, and preferably democratic, rule. These issues of governance do not replace, but are superimposed upon, those of conflict resolution and prevention. Successful civilian governments not only have to prevent conflict but also to provide various public goods and other policies that their populations desire. Most polities around the world face such problems of governance, and many are torn by domestic conflict that could erupt into violent struggle.

3. Spoilers and the Calculus of Conflict

Sadly, peace-building is typically most difficult where it is at the same time most critical. Post-conflict societies or other societies threatened by civil conflict commonly face a security dilemma, “a situation in which each party’s efforts to increase its own security reduces the security of others” (Snyder and Jervis 1999: 15). And, all else equal, the greater the threats to the various parties’ perceived security levels, the greater the risk of conflict. Parties that perceive significant threats to their security, or who see their security declining over time, will have reasons to take steps to meet these threats. While occasionally their responses may be to strengthen collective security, at other times they may react in pre-emptive or even aggressive ways. Such situations are, of course, potentially volatile and particularly in need of peace-building efforts. And if even a small number of parties, or just a single actor, acts in a destabilizing manner, large-scale conflict may ensue.

There are many problems that can threaten the effectiveness of peace agreements and peace-building efforts, including shortcomings in the areas of coordination, capabilities, and credibility among the guarantors (third parties) of the agreements (Stedman and Rothchild 1996). But as Stedman (1997) points out, the greatest risk to peace-building in post-conflict situations comes from “spoilers” – leaders and parties that have the capacity and will to resort to violence to subvert peace processes through the use of force. Conflict may result whenever there is at least one player that has both the capability and incentive to act in this way. Angola, Mozambique, and Cambodia have been among the societies afflicted with conflict that originated in this way (Stedman 1997).

¹ We intentionally mention this diverse set of cases to underscore the generality of application of our model. Indeed, the only restriction we make is that conflict is costly.

4. The Remedy of Power-Sharing

Among the remedies commonly prescribed for societies threatened by civil conflict are power-sharing arrangements designed to accommodate the various actual or potential parties to a civil conflict. In many cases, the critical players that power-sharing arrangements seek to integrate are precisely “spoilers” and their respective constituencies. The main premise of power-sharing is to guarantee each of the critical players, those capable of acting as spoilers, a significant payoff from cooperation and peaceful behavior. The hope is that *ex ante*, each player will see the payoff from peaceful cooperation as superior to the expected returns from violence, and that *ex post* the rewards from cooperative behavior will sustain this expectation.

Power-sharing arrangements promise to sustain such behavior in two ways: (1) by providing a “floor” for each party’s returns from cooperation in collective decisions, and (2) through provisions that protect group autonomy in sensitive policy areas. Power-sharing thus helps reduce the threat of conflict by giving all potential parties to any conflict a stake in peaceful cooperation and a set of mutual guarantees of security and the protection of basic interests. Both of these features are likely to lessen the probability that any group will perceive significant threats to its interests. This may be especially true for small or resource-poor groups. Power-sharing arrangements are designed specifically to reduce the uncertainty found in democratic societies by limiting the ability of larger social groups or electoral winners to use the power of the state for sectional purposes. Given that such governance solutions thus promise to minimize the risk of a recurrence of conflict, it is no surprise that power-sharing arrangements have found widespread favor among analysts and peace-makers (Sisk 1996).

Previous research on power-sharing has identified this practice as the political institutionalization of conflict resolution. Institutionalization implies that power-sharing must be embedded in key aspects of political decision making and that it must be given sufficient procedural entrenchment and “stickiness” to form the basis for credible commitments. Power-sharing arrangements vary in the institutions involved, as well as in the entrenchment or rigidity of these procedures. Probably the most well-known example of rigid power-sharing existed in Lebanon from 1943 to 1975, which was governed according to a very specific and static formula. Other examples include Colombia (1958) and Northern Ireland (1974). Less rigid forms of power-sharing allow grand coalitions to be formed not only on the basis of predetermined ethnic groups, but on an evolving basis through the party system. South Africa exemplifies this type of “self-determined” arrangement. South Africa’s power-sharing arrangement is also noteworthy for its time limitation, a transitional period of five years. Such constraints address one of the key weaknesses of the power-sharing enterprise – the rarity of circumstances under which both advantaged and disadvantaged parties are willing to adopt them (Spears, 2000).

