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SPOT-CARP symposium and collective dissent: a cross-national and sub-national analysis

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**SPOT-CARP SYMPOSIUM AND COLLECTIVE DISSENT: A CROSS-
NATIONAL AND SUB-NATIONAL ANALYSIS**

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Political Science

by

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DEDICATION

Baba, Ma and my beloved husband and best friend Subaran

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ABSTRACT

The main analytical concern of this dissertation is to develop theoretical and methodological tool to improve our understanding of collective violence, like civil wars, riots, etc. There are essentially two major problems in the existing literature: compartmentalization of focus on structure or action and inadequate systematic analysis of bridging this gap. This dissertation is an attempt to address these deficiencies in the literature.

Using the opportunity-willingness framework of interstate conflicts, I propose a mid-range theoretical approach to the structure-action problem. I argue that structural and political opportunities lead to more collective action if willingness is present in the form of grievances from low government social expenditures. I identify the particular structural and political factors that create the opportunity for collective action. Since opportunity alone will not provide a sufficient explanation of collective dissent, one would need to consider the decision calculus of the actors too. In order to do that I propose that grievances caused among people due to low level of government social expenditure creates the willingness to choose collective action. Finally, the combination of the (structural-political) opportunities and the willingness (related to grievances) facilitates several solutions of collective action problems faced by dissidents. By reducing free-riding, opportunistic behavior, pecuniary interests of the rebels, the combined effect of structural opportunities and grievances lead to collective dissent.

This dissertation also emphasizes the fact that different solutions to collective action problems have different outcomes. Some structural factors may be more relevant for low-intensity civil violence like riots, while others can lead to revolutionary overthrow of the incumbent by large-scale collective violence like revolutions and civil wars. These assumptions lead to three hypotheses which are tested using large-N datasets and different estimation techniques.

I also try to address the second drawback by providing substantial empirical analysis both at cross-national level for the period 1970-99, and at sub-national levels in two countries, India and South Africa, for the period 1999-2006.

CHAPTER ONE: INTRODUCTION

1.1. Introduction

The studies of collective dissent in various countries have come to occupy an important position in the international political research agendas. The sheer proliferation of domestic conflicts has made it imperative for scholars in almost all disciplines to study their causes and consequences. Several countries of the world have been torn by internal conflicts like Ethiopia, erstwhile USSR and Yugoslavia, many other African countries. The contribution of this dissertation is to improve our understanding of civil conflict that has plagued several countries around the world.

This dissertation aims at better understanding the reasons that lead human beings to give up everything and join rebellions and civil wars. There is abundant evidence in the literature highlighting the effectiveness of social policies and redistributive transfers in controlling and preventing civil wars (Grossman 1994, 1995; Azam 2001; Azam and Mesnard 2003; Justino 2007). For example, Grossman (1994, 1995) shows how redistribution of property income to the working classes through wage subsidies or other forms of transfers can reduce the probability of workers engaging in extralegal activities. Similarly, Azam (2001), in the context of Africa, demonstrates how systems of redistribution within and amongst groups, especially in the education and health sector, create solidarity links between them, which in turn helps reducing the risk of political violence. Building a contract-theoretical model, Azam and Mesnard (2003) argue that promises from government about transfers can be effective in off-setting the rebel groups from engaging in violence. Further, Justino (2007) shows that redistributive transfer is a better strategy in combating civil violence when compared to other coercive policing strategies. Repression can work with largely unorganized groups but it can facilitate organization for more large-scale collective violence (Rasler 1996). Despite the pacifying effect of redistributive transfers, poor socioeconomic conditions of people have not led to as many civil wars as one would expect. As Lichbach (1998) argues that even very intense interests and preferences are not enough to lead to a collective action, as some groups are more socially active and politically relevant than others.

Similarly, several scholars emphasize the role of structural factors in determining the onset and prevalence of civil wars (Collier and Hoeffler 1998, 2000 and 2004; Fearon 2005; Fearon

and Laitin 2003; McAdam et. al. 1996; Skocpol 1979; Elbadawi and Sambanis 2000, 2002; Sambanis 2001). Structural conditions like rough terrains, large population, low income, natural resource, and political conditions like weak state, weak society-state linkage, breakdown of states or changing balance of political power create opportunities of civil wars. Under these situations irrespective of the grievances of people, actors engage in collective dissent.

In this dissertation I try to show that, under particular structural and political conditions, grievances caused by low socioeconomic standards of living would make a person more willing to join collective action. I try to argue here that whether public provisions of basic facilities for people would lead to any collective violence or not depends on how well the discontent mass of people are able to mobilize and overcome their collective action problem of non-participation, free-riding, opportunistic behavior, etc. Redistribution of countries' wealth or shifting of fiscal incidence, which might not be possible always or not at least in a very short-run, will not initiate or prevent all the violence we see around the world. We would need a better understanding of how redistributive policies or structural conditions predict collective violence by actors.

I use the opportunity-willingness framework of interstate dispute to explain domestic civil unrest. The opportunity and willingness framework as propounded by Starr (1978) and Most and Starr (1989) represents the discussion of structure-agent problem in conflict studies as argued by Lichbach (1998). Opportunity refers to the possibility of interaction in a particular environmental/ structural/ systemic setting. In other words, it refers to the idea that "what humans do is constrained by the actual possibilities in the objective environment" (Friedman and Starr 1997). For example, in the context of inter-state disputes borders and other geopolitical factors are important. Willingness, on the other hand, refers to 'cognitive behaviorism', i.e., the process of choice related to the selection of particular action from a range of alternatives (Friedman and Starr 1997). Willingness, thus, refers to the choice of particular action (even no action) and to employ available capabilities to further certain policy options over other alternatives (Most and Starr 1989).

On similar lines, Lichbach (1998), in the context of intrastate conflicts, argues that every action of collective dissent needs an institutional context which exacerbates or retards it. That is, action against the authority accounts for the possibilities and constraints available to the people. A study of collective action by agents in any society would need an understanding of the historically concrete nexus between groups and institutions prevalent in that society (Lichbach 1998). Specific institutions facilitate the mobilization of particular groups and this, in turn,

influences the shaping of future institutions. Based on this logic, I attempt to show in this dissertation that particular structural and political opportunities facilitate the mobilization of people who are aggravated due to poor living conditions. These structural and political opportunities provide the backdrop within which willingness of people lead to collective actions.

Using both cross-national and sub-national levels of analysis, I show that large youth cohorts, ethnic groups and chances of political participations provide the contextual opportunity. These opportunities help to mobilize people, who are dissatisfied by the poor delivery of basic services, into rebel groups. Rebel groups are able to solve the problems of initiating a collective action if there are large number of young people, ethnic groups and open political contestation present. At cross-national level, I find that lack of educational facilities lead to collective action in the presence of afore-mentioned structural-political opportunities. In the case-studies on India and South Africa, I find that poor delivery of social services like education and health disturb internal peace and order in the sub-national units (states for India and provinces for South Africa). The discontentment due to lack of basic services provide the motivation, while youth bulges, ethnic groups and political openness provide the opportunities for low-level collective violence in the countries. The effect appears to be stronger for low-intensity collective violence like riots and protests than large-scale civil wars. In the next section, I present a brief overview of the literature on civil wars relevant to this study and try to point out their limitations in understanding civil wars and collective dissent in general. Then I move on to outlining the theoretical and methodological orientation of this methodological. I conclude the introduction with chapter outline.

1.2. Literature Review

The sheer proliferation of domestic conflict in the recent decades has made its study a central point of attention for the scholars in the discipline. The complexities involved in collective action have confounded the scholars forever. Riker (1982) argues that collective choice is inherently unstable and unpredictable. This dissertation attempts to improve on this point by stressing the importance of particular “nuts and bolts” (Elster 1993) that reappear across various collective action situations. This is also an attempt to apply collective action theories to the study of conflict, which has so far remained largely unexplored (Lichbach 1998) by deriving falsifiable hypotheses, rather than a more general theoretical approach based on preferences and constraints (Moore 1995).

Problem1: Limited Focus of Existing Theories

The first problem with existing literature is the compartmentalization of focus either on structure or on agent. Although scholars have tried to conceptualize and develop analytic frameworks to account for collective action, but due to their limited focus these efforts had remained concentrated at particular levels of analysis. While structural-political opportunity theories place more importance on macro-level factors, agent oriented theories like rational choice based collective action theories or psychologically oriented deprived actor (DA) have mainly concentrated their efforts to study micro or meso-level processes. Proponents of deprived actor research program claim that they do a better job in integrating structure and action (Gurr 1970, 2000; Davies 1965; Lichbach 1995). On the other hand, collective action research program make auxiliary assumptions about structural characteristics and structuralists also make assumptions about actors to elaborate their theories. Besides being limited in their focus, rational-choice based collective action theories are also criticized for being tautological, since it is difficult to derive falsifiable hypotheses from broad sets of constraints and preferences. Preferences do not imply mobilization automatically or performs well empirically (Moore 1995). Therefore, structuralists and collective action theories realize that they can explain certain aspects of collective dissent but cannot successfully predict aggregate levels and particular outbreaks of protests and rebellions (Lichbach 1995, 1998).

The reason for this inadequacy, as Lichbach (1994) argues, in most studies of social movement and contentious politics is due to their focus almost exclusively on the initial problem of why a rational human being would agree to participate in a collective action, when he/ she can choose to free-ride. While political process oriented theories emphasize the roles played by political structures and institutions, rationalist cite subjective or strategic utility of individual decision calculus as the cause. In doing so, structuralist theories have been more successful in relating economic variables, like income inequality, inflation, unemployment, as the main driving of collective dissent (Tarrow 1996, Schock 1996). Kriesi and his colleagues, on the other hand, complain that rational choice theories on collective action leaves us in vague, since it does not provide any explanation as to how political opportunity structure is translated into cost-benefit calculus of individuals (Kriesi et. al 1995).

Problem 2: Bridging the gap between structure and action

Patterns of collective action can change according to context or, more clearly, it varies between regimes. As Tilly (2008) contends:

“Uniformity [in the repertoire] within regimes and differences between regimes result from two interacting influences: (1) actions of the central government that impose limits on collective claim making within the regime and (2) communication and collaboration among claimants (actual and potential) that pool information, beliefs and practices concerning what forms of claim making work or don’t work.” (as quoted in Tarrow 2008)

Every government has its own set of prescribed, tolerated and forbidden forms of collective action (Tilly 2008). Lichbach (1998) argues that political opportunity theories and rational choice collective action theories can be blended to offer a more comprehensive explanation of collective behavior. Political opportunities facilitate mobilization processes, which, in turn, create further political opportunities. Collective action theories studies three sets of political processes which forms the backbone of social order: (i) political opportunities created by the interaction between rebels and State patronage, accommodation, repression, etc; (ii) effort of dissident groups to overcome collective action problem of non-participation through mobilizing structures in the society; (iii) creation of cultural frame about the public good sought for by the dissident groups. Therefore, basic argument provided by both structuralist theorists and rational actor models that follow from this discussion can be integrated together as follows (Lichbach 1998):

Institutions → Political Opportunity, Mobilizing Structure, Cultural Frame → Collective Action
Solutions → Collective Action → Intended and Unintended outcomes

Institutions provide the political opportunity, mobilizing structures and cultural frames for collective action which facilitates particular solutions to collective action. This, in turn, exacerbates or reduces possibility of collective action. The pathologies of collective action once again shape the institutions and contextual factors. Tilly (2008) argues that the variation between regimes with respect to different types of collective action stems from the interaction between government capacity and level of democracy in the country. Different groups of dissidents with different collective action problem facing different regimes thus adopt different solutions (Lichbach 1994). The struggle over solutions to collective action problem is the political struggle between the regime and opposition.

Lichabach (1998) points out that the structural or rational choice based theories have only been able to provide a speculative explanation of how structure and actors interact either at the aggregate level or in particular outbreaks of protests and rebellion. A more comprehensive

approach should be directed towards integration between these two lines of theorizing collective dissent. The macro-level structures will provide the contextual inputs in which micro-level processes will be able to operate.

However, in Lichbach's (1998) model, too, there appears to be gap, since he does not clearly account for the motivational input of rebels. His solutions to the collective action problems is limited to the extent that it does not elaborate on why agents would agree to mobilize in the first place and solve their collective action problem. Put differently, his model misses the willingness criteria of individuals to become a rebel.

1.2.1. Solution – Opportunity-Willingness Approach

The opportunity-willingness approach (Most and Starr 1989), I argue provides a more holistic explanation of collective violence than what is currently available in the literature (refer to Appendix I for the conceptual framework). By applying theory of interstate conflict to intrastate contentions, I try to show that the willingness or process of choice for one action over others is given by the grievances of the rebels. People will be willing to get into a contest against the state is they feel that the government is not providing them with basic social services. As Gurr (1970) points out certain socio-economic conditions make people angry and violent. It can be assumed that lack of basic provisions like food, drinking water, school, housing, hospital, etc. lead to such socio-economic conditions that make people angry and frustrated and facilitates mobilization by rebel organizations (Gurr 1970). On similar line, Maslow (1970) also argues that basic requirements of people, which he calls deficiency needs, should be met to prevent unpleasant behaviors. Physiological needs like air, water, food, social needs like education, health, and security needs like steady income, clean environment should be provided to everyone for their self-actualization. Besides satisfying the psychological condition for collective action, such socio-economic deprivation also creates the political situation which highlights the weakness of the state (Huntington 1968). To quote Hobsbawm (1959) "provided the ruler did his duty, the populace was ready to defend him; but if he did not, it rioted until he did". Government inability to provide the basic amenities is considered to be a big failure, leading to less value for the present status quo.

My first proposition shows why I assume that opportunity-willingness approach as a better way to study contentious politics, other two propositions can actually work in the real world to lead to outcomes that is unexpected, yet expected (Lichbach1995).

Proposition 1: Opportunity and Willingness combination is achievable and desirable to study collective violence.

This proposition extends the idea that almost all the proximate causes of interstate conflicts can be broadly categorized as structural or agentic (Friedman and Starr 1997; Most and Starr 1989). Similarly, I, along with Lichbach (1998), argue that all the factors that have been cited in the literature on internal violence can also be classified as either structure-oriented or actor-oriented. This limitation of levels of analysis has led to inadequate explanation of violent collective behavior. That is, structural and political opportunities alone cannot explain how these opportunities lead to collective actions by agents. On the other hand, rational-choice based collective action theories assumption of interests and preferences of actors being exogenously given fail to account for the origins of such interests and preferences (Fearon and Wendt 2002; Lichbach 1994, 1998). It does not clearly state why individuals would be willing to choose action over inaction. I argue that in order to bridge the gap between structure and action, we would need to account for the willingness of individuals. Willingness for collective dissent, according to me, is generated from the grievances of people (which I elaborate in my second proposition). Individuals are motivated to choose violence if they are aggravated due to their poor living conditions. But before elaborating on the willingness criteria, I first try to explain how and why I think that the two fundamentally different lines of theorizing (based on structure and action) can and should be integrated.