Power-sharing arrangements have been implemented in a wide variety of forms. Typically, power-sharing includes institutions that mandate joint control of the executive, minority veto power, group autonomy and special forms of legislative representation. Such regimes might feature collegial executives, grand coalition governments, federalism or administrative decentralization, super-majority requirements for policy making, judicial institutions designed to protect group or individual rights, and electoral systems chosen to provide guarantees of continuous representation.

The most prominent model of power-sharing is Lijphart’s (1977) consociational democracy, which has four definitional components: (1) a grand coalition, (2) a system of mutual veto power, (3) proportional representation, and (4) segmental autonomy, such as federalism. Jointly, these features help alleviate the grievances of potential spoilers, ensure

the representation of a broad range of social interest, and guarantee that no group will have to suffer policies that are considered seriously detrimental to its own interests.

Yet, it is clear that the four features that Lijphart identifies can in many contexts exist independently of one another. It is also evident that these features do not fully specify or exhaust the world of possible power-sharing arrangements. For example, Lijphart does not systematically distinguish between consultative, legislative, executive, administrative, and judicial political institutions. Yet, societies may feature power-sharing arrangements in some of these institutions (e.g., administrative ones) while not in others (e.g., judicial institutions). Moreover, Lijphart's focus is strictly on institutions of political decision-making, whereas in many conflict-prone societies arrangements for the sharing of wealth and other resources may be just as important. Our focus in this paper, however, will not be on such potential extensions, but rather on the democratic qualities and governance effects of the key power-sharing institutions.

We offer as an alternative the following conceptual framework. A **power-sharing** arrangement is an agreement that constrains the set of agents (politicians, policy makers) that are empowered to make political decisions in a given community, for example a state. The parties to such agreements are usually political parties, armed forces, or other organizations representing different social groups whose perceived interests are significantly at odds with one another.

Yet, not all constraints on political agency should be considered power-sharing institutions. Constraints can broadly be divided into on the one hand agreements that **mandate** the participation of particular groups in particular offices, and on the other hand agreements that **prohibit** the representation of any group in particular offices. The former kind of constraint is a power-sharing constraint, whereas the latter is a power-dividing constraint.

Power-sharing and power-dividing arrangements can attached to a variety of different political institutions, such as cabinets and chief executive offices, legislatures and legislative committees, civil service systems, judicial institutions, armed forces, educational institutions, and other administrative agencies.

Examples of **power-sharing constraints** are thus:

1. grand (cabinet) coalitions in which all significant parties are represented,
2. other decision-making or advisory councils on which all or a range of different groups are given representation,
3. electoral commissions on which all parties have representation,
4. agreements that reserve particular executive offices for particular parties or social groups,
5. rules that mandate proportionality or broad inclusiveness in civil service or other administrative appointments, and
6. electoral systems (such as large-magnitude Proportional Representation with low electoral thresholds) that facilitate the representation of all significant social groups.

Power-dividing arrangements, on the other hand, can be constraints such as the following:

1. independent judicial institutions on which members of the relevant groups or parties are barred from serving,
2. electoral commissions on which the representatives are prohibited from having any association with particular political parties,

3. rules prohibiting civil servants from holding offices or membership in political parties or similar organizations,
4. rules that establish a separation of church and state, so that political agents are prohibited from making authoritative decisions on matters of religious practice, and
5. federal institutions that prohibit national policy makers from making authoritative decisions at subnational levels of government.

Many agreements feature veto provisions, which may not always seem to fall readily into either the power-sharing or the power-dividing category. Yet, it is reasonable to classify veto arrangements as falling into the power-sharing category if they consist in unanimity rules in broadly based institutions such as grand coalitions. On the other hand, where veto powers are set up through a system of checks and balances among institutions in which some of the parties can be and are routinely absent, then we would classify the latter system as power-dividing.

In the case of both power-sharing and power-dividing institutions, it may be useful to distinguish between **hard** and **soft** constraints. Hard constraints mandate or prohibit particular forms of representation (e.g., a grand coalition formula may mandate that all parties get some representation in the cabinet), whereas soft constraints only significantly facilitate such representation (e.g., a PR electoral system may facilitate the representation of all significant parties, but not completely guarantee it, since the ultimate decision is left to the voters).