Any action against the state should account for the structure of authority (Lichbach 1998), as well as the interactions between structure and action. This leads to discussion of ecological triad as proposed by Harold and Margaret Sprout (1969). The components of ecological triad (as quoted in Most and Starr 1989) – entity, environment and entity-environment interactions – can be extended to propose a theory of civil violence. In the context of civil conflict, too, one finds the presence of such a triad – agent (entity), environment (structure of authority) and nexus between structure and agent (entity-environment interactions). Therefore, any explanation of violent collective behavior should consider the motivation of the entities/ actors involved; the institutional/ environmental context of action/ inaction and, the interaction between actors and their environment. Using such a framework will help to overcome the problems of limited focus of earlier theories of civil violence.

Moreover, collective action theories are as much politically oriented as structural-political opportunity theories in explaining social order (Lichbach 1998). Collective action theories

accounts for political opportunity insofar that interaction between state and rebels shapes strategies of dissidents, as well as, strategies of repression or accommodation of regime. Pre-existing mobilizing structures helps rebel leaders to overcome the collective action problem within the groups. Finally, collective action theories assume cultural frames to be present within both groups (rebels and State) that helps to shape the image of public good (public bad, depending upon which side you are looking at) sought after by the group. Each group tries to solve their own collective action problem, while intensifying the same for the other. This interaction creates political processes that either facilitate or hinder the application of solutions to collective action problem by each group, thereby leading to collective actions. Therefore, opportunity and willingness framework helps in incorporating all the elements of the “triad” and thereby, developing a better understanding of collective dissent.

Proposition 2: Structural factors provide the opportunity and lack of basic facilities provides the motivational input or willingness for action.

Gurr (2000) argues that opportunity for any political activity should be present for groups to mobilize. In absence of opportunities, no amount of grievances can lead to conflict (Oberschall 1973). Similarly, one can argue that in absence of grievances or willingness, no opportunity can lead to conflict. Tilly (1978) and Regan and Norton (2005) among many others point out that grievances form the backbone of any form of dissent. I argue that grievances caused by lack of government provision for basic facilities provide that backbone for mobilizing people.

Gurr (1970) posit socio-economic conditions and the perception of relative deprivation as the basic cause of political violence. Similarly, Maslow (1970) also argues that lack of basic provisions like food, drinking water, school, housing, hospital, etc. lead to such socio-economic conditions that result in unpleasant behavioral outcomes. If people cannot satisfy their basic physiological, social and security needs, it restricts their possibilities of self-actualization (Maslow 1970). Further, it creates a situation where people feel alienated and signals governments’ lack of concern for its citizens (Thyne 2006; Lichbach 1995). With this group of people, the rebel leaders face collective action problem to the least amount. Lichbach (1995) contends that intensity of demand for a good in question can help to solve the rebel’s dilemma with collective action. The value a person attaches to the good sought for determines his/ her involvement in the collective action.

In situations of mass deprivation leaders can convince people to participate in the movement and thereby, increase the probability of successful collective action (Van Belle 1996). The degree to which the deprived blame the incumbent government for their deprivation combined with expectations that the collective action can remedy this situation adds to the value of the good sought for.

If willingness is present, individuals will mobilize to under opportunities. The presence or absence of social control over expression of individual interests creates opportunities for collective action (Tilly 1978). The provisions of repression/threat or accommodation/ facilitation of regimes facilitate resource mobilization by groups for collective action. They will try to resolve their collective action problems by applying different solutions proposed by Lichbach (1994, 1995).

Proposition 3: The combination of particular structural-political opportunities and low government social spending lead to revolutionary or reformist collective actions.

The combined effect of opportunities and grievance related willingness affects the probability of collective action as it facilitates or retards some solutions to collective action problems and not others. If some structural opportunities favor some solutions to collective action and not others, it becomes important to point out those structural conditions that would increase the probability of collective action. I claim that presence of large youth cohorts, ethnic groups and political openness in absence of basic facilities from the government make it easier for the rebel groups to overcome collective action problem. Further, collective actions that occur in these situations aim to bring about revolutionary or reformist changes in the existing institutions depending upon the structure of the regime (Lichbach 1987).

Youth Bulge, Contract and Market Solutions

Urdal (2008) argues that most of the developing countries have experienced a bulge in their youth population due to the declined mortality rates in these countries. There is ample proof in the literature about youth bulges leading to political violence, even more organized forms of political violence like internal armed conflicts (Zakaria 2001; Urdal 2008; Urdal 2004; Huntington 1996; Kaplan 1994). Zakaria (2001) argues that youth bulges along with small economic and social change have been the principal cause of Islamic resurgence in Arab world.

Lichbach (1995) points out young people are generally students and do not face high opportunity cost of foregone wages. Young people are more geographically concentrated as they visit similar places (Eckert and Willems 1986; Lichbach 1995). As a result, youth groups face very low opportunity and transaction costs associated with collective action. Collier and Hoeffler (2000) and Urdal (2004, 2008) point out that presence of large youth cohorts is a potential cause of civil war as they provide a big pool of recruits for rebel organizations.

Young generation will be more susceptible to collective action as they are less accommodative than the older generations (Huntington 1968). They are the ones most disappointed by poor living conditions or due to lack of educational and employment opportunities (Urdal 2004, 2008). In absence of basic provisions from government, youth groups can mobilize to resolve their collective action problems by implementing solutions based on market and contract approaches. Both market and contract approach assumes individuals as actors who come together to act collectively in a planned or unplanned manner. They can choose to self-govern themselves and forge contracts. They can also establish mutual exchange agreements thereby, necessitating participation of all group members. Consequently, if willingness is present, youth groups can provide a potential opportunity for collective action.

Ethnic Dominance and Community Solutions

Structural theorists have long emphasized the role of overlapping systems of stratification like class, gender, status, ethnic, religious groups in organizing collective action by permitting movement coordination and allowing movements to persist over time (Tarrow 1994; Horowitz 1985; Sambanis 2001). Several authors have also found that plural societies are more prone to civil unrest compared to more homogeneous states due to the long held differences between different groups (Horowitz 1985; Sambanis 2001; Kaufman 2001; Petersen 2002). There is enough evidence in literature that shows ethnic and religious fractionalization and/ or dominance as a proximate cause of civil violence (Collier and Hoeffler 2000; Sambanis 2001; Huntington 1996; Collier, Hoeffler and Rohner 2008). This is because, people tied by ethnic and/ or religious ties are more capable of acting together. To cite, Collier and Hoeffler (2000) argue that ethnic identities facilitates in-group coordination and thereby, reduces transaction costs of collective action. Similarly, Sambanis (2001) also show that ethnic groups try to preserve their cultural identities and can act together if they are threatened. Most of the situations of discrimination are generally identified with particular ethnic or religious minorities (Gurr 2000). However, the

support for the causal link between ethnicity and civil conflict is mixed. Fearon and Laitin (2003) do not find any support for ethnic fractionalization as a source of civil wars. Nevertheless, there have been several civil conflicts in the real world due to the different ethnic identities of the people living within the same boundaries.

Lichbach (1994) also contends that rebels who see things similarly are more likely to rebel together. He argues that people tied together with kinship, religion, ethnicity or other ascriptive virtues are keener to share common knowledge that can help in reducing informational backlogs and help overcoming mutual ignorance. They also share common values that downplay self-interest for greater interest of the society or other altruistic causes (Lichbach 1998; Jassay 1989). This helps in explaining why some ethnic/ religious groups are more active in collective dissent. Therefore, it will not be a severe mistake to assume that ethnic groups will provide a potential opportunity for mobilizing if people are disgruntled due to poor socioeconomic conditions. Since we find more support in the existing literature for ethnic dominance as a permissive source of civil violence, I assume that if there high polarization between few ethnic groups it will provide a good opportunity for collective action in absence of basic facilities from government.

Political Participation and Hierarchic Solutions

Democracies are considered to relatively more peaceful than authoritarian systems or fledgling democracies (Hegre et. al. 2001; Fearon and Laitin 2003). This is based on the idea that democracies have proper political institutions to channel grievances and autocracies have strong repressive mechanisms to quell dissent. Anocracies or democracies in transition lack in both established political institutions and strong policing machinery, hence susceptible to more internal violence. Contrarily, I argue that we should expect more unrest in democracies, at least low-intensity, where there are chances of political participation.

According to McAdam et. al. (1996) openness or closure of political systems creates political opportunity for collective actions. Open and competitive elite recruitment system, as found in democracies, would make collective actions more likely as it provides more opportunity to affect the political system. Democratic societies are more likely to face more low-intensity armed conflicts due to the political lobbying by insurgent groups (Lacina 2005). In democracies, use of coercion to suppress resentment is a costly affair. Consequently, rebels know that by low-intensity civil violence they can pressurize the government to make concessions.

Political openness can give rise to aspiring leaders. Leadership plays a big role in ensuring collective action (Lichbach 1995, 1998; Moore 1995). Leaders can reduce the asymmetric information regarding others participation and thereby, increase participation in a collective action (Moore 1995). Lichbach (1995) also agrees that leaders can improve participation by forging contracts, monitoring defection, enforcing rules by sanctions and rewards. If people are extremely aggrieved due to lack of basic amenities, leaders can easily mobilize these people by promising that he/ she will be able to ameliorate their situations. Increased participation will increase the probability of winning and this, in turn, will draw in more people (Van Belle 1996). Therefore, open political system should be more prone to experience civil unrest, at least low-intensity, that authoritarian systems where repression will be used to suppress such dissent. Authoritarian governments, with their restricted political recruitment systems, will be more likely to experience large-scale civil violence like rebellion or civil wars (Hegre et. al. 2001; Rasler 1996).

Reformist or Revolutionary Change

As Lichbach (1995) points out that whether rebels collective action leads to a reformist change of policies of existing regime or a revolutionary overthrow of the regime depends upon rebels' perception of the regime and the solutions they are able to apply. If the dissidents think that the government is able to provide the good, has not provided it enough and should provide it, they will aim at a reformist change of policies. On the other hand, if a large section of the population feels alienated, several groups of dissidents with more or less different objectives bandwagon to form a revolutionary coalition, dissidents will aim at overthrowing the incumbent and provide the good themselves. Therefore, I argue that dissident groups will choose collective action of different intensities as strategies to attain reformist or revolutionary changes of regime. They will use low-intensity civil violence like riots, protests, anti-government demonstrations if they aim at reformation of existing policies within the regime. But they will prefer large scale civil violence like rebellions or civil wars if they want to overthrow the regime and become the regime themselves.

1.3. Hypotheses

There can be at least three hypotheses from the discussion presented above regarding opportunity-willingness approach to the study of contentious politics – one for solutions to

rebel's dilemma under particular combinations of opportunity and willingness, and second, on the intended and unintended consequences of such action.

Hypothesis 1: In situations of youth bulges, ethnic dominance and chances of political participation we should expect more collective action as it provides structural and political opportunities for collective actions.

Hypothesis 2: In absence of public provisions for basic facilities we should expect more collective action as it increases the willingness to choose such action and not others.

Hypothesis 3: The combination of opportunity and willingness increase the chances of both reformist and revolutionary change of political systems.

1.4. Methodological Orientation

Lichbach (1998) contends that there is not systematic empirical investigation of collective action theories of conflict. This dissertation aims to plug in that loophole. Using structure-action combination to study collective dissent, I attempt an empirical analysis first at the aggregate cross-national level and then at sub-national levels in two countries, India and South Africa.

The dependent in this study is violent collective action – riots, cycles of protests or civil wars. Civil wars include situations where there is armed military action against the regime of a state of the international system by another organized group of dissidents, where governments are actively involved and active resistance is offered, and at least 1,000 battle deaths occur during the course of action and there is at least 100 fatalities on both sides (Fearon & Laitin 2003; Sambanis 2001; Sambanis 2002). Riots are generally defined as collective acts of spontaneous violence that include five or more people (Gurr 1970). Hypotheses 1-3 will be verified using both civil wars and low-intensity civil violence like, riots and protests, as the dependent variable. This would help us to confirm the combined effect of the structural-political opportunities and lack of government social expenditure on different levels of civil violence. In the country studies the dependent variable is number of riots in each sub-national unit (Indian states and South African provinces) for each year under analysis. Although the period under analysis for cross-national analysis is 1970-99, I had to restrict the period for case-study from 1999-2006 due unavailability of data for both dependent and independent variables.

The principal explanatory variables are government social expenditure, measured as expenditure in the education and health sector, percentage of youth population, ethnic dominance

and measure of chances of political participation. In my analysis, I first try to show the independent effect of these variables to verify my first two hypotheses, then I use interaction terms between the measure of government social expenditure and structural-political opportunities to ascertain the relevance of opportunity-willingness approach combination (hypothesis 3).

I include several control variables that have been verified in the literature as determinants of collective violence. Some of these variables are: population, rough terrain, natural resources, political stability, regime, etc.

1.5. Chapter Outline

The chapters in this dissertation illustrate my assumptions and provide empirical tests of the hypotheses. In chapter 2, based on the relevant literature on collective dissent, I delineate the opportunity-willingness approach to identify particular structural and political conditions which can interact with the grievances/ willingness of actors to resolve collective action problems of the dissident. Depending upon which solution is more relevant and applicable, dissidents choose to engage in collective dissent of different magnitudes.

In chapter 3, I provide detailed discussion of the research design that I employ to test my hypotheses empirically. In this chapter I elaborate the variables used to measure all the concepts for the cross-national and sub-national studies. I also point out the different estimation techniques that will be used for different levels of analysis.

Chapter 4 provides the empirical analysis at the cross-national level. First, I provide the relevance of opportunity-willingness combination for understanding large-scale collective violence like civil wars, which I assume is always directed for complete overthrow of the regime. Second, I do the same for low-intensity collective violence like riots, in which dissidents' objective is mainly to pressurize the incumbent to meet their demands. Chapter 5 and 6 provide the country study for India and South Africa. In these two chapters, I try to find the application of national level phenomenon at the sub-national level.

In the concluding section, I summarize the findings and discuss the broad substantive implications of this study. I also highlight the policy prescriptions that can be derived from the theoretical and empirical analyses.

CHAPTER TWO: THEORY: OPPORTUNITY AND WILLINGNESS APPROACH TO THE STUDY OF CONTENTIOUS POLITICS

2.1. Introduction

In an attempt to better understand the dynamics of contentious politics, I build upon the structure-action consortium proposed by Lichbach (1998). This attempt is novel to the extent that it has remained largely unexplored in the literature on contentious politics. There is not much systematic analysis done on how the macro-level structural environment interacts with the micro-level decision calculus of individuals engaging in collective action against the regime. Although one observes some causal linkages established in the literature that assumes some kind of interaction between structure and agent, it does not clearly specify how such structures change the utility function of the dissidents or how dissidents assume such interests and preferences. The theoretical framework that I develop in this dissertation is based on two premises.

The first premise is that a theory of contentious politics needs to account for the structural context in which such contentions take place. Lichbach (1998) argues that a theory of collective action against the authority must first understand the nature of the authority. Most and Starr (1989), in the context of interstate disputes, argue that it is important to study both structure and situation of the system and the processes that operate within those structures. This also helps a researcher to cut across the different levels of analysis, which has been main contention of Lichbach (1998) regarding studies of internal conflict.

Lichbach's (1998) idea of structure-action problem in the study of contentious politics nicely fits with the opportunity and willingness argument propounded by Most and Starr (1989). The authors define opportunity as the set of possibilities available within an environment. It is the set of possibilities and constraints constituted by the macro-level environmental and structural factors. This is analogous to the structural opportunity argument forwarded by several scholars of contentious politics (McAdam, Tarrow and Tilly 1996; Skocpol 1979; Fearon 2005; Fearon and Laitin 2003). These structural theorists argue that the opportunities created by breakdown of a state, weak state, changing political balance or weak state-society relations affect the cost-benefit analysis of dissidents. Under such situations, one should expect more collective action against the regime compared to others. This can be restated in the words of Most and Starr (1989) that

these structural and political conditions provide the set of possibilities and constraints available to the dissidents in which the latter decide their (non) participation in a collective action.

According to structural-political opportunity theories, historically rooted political, social and cultural institutions define systems of stratification in the society and provide the contexts that affect and shape struggle over power, wealth and status (Lichbach 1998). The social, economic and cultural divisions of labor create scarcity and struggle over scarce resources thus produces struggle between competing groups. The groups also come to control some resources that facilitates its mobilization and prominence vis-à-vis other groups. Outcomes are contingent upon the organizational and mobilization capabilities of the groups (Tilly 1978). In this mobilization of group resources, three factors play determining role – political opportunities, mobilizing structures and cultural frames.

Political opportunities (PO) and constraints created by the state; the relative openness or closure of state system, the stability of alignments between institutions, the presence of elite allies and the capacity and propensity of states to repress provides the political opportunity which are necessarily consistent dimensions of a polity (McAdam, Tarrow and Tilly 1996). These four dimensions of the political system create the opportunity for collective action depending upon the relative chances of success or failure.

Mobilizing structures (MS) of the pre-existing communal groups link the leaders of the rebel groups with its other members – core and periphery (Tarrow 1994). This formal and informal links between leaders and followers helps in mobilizing and initiating collective action and persisting it over time. Dissidents use the mobilizing structures that are deeply rooted in their civic society. Finally, for structuralists, culture defines social movements in which they operate. Dissidents strategically shape the meaning, solutions and tactics of collective action. Cultural frames (CF) help dissidents to shape their understanding of the world and thereby, legitimize the ideology and motives of collective action (McAdam, Tarrow and Tilly 1996). Culture, along with polity and society, structures opposition to authorities. Thus, structuralists use historically defined institutions as the context to study contentious behavior of people without much reference to the decision calculus of the rebels.

The second premise of my argument follows from the second condition that should be accounted for in a theory of contentious politics. I argue that opportunity alone is not a sufficient condition to understand the contest between rebels and regime. A study on the protests in America should also understand the people who participated in it. This argument leans on the

second criteria forwarded by Most and Starr (1989). The authors point out that, along with opportunities, willingness should also be present for a state to wage war against each other. Willingness involves the choice process of states facing opportunities; to choose a particular action from a range of alternatives (Most and Starr 1989). It refers to the choice made by a state to use their capabilities to further some policy options and not others. In the context of intrastate dispute, this principle point to the fact that one needs to understand the process of choice of the dissidents while facing the possibilities and constraints offered by the structure. Together, opportunity and willingness requires structure or environmental factors on one hand, and decision-making processes on the other to account for the phenomenon of civil conflict.

By applying theory of interstate conflict to intrastate contentions, I try to show that the willingness or process of choice for one action over others is given by the grievances of the rebels. People will be willing to get into a contest against the state if they feel that the government is not providing them basic social services. Gurr (1970) mentions that certain socio-economic conditions make people angry and frustrates, which eventually leads to violent behavior. It can be assumed that lack of basic provisions like food, drinking water, school, housing, hospital, etc. lead to such socio-economic conditions that make people angry and frustrated and facilitates mobilization by rebel organizations (Gurr 1970). Maslow (1970) argues that physiological, social, security and esteem needs are very important to the development of individual and provides the motivating factor. These needs, which he terms as Deficiency needs as they arise due to deprivation, should be fulfilled to avoid unpleasant behavior. Inglehart's (1997) materialists are more worried about their physical, economic and social securities rather than altruistic and aesthetic values of life and these differences of values between the materialists and post-materialists have different ramifications for political and social order. Further, socio-economic deprivation also creates political instability by highlights the weakness of the state (Huntington 1968). In situations of mass deprivation it is rather easy for the rebel leaders to convince people to participate in the movement and the probability of successful collective action becomes very high (Van Belle 1996). The degree to which the deprived blame the incumbent government for their deprivation combined with expectations that the collective action can remedy this situation adds to the value of the good sought for. Government inability to provide the basic amenities is considered to be a big failure, leading to less value for the present status quo. As it follows from this discussion that socioeconomic deprivation can be a potential motivating factor that induces people to choose violent behavior.

Lichbach (1998) contends that opportunities or willingness do not change the decision calculus of rebels in itself. In order to see how the structural and political conditions and the willingness for change affect (non) participation of individuals one should look at the politics between the rebels and the state. In the contest between state and rebel, who ever is able to resolve the non-participation problem wins. According to him, both state and rebel organization face similar problems of collective action. The members of state (as a group) and dissident organization can choose to free-ride, because maintaining the status quo or overthrowing it is after all public goods and hence, both groups need ways to resolve their dilemmas. The structural and political opportunities become instrumental in helping one or the other resolve the dilemma and ensure collective action. The institutional structure of the state and motivation for dissent interact with each other while facilitating rebel groups to apply some solutions to their collective actions problems. In this dissertation, I try to identify certain structural and political opportunities and grievances that provide motivational inputs which in turn facilitate or retard solutions to the rebels' dilemma.

The combination of opportunity and willingness for contention describes and explains contentious politics more comprehensibly. This approach has two advantages: first, it attempts to link the structure of the authority with the actions of the agent as proposed by Lichbach (1998). In this approach, I indentify the contextual/ macro-level factors and motivation from socioeconomic deprivation under which one should observe more collective action. This is an extension of Lichbach's (1995) analysis of rebel's dilemma. Further, doing this satisfies good theory building as proposed by Most and Starr (1989), who point out that "nice laws" should provide a good understanding of the context in which the theory should be expected to hold or in which one can expect to find evidence of the implications of that theory. At the same time, I also show how the structural-political conditions affect the decision-making calculus of people by facilitating solutions to collective action problems faced by rebel groups. Second, I point out the situations of rebels in which agents will be willing to engage in collective action against the state. If they are disgruntled by the lack of public provisions of basic facilities, they will choose collective violence and not passivity. Together, the macro-level structural-political opportunities and agent's willingness facilitate particular solutions to the collective action problems faced by the rebel groups and hence, lead to collective action. This helps in deriving falsifiable hypotheses that makes rational choice based collective action theories more applicable to conflict studies.

In the remainder of this chapter, I discuss the relevant literature available and point to the need of a more comprehensive approach to understanding contentious politics. Later, I try to develop a comprehensive structure-action theory of contentious politics followed by the propositions that provide the analytical base of my theory. I conclude this chapter by deriving more concrete hypotheses from these propositions.

2.2. Related Literature

Political scientists for a long time have been trying to unravel the causes of civil violence, which has come to dominate both the field of international relations and comparative politics. This dissertation as a study of contentious politics and civil violence is an effort to build upon the existing work of scholars in the field.

2.2.1. Contentious Politics

McAdam, Tarrow and Tilly (1996) defines contentious politics as a collective activity on the part of claimants – or those who claim to represent them – relying at least in part on non-constitutional forms of interaction with elites, opponents or the state. The structuralist explicandum of “contentious politics” is explained through the collective action and collective mobilization of contenders for power (Lichbach 1998). Different forms of collective action can be included under the broad umbrella of contentious politics that involves collective action and collective mobilization of contenders for power – riots, demonstrations, cycles of protests, civil war, etc. Of these different forms of collective actions, the most studied form is civil wars. Undoubtedly, civil wars are the ultimate forms of collective action with respect to the magnitude of violence and destruction involved.

Structuralists (Tarrow 1994; McAdam, Tarrow and Tilly 1996) argue that collective actions leading to contentious politics are triggered by the incentives that are initiated by political opportunities, combining traditional and novel forms of action and building on social networks and cultural frames. Literature abound on different causes, both structural and political, for onset of large-scale violent collective action in a country – size of the population, low-income of the people, large size of the country, rough terrain, dependence on abundant, lootable natural resources, ethnic composition, resource scarcity, polity, discrimination, relative deprivation, so on and so forth (Grossman 1998; Collier and Hoeffler 1998, 2000, 2004; Fearon 2002, 2005; Fearon and Laitin 2003; Sambanis 2001; Elbadawi and Sambanis 2001; Gurr 1970; Hegre et. al. 2001). Their have been essentially two foci of these scholars – (i) structure specific and the way

it impacts decision-making, and (ii) agent specific or rational-actor oriented. The rational actor oriented theories generally stress economic conditions of the country and of the rebels as the main driving force (Collier and Hoeffler 1998, 2000). On the other hand, theories focused on political structures emphasize such causes as state repression, discrimination, state failure create political opportunities for collective action (Tilly 1978; Gurr 1970; Skocpol 1979; McAdam et. al. 1996). In this section, I discuss the literature that is relevant to the argument presented in this dissertation.

2.2.2. Economic Theories of Civil War

First generation of economic theories of civil unrest highlighted the impact of economic modernization – rapid growth rates, structural changes to the economy- as affecting the mobilization of ethnic groups leading to internal conflicts (Sambanis 2002). These theories tied closely with theories on ethnic networks which argued that such ethnic group affiliations provide an enforcement mechanism to prevent cheating and sanction contracts (Congleton 1995). However, such economic theories of civil war is unable to explain all forms of civil wars more clearly, since many ethnic conflicts occur in countries with very low levels of modernizations (Horowitz 1985).

Second generation of economic theories broadly emphasize the criminal behavior of people while participating in any collective action (Grossman 1995; Hirschleifer 1995; Collier and Hoeffler 1998, 2000 and 2004; Fearon 2002, 2005). These theories are more generalizable when compared to first generation theories based on impact of modernization (Sambanis 2002). Hirschleifer (1995) concludes that a rational person joins a collective action due to the interplay of three determinants: preferences, opportunities and perceptions (as quoted in Sambanis 2002). The basic idea underlying all these theories is that collective action occurs due to the rational rent-seeking behavior of dissidents.

Fearon and Laitin (2001) argue that the decision to participate in collective action depends on the cost-benefit calculations of the rebels. Collier and Hoeffler (2000) show that expected gains from a rebellion is positively related to the size of population, presence of lootable natural resources in the country, foreign diasporas and large youth cohorts. All these structural conditions create the opportunity in which collective action becomes both feasible and rewardable. The motivation of agents is described as “greed” in these theories.

People participate in a collective action as a result of their greed for material resources. The most well substantiated empirical finding from this theoretical perspective is the relationship between resource abundance and civil war onset. Collier and Hoeffler (1998, 2000) and Collier, Hoeffler and Rohner (2008), using data on primary commodity exports, show that there exist a significant parabolic relationship between primary commodity export and civil war onset. The basic premise of this argument is that natural resource helps in funding the rebel movement by providing the finances to buy arms, food and labor (Collier and Hoeffler 2000). But Regan and Norton (2005) argues that the importance of lootable natural resources only becomes important at a later stage of the conflict, when leaders use these resources to compensate recruits. The presence of natural resources the control of which rests with the state makes the state itself a prize for the rebels (Ross 2004). Further, looting of natural resources can also provide income to the rebels. However, later studies on the relationship between civil war onsets have used a more disaggregated measure of natural resources, since primary commodity measure of Collier and Hoeffler (2000) includes more agricultural commodities which are difficult to loot (Sambanis 2002). For instance, scholars now argue that rather than an aggregated measure of primary commodities, particular natural resources like oil or alluvial diamonds are better able to capture the relationship between natural resource dependence and civil war onset (Fearon and Laitin 2001, 2003; Lujala, Gleditsch and Gilmore 2005; Snyder and Bhavnani 2005). Further, Doyle and Sambanis (2001) also finds that civil wars lasts longer in countries dependent on primary commodity exports, and Fearon (2002) finds that gemstones and narcotics also increase the length of civil wars. Therefore, natural dependence has implications for both civil war onset as well as its prevalence.

Fearon (2005), Fearon and Laitin (2003) and de Soysa (2002) emphasizes that presence of abundant natural resource should be treated as an indicator of state capacity. States which are heavily dependent on the revenue from exporting natural resources do not develop the bureaucratic and policing machinery. As a result, such states cannot penetrate into the social life of general populace and state-society relations are rather weak. Such a state looks vulnerable to the aspiring rebel leaders.

According to these economic theories of civil wars, participation in collective action is negatively and significantly related to the wealth of the country. This is because low-income of people reduces the opportunity costs of participating in a rebellion (Collier and Hoeffler 2000). Low per capita taxable base increases the chances of collective violence, since it makes the state

less capable to defend itself (Fearon 2002; Fearon and Laitin 2003). Therefore, a low-income country is always in more risk of experiencing civil unrests.

Another structural factor emphasized in these economic theories is level of ethno linguistic fractionalization in a country. Collier and Hoeffler (2000) and Sambanis (2001) argue that ties based on ethnicity and kinship helps in coordination within the rebel groups and reduces transaction costs associated with rebellion. They, further, contend that such ethno linguistic ties facilitates within-group coordination, while hindering coordination between groups (also see Horowitz 1985). Consequently, more diverse societies are less likely to experience civil violence. Although, the effect of ethno linguistic fractionalization on civil war has received mixed support from scholars (Fearon and Laitin 2003), Sambanis (2001) finds that such ties are more successful in predicting and explaining ethnic wars rather than all forms of civil wars.

Besides these aforementioned causes, some other structural conditions of a country have also received good support from the scholars. To cite, rough terrain of a country like mountains or forests provides safe- haven for the rebels. Again, a new state, states in particular geographic region, or with neighbors at war is more at risk of experiencing civil wars compared to those who do not face such constraints (for a more detailed discussion on these factors refer to Fearon and Laitin 2003; Sambanis 2001).

The basic message from all these theories is that certain physical and economic conditions of a country make it more or less prone to experiencing civil violence. These social and economic opportunity theories provide the framework for the study of social revolutions from the perspective of homo economicus, whose cost-benefit calculus is motivated by “greed” of either looting the abundant natural resources or capturing the state for rent (Collier and Hoeffler 2000, 2004; Collier, Hoeffler and Rohner 2008; Ross 2004). The economic motive of individuals or groups explains only a part of why we see so much civil war. However, these economic theories has been criticized by several scholars (Regan and Norton 2005; Fearon 2005), since it cannot explain clearly the intent of the individuals or how such factors alter the decision calculus of a non-participant.