Power-sharing as well as power-dividing constraints can be differentiated according to the types of enforcement mechanisms by which they can be backed up. Some constraints have **third-party enforcement**, which in the case of civil conflict may be the United Nations, other international organizations, great powers, or “coalitions of the willing.” Other constraints can only be **self-enforced** by the parties to the agreement themselves. An example of the latter would be the agreements that were reached in the Netherlands at the time of World War I and that constituted the original example of what Arend Lijphart (1977) calls consociational democracy.

4.1 Is Power-Sharing Democratic?

Although power-sharing is possible without democracy, such arrangements, and other peace-building efforts, are most commonly associated with attempts to build democratic forms of government. Indeed, the claim commonly made for power-sharing institutions is that they promote not only civil peace but also democracy. This is indeed Lijphart’s (1999) claim concerning his broader, but closely related, notion of consensus democracy. Consensus democracy is, according to Lijphart, not only more peaceful, but also more democratic in its design and benign in its effects, when compared to majoritarian democracy. This is, at least in major part, because of not only the security guarantees, but also the egalitarian effects, of this kind of power-sharing.

Yet, the democratic credentials of power-sharing institutions are in some ways rather dubious. Such qualms become evident when we consider the implications of power-sharing for the competition between different social groups and, perhaps even more forcefully, when we consider the internal politics of different social segments.

To understand these dilemmas, let us consider three different normative ideals that are common to many prevalent conceptions of democracy, namely the ideas of (1) *ex ante* uncertainty, (2) procedural performance sensitivity, and (3) *ex post* fairness of rewards. Consider first Przeworski’s (1991) conception of democracy as the institutionalization of

uncertainty (typically expressed through the electoral channel – see also Schumpeter 1942 and Strand 2007). In this elegant conception, which has become increasingly influential since its first publication, Przeworski identifies democracy with the *ex ante* openness of the process of democratic contestation. The greater the *ex ante* uncertainty about political contests, the more democratic the regime.

Yet, this conception does not exhaust the meaning that we commonly give to the democratic political process. For example, we probably would not consider a political system as perfectly democratic in which political contests were entirely unpredictable, but subject to a lottery governed by a random number generator. Democracy, in most people's minds, also implies that political rewards are governed by a process that reflects popular sovereignty and responds to the performance of the political contestants as judge by their political principals. Thus, Strøm (1992) thinks of democratic competitiveness in terms of the **sensitivity** of the political outcomes (e.g. election results) to the **performance** of the relevant players.

Finally, democracy is in many contexts associated with particular outcomes that tend to win popular approval, such as what we can call *ex post* fairness of rewards. In particular, the concern here is that no significant group should receive a payoff that falls below a certain level of acceptability.

In consolidated democracies, these considerations typically do not conflict too starkly with one another. Uncertainty and competitiveness under generally accepted rules lead to outcomes that at least over the long haul satisfy most players' conceptions of fairness. Yet, when institutions may be viewed as biased, or when the future is heavily discounted, as may well be the case in less consolidated polities, participants may perceive a conflict these different conceptions of democracy. In such circumstances, power-sharing arrangements may tap concerns about *ex post* fairness more effectively than would more competitive and majoritarian institutions.

On the other hand, power-sharing institutions clearly run counter to the spirit of Przeworski's concerns, as it is in their very nature to **reduce** *ex ante* uncertainty about feasible political outcomes. In the same way, power-sharing essentially works to reduce competitiveness by reducing the volatility of political outcomes and thus effectively to blunt the impact of democratic competition. Thus, power-sharing effectively means giving priority to one aspect of democracy, what we have referred to above as *ex post* fairness, over other aspects such as *ex ante* uncertainty and procedural competitiveness.

4.2 Is Power-Sharing Effective?

Whether power-sharing is effective in preventing civil conflict is a concern that is different from whether it embodies a form of government that meets our standard of democratic rule. In principle, power-sharing may be peace-inducing without being democratic, or vice versa. Yet, in practice we expect some empirical relationship between these two concerns. In other words, if power-sharing fares too badly with respect to basic democratic values, it may be less effective at promoting peace in the long run. Nonetheless, it is clearly possible, over substantial periods of time, for governance mechanisms to be democratic but ineffective, or effective but undemocratic.