2.2.3. Political Rational Choice Theories of Civil War

The political rational choice theories of civil war highlight causes like political oppression, breakdown of political institutions, political systems in transition, or asymmetric information problems in civil war (Sambanis 2001; Piven and Cloward 1977; Tilly 1978). All these theories

directly link social movements to politics (Tarrow 1996). They draw on the expected utility calculations of the rebels, as well as resources of rebel organizations, social movements and protests (Tilly 1978). The main underlying theme of all these theories is the idea of political opportunity.

Rebellion or collective action, as explained by the political rational-choice based theories, occurs due to the opportunities caused by political, economic or both factors. A rational human being will not participate in a rebellion seeking public good unless his net benefits of participation outweigh his net cost. The net cost of participation includes both actual costs (e.g. deaths) and opportunity costs (e.g. income foregone to participate).

Hegre et. al. (2001) argues that a rebel will participate if he has high level of grievance with pre-war status quo. According to them, political instability and regime transition creates grievances with pre-war conditions and opportunity for collective violence. They show that such grievances and opportunities are less present in a democratic or authoritarian country, respectively, and the chance of violence increase in fledgling or transitional democracies, which they call “anocracies” (Hegre et. al. 2001). This finding is also supported by other studies in the literature (Lichbach 1987; Moore 1998; Gupta, Singh and Sprague 1993).

At the micro-level, Kalvyas (2001) argues that there are two separate things that deserve attention in a study of civil wars: how wars start and how wars are fought. He argues that during a civil war both government and rebel groups contest to control the civilian populations who have not joined either side. Institutions that disseminate information to the government, civilians and rebels play an important role in deciding which side civilians join. Both government and rebel groups contest with each other to draw civilians to their respective sides with a mix of selective incentives and disincentives. On similar lines, Gates (2002) also argues that rebel recruitment becomes easier as the cultural, ideological and geographic distance between the rebels and their leaders decrease. Gates (2002) study further corroborates the findings of economic theories when he argues that, in order to prevent defection, leaders would need finances for recruiting and other organizational purposes. Regan and Norton (2005) also argues that presence of abundant natural resource can help in compensating the rebel recruits and finance the rebel organization to carry on with the movement.

Although some advancements have been made towards bridging the gap between macro-level studies (Collier and Hoeffler 2000; Fearon and Laitin 2003; Hegre et. al. 2001) and micro

individual oriented studies (Kalvyas 2001; Gates 2002), more work is still required to actually see how these macro-level institutions shape the preferences and motives of the individuals.

2.2.4. Psychological or Culturalist Theories of Civil War

A pertinent counter-hypothesis of “greed” or homo economicus is provided by proponents of psychological causes of civil war onset (Davies 1965; Gurr 1970). Gurr (1970, 2000) points out four main reasons of civil war – (i) ethno cultural identities and its link to other socio-economic identities; (ii) level of grievance, absolute or relative; (iii) the capacity of ethno cultural groups to mobilize depending upon their cohesion, and (iv) available opportunities for political action by each group.

Gurr (1970) points to the social and psychological conditions that make people unhappy with their political establishments and that dispose them to use force to pursue what they want. His argument about relative deprivation of people as the main cause of civil war onset is based on the premise that there exist several social reasons, besides bad genes and distorted psyche, which make men aggressive. Gurr (1970) argues that rather than absolute levels of deprivations, feelings of relative deprivation are stronger in leading to aggressive behavior among people. If there exists a perceived difference between what people think that they deserve and what they can actually get, the likelihood for rebellion increases (Gurr 1970). It is noteworthy that Gurr does not look to a more absolute or objective indicator of deprivation as the source of political violence. People can become inured to a bad state of affairs, even one that offers so little access to life-sustaining resources that members of the group are starving or dying of remediable diseases or exposure. The intensity and scope of relative deprivation strongly determine potential for collective violence. Angry and frustrated people are more likely to commit violence and are also more receptive to arguments that violence will help to redress their present situation.

Davies (1965) argues that people will rebel or join any on-going rebellion if they feel that there exist a gap between their aspiration and their actual objective conditions. He pointed out that a failed dream is much more dangerous than the dream which has not been pursued. He argues that people are most agitated right after there is a slump in their objective conditions. When a country is developing people start dreaming of improvement in their conditions. Under such situations of prosperity, the expectations of people are sky high. If for some reason there is a downturn in the improvement curve of the populace, it creates a huge gap between people’s expectations and their actual material conditions. These aggrieved people, who suddenly

experience a slump in their growth process, are most dangerous and most likely to rise in rebellion. Davies and Gurr view political violence as the predictable outcome of frustrations and emotions that result from the dynamics of socio-economic conditions.

These psychological theories of determinants of civil war also suffer from bottlenecks similar to the structural-political opportunity theories. These theories are strong on motivational factors of agents, but fail to provide a structure or context, under which such motivations lead to collective violence (Lichbach 1998). Lichbach (1998) points out that the structure-agent problem of political science stems from the fact that active individuals constantly interact with their passive external surroundings shaping them, which, in turn, also influences the individuals. Hence, a theory that does not account for the external surroundings or institutions that affect the individual action or vice versa will be inadequate to study collective action involving rational human beings.

2.2.5. Collective Action Research Program (CARP)

Olson (1965) and Tullock (1971), and many more social science scholars argue that norms of instrumental rationality or people's concern with most cost-effective and efficient ways of achieving ends, prevents them from participating in collectivity. Under such assumptions, collective actions are rare and an exception. Following this assumption, collective action theorists hold that less than 5% of supporters on a cause actively participate in any form of collective action directed towards that cause (Lichbach 1995, Lichbach 1998, Moore 1995). But here the crux or point of inquiry lays in the fact that collective action theories try to explain why this 5% also participated at all and did not free-ride like the other 95%.

The fundamental assumption of collective action is that it seeks public good and involves element of Prisoner's Dilemma (Lichbach 1998). Both rational-choice and structuralist theorists assume that potential actors mobilize not due to simple grievances and discontents, but in response to incentives and opportunities (Tarrow et.al. 1996). While rational choice scholars term these incentives as individual calculations of cost-benefits, structuralists view it as a decision working through group processes and political opportunities. Both schools explain variations in participation as a result of incentives and disincentives. Rational-actor oriented theories argue that people always have a tendency to free-ride and let others do the dirty job. Free-riding is the most pertinent problem of any form of collective action like protest, revolution or civil war. Fear of state coercion might not be always sufficient strategy to make people

participate in any anti-government activity (Moore 1998). Even if one feels that free-riding might be expensive, given indiscriminate state violence, people can still choose to free-ride. Further, if damage from such a mass movement is very high, the problem of collective action exacerbates (Lichbach 1995).

2.2.6. Critical Appraisal of Existing Literature

Lichbach (1998) points out that structure specific or action oriented explanation of contentious politics are largely insufficient in themselves. While the former is strong in providing the context within which action occurs, but does not offer an explanation as to how these structure or institutions were able to shape the concrete interests and preferences of the actors; the latter remains inadequate in explaining how the interests and preferences of the actors are formed or originate in the first place. For example, the economic theories of civil war are strong about the structural incentive available to the dissidents and offers opportunity arising of the structures as the main driving force. On the other hand, relative deprivation arguments provide the motivational aspect of rebellions, but does not show such motivations lead to collective violence to ameliorate the conditions of the people or under what situations such motivations find a vent for collective violence. There exists a gap between the rational-choice oriented economic and political theories and psychological theories of the civil war.

Structural theories have been criticized of being limited in their approach to understand collective behavior as they have to constantly make auxiliary assumptions about agents. On the other hand, rational-choice based collective action theories are charged for making tautological claims (Moore 1995). Structural theories cannot explain how the different constellation of possibilities and constraints alter the decision calculus of bystanders. Rational choice explanation based preferences and constraints are not always falsifiable. Moreover one enjoys unlimited degrees of freedom in defining preferences of the actor, which leads to problems of generalization. Therefore, with the objective of developing “nice laws” I propose a solution that would integrate both the opportunity and willingness of collective dissent and explaining how this interaction effectively reduces collective action problems of the rebel groups by facilitating solutions to their dilemmas. While doing this will also help to resolve the structure-action problem which, according to Lichbach (1998), has restricted our understanding of contentious politics

2.3. Structure-Action Problem in Contentious Politics

According to Lichbach, the structure-action problem is closely related to three aspects of levels of analysis: micro (individual), meso (group) and macro (societal). The micro/ individual level of analysis lead to the aggregate problem, i.e. how unintended and unexpected collective outcomes occur by more or less determined individual actions. At the second or group level, researchers encounter institutionalization problems: how these collective outcomes solidify into structures. Finally, there is the contextual problem at the societal level of analysis centering on the question – how these solidified social institutions affects individual consciousness and actions (Lichbach 1998). The structure-action problem needs to be addressed in studying contentious politics because structural opportunities and actions of the agents are reciprocally constituted. Structure provides the context or the environment in which agent acts, which in turn, shapes the future structural context.

The literature discussed in the previous section suffers from similar problems emanating from their levels of analysis. Although economic theories do a better job than the psychological theories as they try to drive home the fact that opportunities created by economic conditions motivate rebellions, it becomes difficult to discern whether looting was the primary objective of the rebellion or it was just a mean to achieve other ends (Sambanis 2002). According to these theories, the rational calculus of people is completely driven by economic motives. As a result, these findings have received mixed support in the literature (Fearon and Laitin 2003; Regan and Norton 2005). As Lichbach (1998) contends that economic opportunities and political institutions does provide the context for collective action, but for a better understanding of how these opportunities motivate individuals, we need to bridge the gap between micro (individual) and meso (group) levels of analysis on one hand and macro (contextual) levels of analysis on the other.

Despite the problem of free-riding, we still see so much collective dissent all over the world. So the pertinent question here is that how some of these groups were able to overcome the problem of non-participation and other could not? Even if it is just 5%, why did they at all participate?

Lichbach (1994) argues that the preoccupation of collective action research program with why rational actors act collectively has led to several loopholes in explaining conflict situations where rational actors participate. According to him, collective action research program is deficient in systematic analysis of the substantive problems arising in a protest or rebellion. There are several

nexus that exist between rebels and structural conditions, which are not accounted for by the collective action theorists. Secondly, there is no substantial empirical analysis of conflicts by collective action theorists. These two deficiencies have made collective action research program uninteresting and inapplicable to collective dissent (Lichbach 1994, 1995).

Lichbach (1994, 1995) offers a remedy to this problem of collective action research program. He contends that one needs to find the mechanism that exists between structural opportunities and collective action in the politics (Lichbach 1994, 1995). I argue that the mechanism or causal linkage between structural condition and collective action is rooted in the opportunity-willingness nexus of rebels. The opportunity that facilitates collective action can be found in the institutional context in which such actions occur, while the willingness to choose such action and not others can be determined by the grievances of the rebels. Finally, these two dimensions combine to facilitate or retard solutions to the rebel's dilemma. Under certain combinations of opportunity and willingness, one should expect more collective action than others.

2.3.1. Solutions to Rebel's Dilemma

The solutions to non-participation problem that Lichbach (1995) put forwards are essentially based on two dimensions – deliberative and ontological. First dimension assumes that participants in a collective action may or may not discuss their situations with others thereby leading to planned or unplanned social order. On the other hand, ontologically one can assume whether the participant is an individual, a group or an institution or relationships pre-exist individuals and groups resulting in spontaneous or contingent order. There are four approaches that can be subsumed under these broader dimensions – Market (unplanned and spontaneous), Contract (planned and spontaneous) Community (unplanned and contingent) and Hierarchy (planned and contingent). Based on these four approaches or two dimensions of social order, Lichbach (1995) forwards almost two dozen solutions to the rebel's dilemma.

Market approaches assume that individuals who do not engage in social planning create solutions to collective action problem which are unplanned and spontaneous like, increasing benefits to the participants, lowering transaction and opportunity costs faced by dissidents, increasing available resources, increasing the probability of winning, and many more. Contract approaches also ontologically assume individuals as the key actor, but actors plan with each other to forge contracts. Some solutions based on this approach are self-government, tit-for-tat agreements and mutual exchange agreements. Community and hierarchy approaches both

assume that institutions exist. Solutions based on community approaches stress the importance of common knowledge and common belief systems shared by the members of the community, thereby making planning unnecessary to solve rebel’s dilemma. Finally, hierarchic solutions stress the importance of leadership in bringing about order through planning and authority (Lichbach 1995).

	<u>Deliberative</u>	
	Unplanned	Planned
<u>Ontological</u>	Spontaneous	Contract
	Community	Hierarchy

Figure 1: Typology of Collective Action Solutions

2.3.2. Market Solutions to Collective Action Problem

As mentioned, solutions based on market approaches assume that there is some form of an ‘invisible hand’ that ultimately lead to the public good demanded by a rebel group (Lichbach 1995, 1998). Some examples of solutions based on this approach are like increasing benefits from the public good sought by the rebel group, lowering opportunity costs for the rebels, increasing resources or demands of the public good, improving productivity of tactics, increasing probability of winning, etc.

Lichbach (1995) contends that the intensity of demand for a public good can help in overcoming the collective action problem. This solution is especially relevant for groups with zealots, for whom the marginal benefits of their contribution exceed the marginal costs (Tilly 1978). Again, as Elster (1989) and Rappaport (1985) point out that collective action can involve very lowest cost if either cost is negligible or refundable. Rebel groups can also solve the problem of non-participation by increasing resources available to the dissidents which would allow him to buy more of the public good sought for. For example, increase in income can also increase the demand for the public good like education or other basic services. On the other hand, reduced supply of such public goods can also reduce the problem of collective action. For example, Lichbach (1998) points out that less government accommodation of dissident demands should be associated with greater levels of collective dissent. There can be other potential solutions based on market approaches to the problem of collective action.

2.3.3. Contract Approaches to Collective Action Problem

Dissidents can try to organize, manage and govern themselves so that they can take care of the negative externalities arising out of individual action. Rebel groups can devise their own governing structures and impose rules which can help solve collective action problem. Another way of addressing non-participation is through tit-for-tat agreements. Potential dissidents will participate in only if they are sure that their action will be reciprocated by others (Axelrod 1984). Again, mutual exchange agreements between dissidents on various issues can also help in forging contracts for collective dissent.

2.3.4. Community Approaches to Collective Action Problem

Community approaches suggest that communal groups are based on strong social relationships and powerful social institutions (Taylor 1982). For example, common knowledge or communal belief system helps in overcoming mutual ignorance. Rebels who view things with similar lenses are more likely to act together. This solution helps in explaining why some of the ethnic/religious groups are more active in collective dissent. Another part of communal belief system is common values that downplay self-interest for greater interest of the society or some other altruistic causes (Lichbach 1998; Jasay 1989).

2.3.5. Hierarchy Approaches to Collective Action Problem

Solutions based on hierarchical approaches assume that an organization already exists and, unlike market solutions, there is a visible hand of authority and power to impose order and command collective dissent. Leaders play a pivotal role in creating organizations and pool common resources. For example, Mao, Lenin and similar other leaders had been the life-blood of their movements. If any leader can emanate trust from their principals (people), addressing non-participation can become easier. Therefore, a potential solution to rebel's dilemma is identifying capable leaders and supportive patrons or principals. Other useful hierarchical solutions are reorganizing existing institutions, increasing competition among allies, monitoring defections, offering selective incentives, etc.