Whatever its democratic merits, then, is power-sharing an effective way to promote civil peace and good governance? Empirical examinations of power-sharing arrangements have tended to answer this question in the affirmative. Thus, Hartzell and Hoddie (2003) and Binningsbø (2005) each find that power-sharing generically has beneficial effects. Reynal-Querol (2002) similarly finds that systems with proportional representation are more

peaceful. The literature also attempts to differentiate between different power-sharing arrangements. Hartzell and Hoddie's results suggest that, generically, the more components of power-sharing that are present in a conflict resolution agreement, the greater the chances for sustained peace. Binningsbø, looking at a much larger sample, demonstrates that although proportionality and autonomy appear beneficial, *grand coalitions* are significantly *less* likely to be associated with sustained peace, leading her to conclude that "grand coalition is not a useful institution to have if one's aim is lasting peace."

Yet, these studies, like those that came before them, suffer from sample bias and possible endogeneity problems. Case studies are notorious for selecting on the dependent variable, and case studies of power-sharing may have had a tendency to concentrate on the more durable and successful cases. Large-n studies may escape some of these problems, but not entirely. Hartzell and Hoddie, for example, limit their studies to those cases in which the conflict was terminated through negotiation rather than through the victory of one of the parties to the conflict.

In addition to these problems of selection bias, most studies of power-sharing fail to account for potential endogeneity. Federalism and consociationalism have been adopted in many countries specifically to overcome civil conflict (Lijphart, 1999). Thus, the presence of such power-sharing institutions is part and parcel of the explanation of societal conflicts and potential civil wars. Yet, few scholars examining the relationship between political institutions and civil conflict have controlled for such endogeneity problems. In short, there are many reasons to think that the effects of power-sharing are worth further scrutiny, and that the field could benefit from new theoretical ideas as well as from improvements in data and methods.

5. The Limitations of Power-Sharing

In the remainder of this paper, we shall focus on the theoretical agenda, rather than on the improvements that could be made in measurement and empirical analysis. Our first concern will be to spell out in general terms what we take to be the most salient limitations and risks of power-sharing arrangements. These risks and limitations roughly fall into two categories: on the one hand those that result from the very operation of power-sharing arrangements once they are in place (henceforth: the *ex post* considerations), and on the other those that are occasioned by efforts to design and win support for power-sharing institutions in the first place (in our words: the *ex ante* conditions). We shall discuss these factors in broad terms and then in the last section of the paper more rigorously model some key concerns on the *ex ante* side: some factors that attach to the initial design of power-sharing institutions

Power-sharing has reduced the incidence of conflict in many fractious societies. Yet, experience from such societies as Lebanon, Cyprus, and Nigeria suggests that power-sharing does not always curb conflict. Moreover, power-sharing solutions may introduce substantial governance costs. Conflict-prone societies, even those with successful power-sharing arrangements, may exhibit an *inter-temporal trade-off* between on the one hand the prevention of a recurrence of conflict and on the other hand aspects of "good governance," such as democratic accountability and the provision of ordinary public goods. While power-sharing may help prevent conflict, at least some power-sharing arrangements may at the same time be detrimental to democratic accountability and favor politicians that represent narrow group constituencies. And, if democratic accountability is weak, politicians may turn to rent-seeking or strictly group-oriented behavior, which in turn may lead to poor public goods provision. It is therefore important to understand under what conditions power-

sharing most effectively fosters civil peace and under what circumstances it is most likely to involve serious trade-offs.