2.4. Opportunity and Willingness of Collective Dissent: An Alternative Approach to Contentious Politics

The structure-action problem of contentious politics leads one to think about a possibility to bridge these two lines of theorizing. Collective action theories lack political context to the extent that it needs to be supplemented by a theory of origins of preference and a theory of institution

that aggregates preferences. This can be achieved by complementing rational-choice oriented collective action theories with structural theories or vice versa. I suggest this can be done with the help of integrating it with the opportunity-willingness. As Most and Starr (1989) argues that almost all the factors affecting militarized interstate disputes can be categorized as structural or agentic in nature. Similarly, all the factors affecting civil conflict can also be subsumed as structure-oriented or agent-oriented and only in an institutional context one can understand the strategic interaction among actors (Lichbach 1998). Therefore, it will not be too far-fetched to argue that a comprehensive theory of collective dissent should account for both opportunity and willingness of such action, as well as the interaction between the two (refer to Appendix I for conceptual framework). Having said this, I discuss in the next section the basic propositions that form the analytic pillar of this dissertation and later present the hypotheses.

2.4.1. Propositions

While introducing the propositions of my argument regarding opportunity and willingness combination to studying contentious politics, I discuss their theoretical and empirical underpinnings, as well as their logical connection. The first proposition lays out the foundation of my latter argument. While my first proposition shows why I assume that opportunity-willingness framework is a better way to study contentious politics, other two propositions can actually work in the real world to lead to outcomes that is unexpected, yet expected (Lichbach 1995).

Proposition 1: Opportunity and Willingness combination is achievable and desirable to study collective violence.

This proposition is based on the premise that structural and political opportunities alone does not provide adequate explanation of how these opportunities lead to collective actions by agents. Similarly, rational-choice based collective action theories assumption of interests and preferences of actors being exogenously given fail to account for the origins of such interests and preferences (Fearon and Wendt 2002; Lichbach 1994, 1998). Lichbach (1994) argues that the structural or political opportunity theories have provided only speculative explanation of how political opportunity structures affect incentives and expectations that leads to collective action. A theory of collective dissent should consider both institutional context and actions of agents.

By incorporating the opportunity-willingness framework, I propose that it would help in bridging the gap between structure and actor oriented theories to provide a more comprehensive

understanding of collective behavior. Following Harold and Margaret Sprout's (1969) argument about "ecological triads", Most and Starr (1989) contends that a theory of interstate disputes should account for three elements – entity, environment and entity-environment interaction. We can extend this framework to devise a better theory of intrastate conflicts which considers both structural context and individual action. Structure-oriented and actor-oriented theories of collective violence can be integrated using the opportunity-willingness framework. The "triad" (Most and Starr 1989) is complete when we account for the structural opportunity, willingness of entity/ actor and interaction between the two.

The combination of opportunity and willingness will facilitate solutions to collective action problems based on market, community, contract and hierarchy approaches proposed by Lichbach (1995). These solutions provide the mobilizing processes through which such opportunities and willingness get translated into collective action. Political opportunities facilitates mobilization processes, as it forms the part of the structural causes, and such processes, then create further political opportunities, which again forms part of the structural effects. Both theories contribute to the study of contentious politics, but assuming different levels of analysis – structuralists (macro) and collective action (meso/ micro). The confinement within particular levels of analysis leads to the inadequacy of both the research programs in providing a holistic explanation of how conflicts occur in a society of self-interested individuals. Hence, this necessitates a more comprehensive theory that would integrate the macro-structural level causes with micro-individual level processes. This is what I intend to achieve in this dissertation by utilizing the opportunity-willingness framework of interstate conflicts.

Synthetic Political Opportunity Theories (SPOT) focuses on inequality, power, domination and control, and hence, it is inherently political in its orientation (Lichbach 1998). An explanatory sketch based on political opportunity theories use political opportunities, mobilizing structures and cultural frames to study order and change. On the other hand, collective action theories have four ingredients – the five percent rule, collective action processes, politics as causes of collective action and pathologies as consequences of collective action. Collective action research program and political opportunity theories have different fundamental presuppositions about ontology, methodology and nature of theories (Lichbach 1998). While political opportunity theories are strong on structure but weak on action, rational-choice collective action theories focus more on action of agents without (or minimal) reference to structure (Lichbach 1998). Structural theories base their explanation of collective action on the

causes available at the structural level, whereas collective action theories assume a priori that agents choose collective action without informing us as to how these agents make such choices.

Rational choice oriented collective action theories deal with four inter-related dilemmas – Hobbes Dilemma, Prisoner’s Dilemma, Rebel’s Dilemma and State’s Dilemma (Lichbach 1995, 1998). Hobbes Dilemma, or Prisoner’s Dilemma in the modern world, focuses upon how self-interested people act collectively to bring about social order. Although people seek public good in the form of social order, but acting collectively leads to Prisoner’s Dilemma, when one is unsure about the participation of the other. Dissident groups face similar dilemma’s within their groups – Rebel’s Dilemma. Dissident groups seek goods either in the form of capturing the state or redressing their present grievances, which leads to the question of participation within the group. Since every individual dissident is unsure of the participation of the other, he/ she faces Prisoner’s Dilemma regarding their and others participation (Moore 1995).¹ Similarly, the counter-revolutionary coalition, or the state, also faces similar collective action problems within their group – State’s Dilemma. According to Lichbach (1995), the interaction between rebel and state dilemma is political and provides the basis for overcoming collective action problem by either group.

Collective action theories are, therefore, as much politically oriented as structural-political opportunity theories in explaining social order (Lichbach 1998). Collective action theories account for political opportunity insofar the interaction between State’s and Rebel’s Dilemma shapes strategies of dissidents and also strategies of repression or accommodation of regime. Pre-existing mobilizing structures helps rebel leaders to overcome the collective action problem within the groups. Finally, collective action theories assume cultural frames to be present within both groups (rebels and State) that helps to shape the image of public good (public bad, depending upon which side you are looking at) sought after by the group. Each group tries to solve their own collective action problem, while intensifying the same for the other group. This interaction creates political processes that either facilitate or hinder the application of solutions to collective action problem by each group, thereby leading to collective actions.

Finally, the combination of political opportunities and willingness for action makes some solutions applicable and some solutions irrelevant. Different intended and unintended forms and consequences of collective action depend on the solutions that dissidents choose in a given

¹ For more discussion on Strategic Theories of Collective Action refer to Moore 1995.

institutional context. For example, patterns of capitalist development, industrialization and other forces of political change create some contexts for patterns of protest because they implement or discourage solutions to collective action problem. Perry (1993) shows that how fragmented classes in China can act unified under different structures of political opportunities. Political structures, in the form of political opportunities, mobilizing structures and cultural frames, lead to collective action by facilitating and retarding some solutions and not others. On the other hand, political opportunities, mobilizing structures and cultural frames are influenced by those collective actions (Lichbach 1994; Bates 1989). Therefore, the combination of structure-action problematique can be expressed as follows (Lichbach 1994):

Institutions → Political Opportunities, Mobilizing Structures, Cultural Frames → Collective
Action Solutions → Collective action → Consequences of collective action

The combination of structural and collective action theories elaborate how historically ingrained institutions create political opportunities, mobilizing structures and cultural frames of groups. Together they create the environment or institutional context available to the individual or group. I add another element here to simplify the process of choice of individuals, i.e., willingness to choose collective action rather than passivity. The combination of contextual factors and willingness of collective action influence the cost-benefit analysis of agents by making some solutions to collective action problem relevant and not others. Overcoming non-participation, free-riding problems leads to collective actions by people.

Proposition 2: Structural factors provide the opportunity and lack of Basic Facilities provides the motivational input or willingness for dissidents.

Gurr (2000) points out that political conflict is also contingent upon the available opportunities for each group. Structuralists mention several situations like weakness of state, breakdown of state, changing balance of power between elites, state repression provide the political opportunity of collective action (Tarrow et. al. 1996; Skocpol 1979; Tilly 1978). Similarly, rational-choice based economic theories also point out that composition of population, presence of abundant natural resource, diasporas, low income are potential causes of collective violence (Collier and Hoeffler 1998, 2000; Fearon and Laitin 2003; Sambanis 2001, 2002). But, as mentioned earlier, these theories on opportunities do minimal reference to the willingness of the agents. I try to argue that these structural and political opportunities would lead to more collective violence when coupled with willingness of agents.

Along with opportunities that arise at the structural level, one needs to account for the micro-level processes that account for motivation (Most and Starr 1989). Tilly (1978) and Regan and Norton (2005) among many others point out that grievances form the backbone of any form of dissent. I argue that grievances caused by lack of government provision for basic facilities provide that backbone for mobilizing people.

Gurr (1970) mentions that certain socio-economic conditions make people angry and frustrated. Using frustration-aggression logic, he explains how the feeling of relative deprivation among the members of a group pre-disposes them to use violence. This leads one to assume that lack of basic provisions like food, drinking water, school, housing, hospital, etc. lead to such socio-economic conditions that make people angry and hence, violent. Further, if there is a sense of relative deprivation, the chances of political violence will increase (Gurr 1970). It is a matter of relative rather than absolute deprivation that makes people frustrated and aggressive. Further, this group of aggrieved mass can be a good catch for the opportunistic and aspiring rebel leaders. With this group of people, the rebel leaders face collective action problem to the least amount. But, even then, one needs to think whether or not the lack or absence of these basic necessities is an enough cause to make people join together and start violent action against the government.

Lichbach (1995) argues that group mobilization and success is contingent upon political maneuverings and political situations. This implies that if the crisis at hand is serious enough, then group mobilization would be successful. Lack or absence of basic amenities surely creates such a socio-economic situation in which mobilization can be easy (also supported by Gurr 1970). According to Maslow (1970), the deficiency needs, like food, air, water, shelter, health, education, etc., of people should be satisfied in order to prevent any unpleasant behavior. Besides satisfying the psychological condition for collective action, such socio-economic deprivation also creates the political situation which highlights the weakness of the state (Huntington 1968). Therefore, lack of basic provisions can provide potential motivation for collective violence.

Lichbach (1995) further contends that intensity of demand for a good in question can help to solve the rebel's dilemma with collective action. The value a person attaches to the good sought for determines his/ her involvement in the collective action. The greater the intensity of demand, the greater would be a person's participation. Leaders of rebel groups also look for such people who have intense demand for the good in question; these people are also the most easy to mobilize.

Besides the rising dissatisfaction with the incumbent government, Van Belle (1996) highlights how aspiring leaders can use such opportunities in encouraging people to participate in a rebellion. He argues that it is the perception of being successful motivates people to join or not join a rebellion. If people feel that a movement has the potential of being successful and thereby redress their present condition, they will join the movement. Leaders, on both government and rebel side, are aware of this and they manipulate the situation in their own respective favor. While the rebel leaders try to play on the grievances of the people and convince them how new status quo will be better for the mass than its predecessor, government leaders do their bit to unveil the apparent failure of the rebellion. They do it mostly through repression and policing activities. Further, leaders can also reduce the prisoner's dilemma problems of the dissidents regarding others' participation (Moore 1995) which would facilitate mobilization for collective action.

More people are dissatisfied with the present status quo, more people join the rebellion leading to a cascading effect amongst participants (Van Belle 1996). As number of participants increase, it also leads to a rapid increase in the probability of success for the collective action, and the rising probability of success brings in more people. Consequently, one observes that the lack of attention to providing basic amenities to the people creates a web of mass dissatisfaction and disturbance from which it might become impossible for the government to overcome. This situation increases the probability of collective action if opportunity is ripe.

Proposition 3: The combinations of particular structural-political opportunities and willingness due to low government social spending lead to revolutionary or reformist collective actions.

If some structural opportunities favor some solutions to collective action and not others, it becomes important to point out those structural conditions that would increase the probability of collective action. I claim that presence of large youth cohorts, ethnic groups and political openness in absence of basic facilities from the government make it easier for the rebel groups to overcome collective action problem. Further, collective actions that occur in these situations use different strategies to bring about revolutionary or reformist changes of the existing institutions.

As Lichbach (1995) points out that the regime and dissidents struggle over two basic political processes: first, dissidents can induce the incumbent (Eckstein 1965) to provide the good through reformist policies, or second, dissidents can themselves become the incumbent through

revolutionary change and provide the good. Lichbach (1995) contends that there exists a link between dissidents' resource input and state's policy output.

Dissidents can choose a reformist change of the existing policies of the regime if they believe four things: first, they must believe that the state should provide the basic facilities they are demanding and hence it leads to sine causal, legal and moral basis of their grievances; second, they must believe that the regime can provide the good they are demanding and reduce their grievances; third, they must believe that the state has not yet provided the services, and fourth, they must believe that a new state or the existing state can be made more responsive to their demands by collective dissent (Lichbach 1995).

On the other hand, revolutionary changes are brought about when several different dissident groups, implementing several different forms of collective dissent coalesce together to achieve several different objectives (Lichbach 1995). Lichbach (1995) further argues that revolution can occur when principals or patron provide external resources to agents or entrepreneurs to improve the tactics used for action. It can also happen when regime isolates considerable section of its population which intensifies team competition among dissident groups, along with mutual exchange and tit-for-tat among these groups. This would finally lead to a bandwagon effect, where several dissident groups come together and thereby, increase the probability of winning. Hence, revolutionary changes are brought about by anti-revolutionary coalitions of dissident groups that pool diverse resources.

Having discussed the situations under which one should observe reformist or revolutionary changes by collective dissent, I now move on to the elaborate how particular structural conditions and grievances facilitate solutions to collective action problem of the dissident groups and direct them towards a reformist or revolutionary change of the society. In case of reformist change we would expect the dissidents to choose less violent strategies like riots, protests, strikes, anti-government demonstrations, etc. as they try to bring about changes in the policies within the existing regime (Lichbach 1995). On the other hand, revolutionary changes can be brought about by toppling the existing regime when dissidents become the regime to distribute the good (Lichbach 1995), hence more violent collective actions like revolutions and civil wars. Now I move on to discuss the particular structural and political opportunities and willingness related to grievances and how the combination of opportunity and willingness facilitate or retard different forms of collective action.

Youth Bulges, Market and Contract Solutions

I assume that young generation will be more susceptible to collective action as they are less accommodative than the older generations (Huntington 1968). They are the ones most disappointed by poor living conditions or due to lack of educational and employment opportunities (Urdal 2004, 2008). There is ample evidence in the literature that large youth cohorts are a potent source of internal unrest in any society (Choucri 1974; Moller 1968; Zakaria 2001; Hughes 1997; Urdal 2004, 2008). These authors argue that youth bulges put pressure on social institutions like labor market and educational system, which, in turn, results in severe grievances leading to violent conflict. Although it had been stressed for a long time by scholars (Choucri 1974; Moller 1968) that large youth cohorts can lead to political violence, the issue has received much attention in the recent decades (Urdal 2008). For instance, Zakaria (2001) argues post 9/11 that youth bulges have been main cause for rise of Islamic nationalism and political instability in the Arab world, as they provide source for potential recruits to the terrorist organizations. Further, a large part of the argument presented about clash of civilizations by Huntington (1996) is based on the assumption that increasing population belonging to the young generation would lead to more violence. Huntington (1968) substantiates this argument in his book *The Political Order of Changing Societies* when he points out that it is the second generation of the rural farmers who migrated to urban areas who are potential source of unrest in the cities.