5.1 Transaction Costs

The governance problems most likely to adversely affect power-sharing arrangements arise in the forms of *transaction costs* and *agency loss*, respectively. Transaction costs can be conceived of as the institutionalized difficulty of reaching a decision.² Power-sharing institutions, given their emphasis on consensus and broadly dispersed veto powers, are susceptible to such costs. In other words, unanimity rules that come with consensus decision-making make it difficult to come to an agreement when facing difficult issues and polarized preferences. As Buchanan and Tullock (1962) argue, internal (transaction) and external costs are often in trade-off; decision-making structures make it difficult to impose external costs (e.g., through supermajority or unanimity decision rules) and also tend to raise the internal costs of reaching any decision at all. In other words, increasing the number of veto players implies higher costs of negotiation, and a greater likelihood of political gridlock. Power-sharing institutions, given their emphasis on consensus and broadly distributing veto power, typically exhibit these characteristics. Accounts of the difficulties encountered in governing Lebanon under power-sharing attribute its failures to this factor (Zahar 2005).

5.2 Agency Costs: Adverse Selection and Moral Hazard

Heightened transaction costs are not the only risk involved in power-sharing, however. Among the less widely appreciated dangers are the agency problems of *adverse selection* of group-based and intransigent politicians and *moral hazard*—incentives for misuse of public power—on the part of the same public office-holders. Such agency problems are an increasingly important concern among students of democratic political institutions (see Kiewiet and McCubbins 1991, Brehm and Gates 1997, and Strøm, Müller and Bergman 2003). Agency loss in political representation arises between politicians (agents) and their principals (citizens, perhaps identified with particular social groups) and refers to the difference between what the principal wants and what the agent delivers. When citizens delegate to politicians, they run the risk that the latter will choose actions that the citizens themselves would not have adopted, had they been in the politicians' place.

Adverse selection is a problem that may occur even before power-sharing institutions have a chance to work, if the political regime tends to select politicians who appeal narrowly to sectional interests. This bias may be built into power-sharing institutions to accommodate those potential spoilers who can most easily threaten the peace. Such spoilers may often be politicians firmly attached to their own respective groups. For ordinary voters, such politicians may be easier to identify and more credible deliverers of private goods than politicians who could make more effective cross-group appeals. For peace builders representing the international community, such group-based politicians may provide greater security that those groups with the clearest potential for violence have been included in governance. But in the long run, politicians with the most immediate connection to groups involved in recent conflict may be the least likely to foster political integration and cross-group cooperation.

Moral hazard occurs after power has been delegated, when the agent (politician) has the opportunity and incentive to take action contrary to the preferences of the principal

² More technically, transaction costs in political decision-making derive from efforts relating to information acquisition, bargaining and enforcement (Berggren and Karlsson, 2003).

(the citizens), and the latter have little opportunity to discover such acts or to punish the politician for them. Moral hazard thus occurs when politicians have opportunity and incentive to act contrary to the preferences of the citizens, and the latter have little opportunity to discover or police such acts. This can easily happen in power-sharing institutions, where politicians typically make many decisions behind closed doors and where they may come to form a stable cartel for mutual benefit. Indeed, such “elite cartels” are fundamental to many accounts of power-sharing (see e.g., Lijphart, 1977).

Adverse selection, the failure to recruit ‘good’ politicians that pursue the common interests of ordinary citizens, undermines a central goal of democratic governance: putting in place the politicians least likely to misuse their power. Moral hazard, induced by institutions that allow politicians to act unchecked and without proper oversight, enables the politicians that gain power to act with impunity and to disregard public demands. Under either circumstance, a power-sharing regime may not effectively provide the broad bundle of public goods that citizens are likely to demand over the longer haul. This ineffectiveness, if unchecked, may threaten the stability of the short-run benefit of power-sharing—peace.

6. Modeling Civil Conflict

Using the tools of game-theory we now aim to model the environments characterized by group contestation and the threat of armed violence in order to better understand the choices actors make in such settings. We shall seek to determine the circumstances under which civil peace is attained, as well as the conditions that may give rise to different equilibria. By formalizing the arguments in the literature on power-sharing, our game theoretic analysis will offer a theoretical contribution to our understanding of such institutions.

6.1 Self-enforcing Democracy

The idea of democracy as an equilibrium whereby compliance is self-enforcing was first articulated by Przeworski in 1991. Fundamentally this means that democracy is sustained by “self-interested strategic compliance” whereby no actor has an incentive to unilaterally change the system. Similarly we argue the case for power-sharing as a solution to the spoiler problem critically depends on such self-enforcing mechanisms. We proceed as follows. We begin with a non-technical presentation of Przeworski’s and Fearon’s (2006) models of democracy as an equilibrium, which features *ex ante* uncertainty. We then present a non-technical version of our own model of power-sharing (Gates & Strøm, 2007) with a focus on *ex post* proportionality. This model contains a detailed analysis of a spoiler’s outside option to engage in armed conflict. From our analysis, we derive a number of conclusions.