Market and contract solutions assume ontologically that individuals participate in collective action either spontaneously in an unplanned manner or plan among themselves to forge a contract. In order to apply solutions based on market or contract approaches, one does not need to assume any pre-existing group or institution. Young people can act individually in a planned or unplanned manner. For instance, lack of educational or employment opportunities in poor countries lower the opportunity cost (market solutions) of the young people for participating in a rebellion (Collier and Hoeffler 2000; Lichbach 1995). In addition, young people are generally students and do not face high opportunity cost of foregone wages (Lichbach 1995). Again they can plan to self-govern themselves without the help of any pre-existing organization. This is because young people visit similar places like universities, youth clubs, gyms, study groups, etc. The geographic concentration shared by young people reduces the transaction costs of collective action (Eckert and Willems 1986; Lichbach 1995).

Young people are easier to recruit, particularly when they face very low opportunity due to lack of government provision of education and employment (Collier and Hoeffler 2000; Urdal 2004, 2008). Tilly (1978) argues that zealots exist when the marginal benefits of someone's participation in a collective action exceeds his marginal cost. So if the demand for the good sought for is very intense, which is possible for young people facing lack of employment and educational opportunities, it can go a long way overcoming the dilemma surrounding non-participation (Lichbach 1995; Olson 1971). Again, less government accommodation of the demands of rebel groups should be associated with more collective violence (Lichbach 1994, 1995). Unavailability of public provisions for basic facilities can be viewed as lack of attention from the government side, where it is believed that governments can perform better.

Similarly, young people can also plan strategies and try to forge a contract amongst them. Lichbach (1995) argues that dissidents seeking public goods face problems to initiate or continue collective actions since they act independently in an interdependent situation. Hence, dissidents can overcome the negative externalities of their action through self-governing themselves by establishing rules, institutions and processes to avoid free-riding (Lichbach 1994, 1995). Since contract solutions like self-government and mutual exchange agreements do not presume the existence of any supra-organization, young people facing similar kind of problems can come together spontaneously to seek redress. Therefore, one observes that there are plenty of solutions available to young people in order to facilitate collective actions if they have the willingness to choose action over inaction. Presence of large youth cohorts provides the opportunity necessary to initiate or continue any collective action.

Youth cohorts can choose to have a reformist change through collective action within the existing regime. Huntington (1968) argues that second generations of lumpen proletariats are potential source of unrest in the cities as their expectations are higher than their previous generations. Urdal (2008) shows that youth bulges are more involved with low-level internal armed conflicts, rather than full-fledged civil wars. They believe that government policies can ameliorate their situations by providing them opportunities for social mobility. Further, revolutions should not be ignored as a possibility under these situations. If lack of public facilities alienates large section of youth population, they can get into mutual exchange agreements with other youth groups and increase intra-group competition to win the revolution and provide the good themselves.

Ethnic Dominance, Community and Hierarchic Solutions

Besides youth bulges, ethnic groups are also predicted to increase risk of collective violence in the literature (Sambanis 2001; Horowitz 1985; Kaufman 1996). Horowitz (1985), one of the proponents of linkage between ethnicity and violence, argue that plural societies are unevenly disposed to the risk of collective violence. Long standing and deeply engraved differences of different ethnic groups threaten domestic stability (Huntington 1996). Besides the internal, deep-seated differences characterizing different ethnic communities, there is also constant politicization of these cultural differences that make ethnicity as a potential cause of civil violence (Fearon and Laitin 2003; Sambanis 2001). Further, elites may also artificially construct ethnic identities or reinforce the already present racial, linguistic, religious divides to reignite the past rivalries (Sambanis 2001).

There appears to be mixed support in literature for ethnic identities fomenting civil violence (Fearon and Laitin 2003; Collier and Hoeffler 2000). Gurr (2000) and Regan and Norton (2005) argue that often political and material deprivation gets aggregated within a homogenous group. Although collective cohesiveness of such groups is dependent upon targeted mal-distribution, it is individual perception of poverty which facilitates collective mobilization. Fearon and Laitin (2003) find that as income increases for a country it slowly becomes immune to the ethnic composition of its population. Even for the poorest countries in their dataset, authors find that ethnic homogeneity is associated with more civil wars, which completely contradicts the assertion discussed in the previous paragraph. Again Collier and Hoeffler (2000) argue that ethnic identities facilitate in-group coordination and hinder cross-group coordination. Hence, they show that ethnic homogeneity rather than diversity is likely to be associated with more conflicts. Sambanis (2001) also point out that groups based on ethnic identities are crucial for ethnic wars, rather than generic civil wars. As it follows from the discussion here, ethnicity is a potential predictor of civil violence to some extent. However, none of the studies available in the literature posit ethnicity as facilitating collective violence by providing solutions to the dissident groups or how such groups acquire the willingness for such action.

I try to show in this dissertation that ethnic ties of dissidents help in overcoming free-riding or opportunistic behavior of individual dissidents if they choose to act collectively against government inability to provide basic services. According to Lichbach (1994, 1995) common belief systems overcome mutual ignorance. For both Prisoner's Dilemma and Assurance games, the underlying assumption is that people who see things with a common lens are more likely to

act together (Lichbach 1994). This can occur for dissident groups tied together by some ascriptive identity that creates a common belief system for all individuals in that group. Further, Collier and Hoeffler (2000) also contend that ethnic identities facilitate in-group coordination thereby reducing transaction costs facing the group.

Common values shared by individuals helps in overcoming pecuniary self-interest and hence, retard opportunistic behavior of individual rebels. Lichbach (1995) argues that an individual will participate in a collective action to ameliorate his/ her poor condition if he/ she have a process orientation, feels his participation increases group consciousness, altruistic causes, desire to express ethical preference and/ or social incentives. Identity-based groups share common values and hence, view things similarly. Scholars stress that long-standing cultural practices define and distinguish ethnic groups (Huntington 1996; Horowitz 1985; Sambanis 2001). Further, in groups based on identity, individual and group interest coincide and rebels' utility rests upon preserving their cultural identity and political freedom. This leads us to the assumption that ethnically based groups share a common belief system and common values that help them to ensure participation in a collective action.

Another set of solutions that can also be applied by ethnic groups are hierarchic solutions (Lichbach 1995). Hierarchic solutions assume that there is a visible hand to ensure participation in a collective action (Lichbach 1995). The pre-existing institution required for applying hierarchic solutions is provided by the ethnic groups. Dissidents can be made to conform with the group if leaders arise. Leaders can promote participation by imposing agreements, monitoring defections and administer selective incentives. Provision of selective incentives can go a long way to ensure participation irrespective of its kind (Lichbach 1994; Regan and Norton 2005). Leaders can promise employment opportunities, land, or protection from government repression which is contingent upon a rebel's participation. Moreover, aspiring leaders can reignite the already present nationalistic sentiments, which would increase the chances of collective violence (Sambanis 2001). Therefore, one observes that ethnic groups become a potential source of civil violence, since dissidents tied by kinship and ethnic ties are more capable of solving several problems of collective action. This situation is further exacerbated if there is poor delivery of social services from the government.

Ethnic groups can also lead to reformist political change if they believe that the government can and should provide the public they are demanding. Group-level discrimination and grievances almost always coincides with ethnic or religious divisions and hence, most of the

ethnic conflict can be defined as a struggle between the government and the ethnic or religious group in which dissidents seek to improve their conditions (Esty et. al. 1995). But if the ethnic fractionalization is relatively high in a country, the chances of revolutionary changes become more pertinent. I say so because several dissident ethnic groups motivated by different goals can bandwagon to form a strong revolutionary coalition against the incumbent. Different groups can solve within group coordination, but increase intra-group competition (Collier and Hoeffler 2000), which is an essential ingredient for bringing about revolutionary change of the political system.

Political Participation and Hierarchic Solutions

Grievances arise if there are limited chances to influence political system and attain elite positions (Urdal 2004). Democratic civil peace theory also asserts that democracies do not experience so much of civil unrest since they have established institutions to channel the demands of the society (Hegre et. al. 2001). Hegre et. al. (2001) and Fearon and Laitin (2003) argue that fledgling or transitional democracies (anocracies) are more susceptible to civil unrest since they neither have strong repressive machines like authoritarian governments nor do they have strong political institutions to accommodate citizens demands. A state characterized by instability and disintegration, a sign of state weakness, is more likely to offer opportunities for violence, than a strong authoritarian state (Goldstone 2001; Homer-Dixon and Blitt 1998).

Dysfunctional or weak political institutions are indeed a cause of unrest in any society (Huntington 1996). Urdal (2004) argues, with respect to youth bulges, that educated young people are likely to start or join collective violence if their expectations of influencing the society and access to elite positions are limited. Authoritarian systems due to its restrictive policies of elite recruitment are more likely to civil violence compared to their democratic counterparts. But I think that we should expect more low-intensity civil unrest in democracies where there are chances of political participation. McAdam et. al. (1996) contend that openness or closure of political systems create political opportunity for collective actions. Political institutions that offer some amount of popular participation are more likely to experience rebellions (Regan and Norton 2005). Following this discussion, the argument here is open and competitive elite recruitment system, as found in democracies, would make collective actions more likely as it provides more opportunity for disgruntled people to affect the political system. Lacina (2005) also argues that democratic societies are more likely to face more low-intensity armed conflicts

due to the political lobbying by insurgent groups. In democracies, use of coercion to suppress resentment is both politically and economically costly. Consequently, rebels know that by low-intensity civil violence they can pressurize the government to make concessions.

Possibilities of influencing government decision-making would be seen as a lucrative opportunity for a rebel leader to arise in order to grab political office. He can mobilize people for collective action by creating an organization, which, in turn, would pool common resources (Lichbach 1995). So the grievances that already exist among the citizens' get a vent through the rebel organization to redress their situations. Further, the rebel leader can also ensure participation by imposing agreement, monitoring defections and promises of selective incentives. He can also increase the probability of winning by showing to his followers that he has a chance of getting included in the political system. The increasing probability of winning (market solution) would encourage more people to join the group and further, increase the chance of success for the rebel group (Van Belle 1996; McAdam et. al. 1996).

Openness of political system can, therefore, lead to more collective action by increasing the probability of winning, locating political entrepreneurs who can mobilize and organize followers and implement order by monitoring defection, imposing agreement and providing selective incentives. But such opportunities are more likely to aim at reformist changes in the public policy through low-intensity civil violence. Unless several such dissident group leaders arise to increase intra-group competition which would finally form a strong revolutionary coalition against the government, we should expect a revolutionary overthrow of the regime.

Young generation are less accommodative compared to their predecessors and they are aggravated due to unavailability of educational and employment opportunities (Huntington 1968). Unemployment is more common among the younger than older generation of any society (Urdal 2004). The grievances are further increased by rising expectations caused by educational attainments. So the grievance that provides motivation for collective action is supplied by lack of public provisions of education and other facilities. The opportunities are supplied by the chance of solving the non-participation problems faced by the youth groups. Similarly, ethnic groups can demand reformation of policies if they feel that are discriminated against other groups in the country. Leaders arising as a response to the chances of political participation can also use grievances caused by lack of basic facilities from governments as their propaganda tool to mobilize followers.

In this section, I identify the combinations between structural-political opportunities and grievances leading to willingness that can increase the probability of collective actions by facilitating solutions to the dissidents' collective action dilemmas. This should be treated as a mid-level theorizing, since I do not assume that all combination of opportunity and willingness will affect collective action or will be able to resolve all collective action problems faced by the dissident groups. This approach also conforms to Lichbach's (1998) proposal that one should aim at mid-level theorizing, rather than a grand theory of structure-action which is more improbable and undesirable. He argues that structural and collective action theories differ substantively regarding the Five Percent Rule and the importance of unintended than intended consequences. The scientific endeavor should aim at applying collective action processes to particular initial conditions, both institutional and contextual, in order to explain the causes and consequences of particular solutions to the rebel's dilemma (Lichbach 1995). Further, the opportunity-willingness approach that I forward for studying contentious politics satisfies the bases of a "nice law" by identifying the particular conditions when one should expect this theory to hold and not in others (Most and Starr 1989), which improves the falsifiability and generalizability of collective action theories (Moore 1995).

2.5.Hypotheses

There can be at least three hypotheses from the discussion presented above regarding opportunity-willingness approach to the study of contentious politics based on two dimensions – one, for solutions to rebel's dilemma under particular combinations of opportunity and willingness, and second, on the intended and unintended consequences of such action.

Hypothesis 1: In situations of youth bulges, ethnic dominance and chances of political participation we should expect more collective action as it provides structural and political opportunities for collective actions.

Hypothesis 2: In absence of public provisions for basic facilities we should expect more collective action as it increases the willingness to choose such action and not others.

Hypothesis 3: The combination of opportunity and willingness increase the chances of both reformist and revolutionary change of political systems.

2.6. Concluding Remarks and Chapter Outline

In this chapter, I've attempted to show how an explanation based on a combination of opportunity and willingness can improve our understanding of collective action by individuals. After reviewing the existing literature on collective violence, in general, and civil wars, in particular, I try to show that there are inadequacies in the explanations provided so far. The rational-choice oriented economic and political opportunity theories have remained confined at the macro-level of analysis without much reference to how such opportunities shape the interests and preferences of rational actors. On the other hand, collective action research program has been incomplete due to its preoccupation with their five percent rule.

Building upon Lichbach (1995), I tried to show, first, that a structure-action combination is not only necessary, but imperative in explaining collective actions. Second, I try to identify particular structural and political conditions that are going to facilitate more collective action like, presence of large youth cohorts, ethnic groups and openness of political participation. After providing the contextual backdrop, I argue that lack of public provisions will provide the motivational ingredient to people while deciding to join sides during collective violence.

Deriving the three hypotheses from the opportunity-willingness combination, I will empirically test them in the following chapters, first at the cross-national level and at sub-national level for India and South Africa. The sub-national level of analysis will help to see the prevalence of similar phenomenon within the countries and also for low-level collective violence. In chapter 3, I discuss the research design for empirical analyses to be conducted in the subsequent chapters. Chapter 4 discusses the results from hypotheses test at the cross-national level. Chapter 5 and 6 discusses same for India and South Africa, respectively. I conclude with policy implications from this study and future research agenda in chapter 7.

CHAPTER THREE: RESEARCH DESIGN

3.1. Introduction

Building on the opportunity-willingness combination, I derive three hypotheses presented in the previous chapter. In this chapter I outline the research design used to empirically test these hypotheses. I hypothesize that particular structural-political opportunities would be more instrumental in facilitating collective actions than others. Under particular structural-political conditions, it becomes easier for the rebels to solve collective action problems and act collectively if they have the motivation from grievances.

The main underlying assumption is that individuals interact with the available structural and political opportunities. These opportunities help them to derive solutions to the collective action problems. Further, states also face similar dilemma for acting collectively against the rebels. Government and rebel groups contest to increase the dilemma for each other and hence, forestall collective action by the opponent. This conflict between state and rebel's dilemma also facilitate some solutions to collective action problem of the rebels under the hypothesized structural-political opportunities. Presence of large youth cohorts puts pressure on the political, economic and social resources of the government (Huntington 1996), thereby increasing state's dilemma and reducing rebel's dilemma since youth groups have several solutions to collective action problem applicable. Youth groups can also align with youth wings of political parties to exacerbate state's dilemma. For example, the Naxal movement in India in early seventies aligned with communist parties of India to derail the then Congress government.

Ethnic groups can also solve collective action problems with their common knowledge base and shared common values (Lichbach 1995). Ethnic group affiliations provide an enforcement mechanism to prevent cheating and sanction contracts (Congleton 1995). As a result, scholars have found that ethnic groups have led to several conflicts in the world (Sambanis 2001). Like youth bulges, ethnic groups can also increase state's dilemma, if they feel alienated by government policies (Lichbach 1995). Ethnic groups can lobby through the political elites who share similar ethnic identity and pressurize government for reformist change of policies. At the same time, there are different ethnic groups to form a revolutionary coalition against the government, they can also act collectively to overthrow the incumbent.

Finally, chances of political participation will also exacerbate state's dilemma and reduce rebel's dilemma. Openness of political system can be seen as an opportunity by aspiring rebel leaders (McAdam et.al. 1996). Leaders can use authority to bring about collective action by the group. This political opportunity will increase state's dilemma even more than youth bulges and ethnic groups. If the political participation is open, political elites can harbor tendencies to defect to support a rebel group with the idea of changing the government according to their wishes.

Having delineated the reasons for the assumption that particular structural political opportunities facilitate collective action solutions for rebel groups, I try to further strengthen this argument by adding motivational ingredients to the situations. Opportunities alone are not enough to make human beings act collectively, there should be strong motivations also for such actions. Regan and Norton (2005) rightly shows that grievances form the backbone of any revolution and grievances, for the authors, are caused by indiscriminate repression of the government and rebel side. But I argue that, rather than protection from repression of either side, absence of basic facilities foments more severe grievances. People might not decide to join a rebellion just due to the fear of repression (Moore 1998). Moreover, repression might reduce low-intensity civil disobedience in the short run, but finally leads to civil wars in the long run (Rasler 1996; Sambanis 2000). Therefore, redistributive strategies of the government can play stronger role in downplaying grievances than policing strategies (Justino 2007).

3.2. Variable and Data

After elaborating the premise of my argument presented in this dissertation, in this section I will discuss the variables used in the empirical analyses of my hypotheses. While discussing the variables used to measure the concepts, I also present the respective sources from which data is drawn.

3.2.1. Dependent Variable

The primary explicandum in this study is violent collective action – riots, cycles of protests or civil wars. *Civil wars* include situations where there is armed military action against the regime of a state of the international system by another organized group of dissidents, where governments are actively involved and active resistance is offered, and at least 1,000 battle deaths occur during the course of action and there is at least 100 fatalities on both sides (Fearon & Laitin 2003; Sambanis 2001; Sambanis 2002). *Riots* are generally defined as collective acts of spontaneous violence that include five or more people (Gurr 1970). Hypotheses 1-3 will be

verified using both civil wars and low-intensity civil violence like, riots and protests, as the dependent variable. This would help us to confirm the combined effect of the structural-political opportunities and lack of government social expenditure on different levels of civil violence. Further, my third hypothesis states that intended and unintended consequences of interaction between rebel and state's dilemma can lead to a reformist change of the existing political institutions or a revolutionary overthrow of the existing regime. I argue that when dissidents aim at only changing the policies within the existing institutional structure, they will engage in low-intensity collective violence to pressurize the government (Lacina 2005). But when there is a revolutionary coalition already present to overtake the government, they will engage in large-scale collective violence like revolutions and/or civil wars.

Data on civil wars are taken from the Urdal (2004) dataset. This data is drawn from Uppsala dataset (Gleditsch et. al. 2002). As Urdal (2004) mentions this dataset was extended to cover post-cold war period only recently. Uppsala dataset sets a relatively low threshold for conflict and distinguishes between minor armed conflict (a minimum of 25 battle-related death every year), intermediate armed conflict (at least 25 battle-related death every year accumulating to a total of at least 1000 deaths, but less than 1000 per year) and war (at least 1000 battle-related death per year). An advantage of this dataset over the conflict data from Correlates of War (COW) project is that it has a lower threshold of battle-deaths to code a war (Gleditsch et. al. 2002). On the other hand, the 1000 battle-related deaths threshold used in COW dataset is very high and leads on a selection bias for countries with large populations where 1000 casualties annually are possible. There are altogether 45 civil war onsets recorded in this dataset in the period under analysis. The definition of civil wars provided in Uppsala dataset is nearly analogous to that provided by Fearon and Laitin (2003) and Sambanis (2001), whom I constantly refer in my analysis. However, it should be noted that I do not distinguish between identity and non-identity wars (Sambanis 2001). Since my assumption is that people in general demand for basic facilities from the government, such demands would not affect ethnic wars separately. Civil wars are coded as 1 for the country-year when a war starts and 0 for all other years.

Data on riots are taken from Fearon and Laitin (2003) dataset. Riots are event counts in Fearon and Laitin (2003) dataset, recording annual events of rioting in a country. The data is collated from Alvarez et. al. (1999) dataset, where riots are defined as violent demonstrations and clashes of more than 100 citizens involving use of force.

3.2.2. Independent Variables

The chief explanatory variables in this dissertation are operationalized as social spending by the governments of all countries, presence of large youth cohorts, dominance of ethnic group and political openness. The underlying assumption of hypotheses two is that lack of public provision for people's basic needs under certain structural conditions increase the risk of civil onset as it makes it easier for rebel groups to implement some solutions to their collective action problem.

In ascertaining linkages between public social expenditure and domestic peace the most important questions that must be addressed at the very beginning: which public spending should be counted as "social"? (IMF 2002). The answer to this question is usually based on functional classification of government expenditure, according to which 'social' is understood to be spending on the public provision of health, education, housing and other social services (Chu and Hemming 1991). In practical terms, this usually means that social spending can be proxied by total spending under the relevant government agencies, such as for example ministry of education, ministry of health, government welfare agencies, so on and so forth (UNDESA 2000).

Susan Mayer (1999) points out that state spending on health care mainly benefits less poor families, spending on elementary and secondary schooling benefits the middle of the income distribution, as well as the poor. However, state spending on post-secondary schooling mainly benefits the top half of the income distribution. Several scholars in the civil war research program have asserted that it is either the people living under bare subsistence level or the middle class, who are most vulnerable and likely to go against the state (Moore 1966). Consequently, it becomes imperative for the government to increase its expenditure in elementary and secondary schooling, investing in research to reduce infant mortality and basic health care for its population, and improve the basic standards of living for all its citizens.

Thyne (2006) provides detailed analyses of the pacifying effects of education on civil wars for the period 1980-99. The underlying assumption of his argument is increase in educational opportunities signals to the people that government cares for them and hence, increases government credibility and legitimacy. Secondly, in presence of educational opportunities people will not join rebellion as it increases their opportunity cost, much in similar lines with Collier and Hoeffler (2000). The primary indicators for the role of education in his analysis are enrollment rates at three levels of education – primary, secondary and tertiary – and adult literacy. Using the enrollment rates for 160 countries from 1980-99, he finds that primary enrollment rates reduces the grievance in the society significantly. An increase of primary

enrollment rates from 1 s.d. below the mean to 1 s.d. above the mean decreases the probability of civil war onset by almost 54%. But he finds marginal support for education expenditure and it is not robust to other model specifications in his analysis (Thyne 2006). He argues that education expenditure does not completely capture the effect educational facilities can have on domestic peace and stability. This is because education expenditure is largely unequally distributed with a bias towards tertiary education, which can further perpetuate inequality and grievance among people (Thyne 2006; Brown and Hunter 2004). A better measure would be percentage of expenditure directed to the primary sector (Brown and Hunter 2004), which Thyne (2006) proxies in his analysis by enrollment rate at the primary level of education.

I choose to use education expenditure as the principal explanatory variable, since enrollment rate has another side to it. Empirical evidence indicates that children from poor families are almost three times more likely to be out of school than children from rich families (UNESCO 2005). Further, another report indicates that enrollment rates are highly dependent on the quality of education provided in the schools (Tandon 2006). Van der Berg (2001) argues that poor African families in South Africa are highly skeptical of the quality of education imparted in school in the homeland areas. Motala (2006) also shows that there is huge discrepancy between the educational quality in schools attended by white South African students and those attended by their black counterparts. Therefore, both Van der Berg (2006) and Motala (2006) recommend South African government to increase their expenditure in the educational sector in order to attract better qualified teachers to the schools, improve teacher-pupil ratio and provide other resources. Therefore, percentage of expenditure in the education sector is a better indicator of government attention towards its population.

The principal explanatory variable public social expenditure is a set of indicators for government spending in education sector and rate of infant mortality. Due to unavailability of data on all social sectors for a large number of countries, I would prefer to concentrate in the education and health sector. Mainly due to limited availability of data on explanatory variables the years under analysis range from 1970-99.

Education expenditure is measured as the total *government expenditure in the education* sector as a share of total GDP of a country. The data for this variable is taken from Bueno de Mesquita (2005) *The Logic of Political Survival* dataset. He collated this data from ACLP Political and Economic Database Codebook 1999 (Alvarez et. al. 1999).

Keeping in mind Thyne's (2006) argument about inequality in government education expenditure, I use another variable to better capture the grievances generated from lack of educational facilities. I include a measure of primary and secondary enrollment for all countries between 1970 and 1999. It is measured as the per capita enrollment at primary and secondary levels. The data for raw enrollment number at both levels is taken from *Banks Cross-National Time Series Archive* dataset and then standardized by population.

According to Thyne (2006) primary enrollment rates better reflects the equitable distribution of government expenditure rather than actual expenditure which might get trapped in red tapism and corruption. On the other hand, secondary enrollment rates reflects the proportion of youth left unattended in the society, who can turn out to be potential rebel recruits (Thyne 2006). I try to use per capita measure of the two levels of education as a contingency measure of education related grievances. Expenditures (proxied here as enrollment) in these two levels of education benefits the low and middle income families while spending biased towards tertiary sector benefits higher income families (Mayer 1999).

It would have been more appropriate to use government expenditure in the health sector, but due to data unavailability I use infant mortality rate as a proxy measure for government investment in the health sector. *Infant mortality rate* (IMR) is a good indicator of overall quality of life of all citizens (Esty et. al. 1999). Urdal (2004) also points out that infant mortality is a better indicator of overall development of a country compared to GDP or energy consumption per capita. The level of infant mortality is dependent upon both material living conditions, levels of education, gender inequalities and health care systems. Besides capturing the non-economic aspects, it is not so much skewed by distributional effects (Urdal 2004). Infant mortality is the number to infants dying before reaching one year of age, per 1000 live births in a given year. Data for infant mortality rate is taken from Abouharb and Kimball (2007) dataset. Both education expenditure and infant mortality are lagged by one year, assuming that low expenditure in education and high infant mortality of previous years will affect civil peace in the following year.

3.2.3. Hypotheses

In this section I discuss the variables specifically used to verify the hypotheses in this chapter. The structural conditions that are hypothesized to create opportunities for civil war are youth bulges, ethnic networks and chances of political representation. Motivation for the collective

action comes from the unavailable educational and poor health facilities from the government. I hypothesize that the combination of these two factors makes collective action a possibility by reducing the dilemmas faced by dissident groups.

Youth Bulge

As discussed in the hypotheses section, youth bulges increase the opportunity for collective actions. I argue that youth bulges are a potential source of collective violence because it is easier for this group of dissidents to solve their dilemmas regarding non-participation. In order to verify my contention, I use a measure of *youth bulge* in my analysis. Following Urdal (2004), youth cohort, in the cross-national analysis, is measured as the population belonging to 15-24 years of age relative to the total adult population (15 years and above). The data is drawn from Urdal (2004) dataset. Urdal (2004) constructed this data based on World Population Prospects (UN 1999) and from the Demographic Yearbook (UN annual) for small states. According to this dataset, among the 20 countries with significant amount of population in the age-group 15-24 in 2000, 15 are in Sub-Saharan Africa. Countries in the data used with exceptionally small youth cohorts are Switzerland and Italy.

Besides controlling for youth cohorts in the full model, I separately test the hypothesis on youth bulge by adding another interaction term. As I intend to show how the combination of opportunity in the structure and motivation of the agent work together to increase the risk of civil violence, I interact the measure of youth bulge with both the explanatory variables – percentage of education expenditure and infant mortality rate. If my assumption is upheld then we should observe that these interactive effects significantly increase the probability of civil war in a country.

Ethnic Dominance

With the end of Cold War and disintegration of erstwhile USSR and Yugoslavia, culturalist perspective is greatly emphasized in the literature for interpreting both domestic and international conflicts (Huntington 1996). Horowitz (1985) argues that plural societies have lot of inherent problems that make them prone to conflict and, at the extreme violence. Collier and Hoeffler (2000) find that ethnic dominance rather than diversity is an important explanation for civil war onset (also see Elbadawi and Sambanis 2000; Bates 1999). On the other hand, there are studies that show no statistically significant relationship between ethnicity and civil war onset (Fearon and Laitin 2003; Laitin 2001). Sambanis (2001) found that ethnic diversity is indeed a

significant predictor of ethnic wars, but there is a parabolic or non-significant relationship between ethnic heterogeneity and non-identity based civil wars.

Since most of the literature available emphasizes the impact of ethnic homogeneity on civil unrest, I will use the measure of *ethnic dominance*, rather than fractionalization, to verify my hypothesis on ethnic groups. Ethnic dominance is a dummy variable coded as 1 for all country-year when 45-90% of the population of a country belonged to one ethnic group. The data is drawn from Collier and Hoeffler (2002) dataset. Further like youth bulge, I use interaction effect between ethnic dominance and two explanatory variables to better capture the effect of structural conditions and agent motivation. As hypothesized, the interaction effect should increase the probability of civil war onset in a country with low government social expenditure and high ethnic homogeneity.

Political Participation

The hypothesis on chances of political representation holds that in countries with chances of influencing the political system low-intensity civil unrest should exacerbate. This is because it gives rise to aspiring leader, who with authority will be able to bring about order in the dissident organization. Further, if political recruitment is open, it would increase the expectation of people about probability of winning, thereby increasing participation in the collective action. To test this argument, I use measure for *political openness*. This is a dummy variable coded as 1 for all country-years when executive recruitment is marked open and competitive in Bueno de Mesquita (2005) dataset and 0 otherwise.