Przeworski’s (1991) and Fearon’s (2006)³ games involves two players, A and B. These players can be considered to be political parties, ethnic groups, or even military groups having a choice to compete in an election or to subvert or spoil the democratic process. Both Przeworski’s and Fearon’s models implicitly assume that the election contest is winner-take-all, or what could be more accurately describes “loser-takes-nothing” political institutions. The implication being that even under conditions of winner-take-all, losers of an election have an incentive to participate rather than subvert given the value of future payoffs that would come with participation. Subversion of the election process may lead to immediate gains, but long-term gains are more valuable.

³ Fearon’s (2006) game is a modified version of Przeworski’s (1991) original model.

6.2 The logic of power-sharing

We draw on the underlying logic of Przeworski's and Fearon's work to model power-sharing institutions in post-conflict environments. Our game (Gates and Strøm, 2007) also involves two players competing over the political pie. But our approaches differ in a fundamental way. While both Przeworski and Fearon feature the probabilities of winning the election presuming winner-take-all majoritarianism, in our attempt to model the features of power-sharing, we consider the proportion of the total pie allocated to a political party in accordance with the results of an election and the nature of the political institutions. Such proportionality stems from several of the political institutions that define a power-sharing system, especially a grand coalition and proportional representation. In a majoritarian system, the winner of the election captures the entire political pie. In a power-sharing system, the pie is divided more proportionally.

The basic feature of a power-sharing arrangement is the allocation and distribution of political powers to all relevant political parties. To capture this concept, we model the division of the political pie. As such, there is no *ex ante* uncertainty and no *ex post* surprises either. The share of political power (rather than the uncertainty of democracy) is emphasized.

6.3 Fighting as an outside option

Allocating a slice of the political pie to spoilers, (i.e. those capable of engaging in an armed conflict), is frequently touted as a path to peace. To model the role of spoilers, we assume that actors have a choice of complying with the results of the election or subverting the election – just as in Przeworski's (1991) game. A player (the leader or designated leader of a group) acting as a spoiler can restart the armed conflict as an outside option to striking a bargain over his share of the pie.

Fighting is relatively more attractive to the poorer group. They have less to lose by engaging in armed conflict and will therefore devote most, if not all, their resources to fighting. A group with a poorer resource endowment has a higher marginal utility for fighting than a marginal utility for productive activity. This is the essential result of Hirshleifer's "Paradox of Power" (2001) and is also found in different models by Butler and Gates (2007), and Mehlum, Moene, and Torvik (2006). These results demonstrate the incentive for a group to engage in armed conflict, particularly when a group is disadvantaged relative to another and thereby have a higher marginal utility for fighting.

6.4 Power-sharing in equilibrium

To evaluate the effectiveness of power-sharing to a potential spoiler, we need to compare the relative value of the fraction of the pie offered to a group as compared to the value afforded through armed conflict. Ultimately, the temptation to fight is low as long as the value of power-sharing is greater than the share a spoiler could earn through fighting.

The formulation of the logic of our game (Gates and Strøm, 2007) follows from a game theoretic, mathematical analysis. Here we limit ourselves to a presentation of the intuitive logic of the model. We thus examine the temptation for spoilers to reengage in combat after a power-sharing arrangement has been agreed upon. Under conditions of symmetric resource endowments (which could involve some aspects of wealth-sharing), such that groups are roughly balanced, power-sharing is relatively easily attainable.

Power-sharing agreements are less likely to hold under conditions of inequality between groups. When one group is poorer than the other (but not significantly poorer), the share of political pie needed to insure that spoilers do not fight will need to be disproportionately large.

This result raises the specter of the adverse selection problem. Given a strong incentive to fight (most evident in cases of asymmetry between the groups), military leaders will be regarded to more credibly threaten the military option. Therefore even as representatives of a political party the transition to leader of the army is less costly. Thus we should expect military politicians to be in a stronger bargaining position. Military leaders will be “unfairly” rewarded in a power-sharing arrangement due to the threat of them choosing war over a more proportional division of the political pie.

The paradox of power, whereby the weaker side is more attracted to fighting, can lead to another problem of adverse selection. Even if a power-sharing deal is struck between two relatively balanced groups, extremists in one or both groups have an incentive to break away and form their own group (as long as the splinter group would have access to enough resources and personnel to form an army). Splinters and renegades thereby actually increase the marginal utility of fighting. A relevant example is in Northern Ireland, where the two moderate sides signed onto the Good Friday power-sharing agreement, while Sinn Féin (Gerry Adams) and DUP (Ian Paisley) did not. Though in this case, neither was a military leader, but it does show the “value” of being an extremist.

Moral hazard also comes into play. If we conceive of a broader complicit public as the principal and the political party/army as the agent, power-sharing arrangements may serve to benefit the agent much more than the principal. Indeed, consider the costs of war. The general public pays for the destructiveness of war, while for the agent war is only costly in that you have to pay to fight.

We derive several conclusions from our model. First, if a player is unlikely to win an election, but likely to win a war, war is likely. As such, democracy is not self-enforcing. This result is similar to Chacon, Robinson, and Torvik (2006), who demonstrate that party’s decisions to play by the rules of democracy or spoil the process ultimately depend on both the probability of winning an election *and* the probability of success in a violent conflict. Their example of Columbia’s *La Violencia*, the incredibly bloody civil war fought by the Liberal and Conservative parties 1946—1950, further demonstrates this. Any assessment of power-sharing as an instrument of peace-building has to account for the threat of spoilers.

The second conclusion we draw is that proportionality can serve to lower the risk of spoilers. Proportionality increases the value of the present for the losers of an election by giving them a piece of the political pie. By conceiving of power-sharing as an allocation or slicing of a political pie, we feature the *ex post* aspects of power sharing and contrast them with the *ex ante* features of an election lottery. Without accounting for risk, chance in a lottery is indeed mathematically the same as the guaranteed share of the total payoff in a power-sharing arrangement.

The third conclusion has to do with the relative power of different groups in a society and how this affects the attractiveness of fighting. The paradox of power has particular relevance for power-sharing and the threat of spoilers. Moreover, it helps explain the problem of extremist splinter groups that re-start conflicts.

7. Implications

The resolution of civil conflict is among the most pressing issues facing the world today. Civil conflicts account for the vast majority of armed struggles in the contemporary world and the vast majority of casualties from war. The prevention and resolution of civil conflict is therefore a paramount concern among scholars and the policy community alike. It is especially important to understand the challenges faced by societies that are trying to resolve or prevent civil conflict while at the same time build institutions of political

democracy, perhaps for the first time, as in Iraq or Afghanistan today. It is important to improve upon the existing knowledge of institutions conducive to peace-building, specifically by carefully considering the different aspects of power-sharing and their compatibility with other social goals such as democratic accountability and the provision of public goods.

In this paper, we have discussed the advantages as well as the disadvantages of power-sharing arrangements in societies threatened by civil conflict. A significant and prominent literature touts the benefits of such institutions when civil peace is under threat. In this paper, we have tried to identify the merits of power-sharing institutions but also the limitations and risks that they carry. Some of these risks lie in the transaction costs and agency costs of power-sharing institutions, which may in the short or long-run threaten their capacity to deliver civil peace as well as a satisfactory bundle of public goods. In order to illustrate some of the pros as well as cons of power-sharing, we have presented a simple model in which two parties in a conflict-prone society have to choose between peaceful and belligerent behavior under either majoritarian or power-sharing institutions. Our results show that power-sharing has powerful attractions when the parties are evenly matched and the costs of war high, but that under other circumstances such institutions may have less intuitive and desirable consequences. Specifically, when the parties to a potential conflict are less evenly balanced but each party still retains a credible military threat, power-sharing may favor and at the same time radicalize the weaker party in a way that suggests that adverse selection of belligerent groups may occur. These results suggest that the unintended consequences of power-sharing arrangements are well worth further study, and that practitioners should approach such solutions with an understanding of the risks as well as the benefits that they may entail.

8. References

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