On similar lines with my previous hypotheses, here too, I would use the interaction effect of political openness and two principal explanatory variables, i.e., government expenditure in education and health sector. Grievances caused due to unavailable public provision will get a vent if a rebel leader can promise that after reaching political office he will remedy the present situation. Hence, the interaction effect should considerably increase the chances of civil war, and also low-level internal conflict which can occur in democracies too (Hegre et. al. 2001).

3.2.4. Control Variables

Some baseline analysis is conducted to see the general effect of low government social spending on internal peace, while statistically controlling for other factors which might affect civil violence. Some of these important structural factors are large populations, non-contiguity, urbanization, resource abundance, nature of terrain, per capita income of the population, etc.

Data for all the control variables used in this analysis is taken from Fearon & Laitin (2003) dataset, unless mentioned otherwise. Although their dataset is very extensive covering a range of years from 1945-1999, due to lack of data on my independent variables (especially, education expenditure) I had to limit my analysis from 1970-1999.

The direct link between economic development of a country and its internal peace is the best founded in the recent quantitative literature on civil war (Hegre & Sambanis 2006, Collier & Hoeffler 2000, Fearon & Laitin 2003). Fearon & Laitin (2003) maintains that income per capita is an indicator of state strength – wealthier countries are more capable of monitoring their states. On the other hand, Collier & Hoeffler (2000) argue that higher per capita income increases the opportunity cost of the people to join rebellion. If people have to forego their good income to join a rebellion, they might not feel it to be wise to do so. Hence, rebellions should be expected more in poorer countries than in their richer counterpart. I control for *income per capita* in my analysis. It is measured in 1000s of 1985 USD and is lagged one year with this hunch that low per capita income in the preceding years would foment grievances and lead to civil violence (Fearon and Laitin 2003).

Large country *population* generally increases pressure on government to increase its monitoring capacities at all levels of the society. Further, it also provides a bigger pool of people facilitating rebel recruitment. Therefore, logged values of total population of each country in the dataset are controlled for. Another demographic control variable that is expected to have effect on civil unrest in urbanization (Homer-Dixon 1991; Urdal 2004, 2008). Homer-Dixon (1998) points out that population pressure leads to resource scarcity, which, in turn, makes a state more conflict-prone. As more people migrate from rural to urban areas it puts pressure on the resources available in the cities and creates differences between groups in the urban areas (Urdal 2008). However, Urdal (2008) does not find much support for urban growth rates in his sub-national study on India. Similarly, the State Failure Task Force finds no such relationship between population pressure and conflict (Esty et. al. 1998). Although findings regarding nexus between population pressure and conflict are ambiguous in the literature (Urdal 2008), I add a control for *urban growth* rate. The data is taken from Urdal (2004) and is measured as the percentage of people living in urban areas in each country.

The argument that presence of abundant natural resources as the main driving force behind a civil war have received enough support in the literature (Sambanis 2002). Fearon (2005) and Fearon and Laitin (2003) emphasizes that presence of abundant natural resource should be

treated as an indicator of state capacity. States which are heavily dependent on the revenue from exporting natural resources do not develop the bureaucratic and policing machinery. As a result, such states cannot penetrate into the social life of general populace and state-society relations are rather weak. Such a state looks vulnerable to the aspiring rebel leaders. Moreover, presence of abundant natural resource makes the state a prized possession for the insurgents. Collier and Hoeffler (1998, 2000) argue that people would join a rebellion if their expected utility for doing so outweighs their cost of participation. Rebels may derive this utility from looting that is facilitated during a time of chaos and when lootable natural resources are in abundant supply. Collier and Hoeffler (2000), using share of primary commodity export in the total GDP of a country, found that there exist a significant parabolic relationship between natural resource abundance and civil war onset. However, later studies on the relationship between civil war onsets have used a more disaggregated measure of natural resources, since primary commodity measure of Collier and Hoeffler (2000) includes more agricultural commodities which are difficult to loot (Sambanis 2002). For instance, scholars now argue that rather than an aggregated measure of primary commodities, particular natural resources like oil or alluvial diamonds are better able to capture the relationship between natural resource dependence and civil war onset (Fearon and Laitin 2001, 2003; Lujala, Gleditsch and Gilmore 2005; Snyder and Bhavnani 2005). Whatever may be the reason, presence of abundant natural resource, especially oil (Fearon & Laitin 2003; Fearon 2005), does make a state more prone to civil unrest. The control variable *oil exporters* are countries whose more than 1/3 of the revenue comes from fuel export. These oil exporting countries are coded 1, and other 0 in the dataset.

Non-contiguity is coded as 1 if a state has a territorial base that is separated from the center by land or water. Such a territory is always difficult to monitor and is a fertile breeding ground of any form of upheaval. Also, presence of dense forest areas or mountains helps the insurgents to get safe refuge and makes it doubly difficult for the government to control those areas. Therefore, a measure for the percentage of *mountainous terrain* is controlled for in the analysis.

Political instability at the center indicates disorganization and weakness of the government and makes the state vulnerable to secessionist elements. Consequently, a control variable for *instability* is included in the analysis. It is coded as 1 for countries that had greater than 2-points change in the Polity IV regime index in the last 3 yrs prior to the year in question and 0 otherwise.

Regime type or *polity* of a country is an important predictor of internal peace (Hegre et.al. 2001). It is expected that generally social and political grievances are lower in democracies than in its autocratic counterpart. This is because of the political contestation available in democracies; people can voice their grievances through votes or low level agitations rather than resorting to full-blown civil war. Again, the authors argue that chances of an autocratic state experiencing civil war are also less. Autocratic states are capable of crushing any form of opposition and avoid civil violence. Therefore, as Hegre et. al. (2001) contends that the relationship between democracy or regime type and internal conflict is inverted-U shaped, with least chance of violence occurring in extreme cases. Rather semi-democracies or fledgling democracies, known as “anocracies”, are more likely to experience civil conflict. Conventional wisdom about these regimes is that they do not have the coercive capacity of the autocratic regimes required to repress dissent and, at the same time, their democratic institutions are not completely developed to give channel to the growing discontent (Fearon & Laitin 2003). I, therefore, try to control the regime type to see if violence emanating from discontent regarding government social spending is more prevalent in democracies, autocracies or anocracies. I use the dichotomous measure of democracy which is coded as 1 for countries who are greater than 5 points on the Polity IV regime index and 0 otherwise.

The last control variable added in the analysis is a count of *peace years*, which is the number of months since any prior civil war ended. The data for peace years have been generated with the help of Binary-Time Series-Cross-section (BTSCS) program of Beck, Katz and Tucker (1998). Technically, I analyze time-series cross-section data to test my hypothesis which suffers from temporal dependency (Beck, Katz and Tucker 1998). The first assumption of logistic estimation techniques is independence across observations. This independence is not maintained since a country with prior history of civil war would be more prone to experience another civil war in the current year compared to a country with no past history (Gleditsch et. al. 2002). Further, civil war in one country can easily have a contagion effect on another country (Urdal 2004). This assumption leads one to believe that there is autocorrelation between the errors leading to inefficient estimates. This program also helps to introduce cubic splines in your model to correct for such temporal and spatial dependence. Cubic splines help in estimating a smooth baseline hazard rate, which implies that the probability of a civil war for a country is assumed to decline as more years passes without such conflict (Ravlo et.al. 2003). Since I have no reason to assume that the hazard of conflict increases, it is appropriate to use cubic splines in my analysis.

The descriptive statistics for some of the important variables are reported in table 1. There is enough variation in the important variables used in this analysis. There are countries like Sweden with infant mortality rates as low as 3 out of 1000 infants dying in a year. Again, Mozambique has almost 300 out of 1000 infants dying in year. On the other hand, Lesotho allocates almost 11% of its expenditure for education sector and UAE allocates even less than 1% of its expenditure for education. Variations regarding ethnic groups, urbanization and income of people are also wide enough. There are countries in the dataset with exceptionally low youth cohorts like Switzerland and Italy, and also countries with almost 50% of their adult population belonging to the age group 15-24. The data used here provides a fertile ground to verify my hypotheses and generalizability of the results.

Table 1: Descriptive Statistics for Cross-National Study 1970-99

Variables	Obs	Mean	Std. Dev.	Min.	Max.
Civil War Onset	3405	0.013	0.114	0	1
Riots	3370	0.491	1.73	0	26
Infant Mortality Rate	3379	62.478	48.843	2.9	284.78
Education Expenditure	3358	3.664	1.697	0	10.482
Youth Bulge	3405	29.921	6.752	13.5	41.8
Population	3274	9.224	1.415	5.541	14.029
GDP per capita	3341	4.497	4.965	0.196	40.044
Ethnic Dominance	3405	0.462	0.498	0	1

3.3. Comparative Analysis

Broad based cross-country studies can provide only a bird's eye view of the interplay between structural conditions and dynamics of collective action. In order to get a more nuanced understanding of how lack of government provision of basic amenities under each of the structural contexts mentioned above – ethnic homogeneity, youth bulges, and political participation – facilitates or retards application of various solutions to non-participation problem, I attempt to do a more in-depth study of sub-national units. As Kimmel (1990) points out that an adequate explanation of revolution requires setting up the structural stage, as well as leaving room for considering human motives, hopes and dangers, mediated by culture and ideology specific to the country in question. This section aims to see whether or not the interaction that is

evident on a cross-national basis, is also present at the sub-national level of analysis. If accomplished, this would reinforce the idea that a consortium between structural theories and rational-choice theories at different levels of analysis is possible.

One important advantage of using sub-national analysis is to compare both countries and local governments in the same design (John 2005). This process helps in overcoming the deficiencies of traditional one-nation case studies that have small samples and also helps in generalizing the results by adding variations within the nation state. Snyder (2001) rightly contends that these studies are useful in comparative country research because it increases leverage and prevents researchers from over-generalizing from one case study. It helps the researcher to find variations spatially of global and other processes (Snyder 2001).

The two countries chosen for the comparative analysis are India and South Africa. No country appears as often in the top ten ranks of various forms of conflicts and violence in most of the data archives as India (Taylor and Jodice 1983; Kinloch 1988). In the recent years, India has experienced almost all other forms of collective violence – political strikes, riots, terrorism, and assassinations. Similarly, in South Africa there have been approximately 6000 protests officially in FY 2004-05 of which 1000 were banned (Freedom of Expression Institutes, Newsletter, September 2006). Although there has not been any large scale violence in these two countries in recent times, low-intensity collective violence is not infrequent. Further, in its sixty years of history as an independent country, India has entered twice in all civil war datasets (see list of Civil wars in Samabani 2002).

Moreover, both India and South Africa has very diverse population with respect to ethnic and religious groups. Hudson and den Boer (2004) point out that presence of large group of young male poses security risk for any country and India is extremely at risk due to its skewed sex ratio in favor of male. Both India and South Africa has established democracy based on non racial and equal opportunity principles. They have the scope (at least in books) for representation of all caste, creed, class, religion and ethnicity in the political apparatus. Therefore, both of these countries provide the structural causes – political opportunities, mobilizing structures and cultural frames – that has been hypothesized above to facilitate collective dissent.

While sharing similar kinds of structural-political opportunities, the two countries are largely different in their political cultures (Diamond, Linz and Lipset 1995). In India, the long tradition of respect for democracy and non-violence has imbibed a tradition of peaceful resolution of differences in elites and masses alike (Dasgupta 1995). Indian National Congress (INC) and its

leaders with high respect for liberty and other democratic values inspired the consensual political culture of the country. On the other hand, Friedman (1995) remarks that a different kind of cultural tension and ambivalence complicates the democratic political culture of South Africa. The long history of repression, political exclusion and liberation struggle has led to culture of intolerance and inflexibility among individuals, particularly black Africans and youth who were radicalized by the experience under the apartheid regime. This political culture has not only hampered South Africa's capacity for peaceful resolution of disputes, but has also bred a culture of general resistance to state authority that hinder the capacity of state to perform even the basic tasks (Diamond, Linz and Lipset 1995). Therefore, one finds several similarities and differences between India and South Africa to make them perfect cases for comparative analysis. I analyze two cases with similar structural-political opportunities (Mills method of difference) in an attempt to unravel whether same conditions affect civil peace in them or do they reveal different patterns.

3.3.1. Variable and Data for India

Dependent Variable

The dependent variable in my analysis is an event count – *incidence of riots per year* - in each of the 28 Indian states and 3 UTs between 1999 and 2006. This data on riots is provided by the National Crime Records Bureau (NCRB), part of the Ministry of Home Affairs, India. This data is recorded by NCRB based on police reports for particular periods.

Indian Penal Code (IPC) holds rioting as a cognizable offence and hence, police can arrest without a warrant. IPC Section 141-146 states that an assembly of 5 or more persons using exhibition of criminal force, resisting execution of law or any legal processes, committing any mischief or criminal trespass, and/ or disrupt public order by use of criminal force, will be considered “unlawful” and punishable under IPC Cognizable Crime Act (Criminal Procedure Code, Section 2c, Indian Penal Code 1980).² Under such situation, police has responsibility to

² Definition of Rioting under IPC Section 146: “The term "riot" means a public disturbance involving (1) an act or acts of violence by one or more persons part of an assemblage of three or more persons, which act or acts shall constitute a clear and present danger of, or shall result in, damage or injury to the property of, any other person or to the person of any other individual or (2) a threat or threats of the commission of an act or acts of violence by one or more persons part of an assemblage of three or more persons having, individually or collectively, the ability of immediate execution of such threat or threats, where the performance of the threatened act or acts of violence would constitute a clear and present danger of, or would result in, damage or injury to the property of any other person or to the person of any other individual.

take immediate action on receipt of a complaint or credible information, investigate situation, assess offender and arraign him before a court of law with jurisdiction over the matter (Crime Reports, NCRB, 2005). NCRB records the number the total number of oral, written, distress call or the ones initiated by suo-moto, complaints received by police under violent crime committed against public order involving use of criminal force by five or more people. This data has been collected by NCRB since 1999, mainly to assess the load of work for the police force. Riots and arsons are the major crimes committed against public order in India which constitute about 3.6% of the total crimes under IPC (Crime Reports, NCRB 2005). The state of Bihar is reported to maximum number of riots in 2005.

Variables measuring number of times an event occurs is called event count (King 1989). All such variables take the value of 0 or other positive integers. There are essentially two principles of the process generating even count: independence and homogeneity. The first principle assumes that occurrence of an event in time $t+1$ is independent of it occurring in time t . At the same time, the second principle assumes that the rate of occurrence of events is same in all time periods under observation. But in case of the dependent variable studied here (incidence of riots each year), one can always assume a contagion effect between events in the same time period and also between two time periods. For example, riots occurring in current year are always affected by similar events of collective action in the previous year or previous month in the same year. Similarly, rates of occurrences of such events can either increase or decrease depending upon other factors. Negative binomial estimation techniques corrects for the problems caused due to violation of the two principles of data generation. I add one year *lagged riots* as one of the independent variables. The unit of analysis here is sub-national units or Indian states and union territories.

Independent Variables

Justino (2007) shows that using redistributive transfers to pacify people can be an important tool available to the government. Since her measure of redistributive transfer in her analysis of few Indian states is an aggregate composite index, it is difficult to tease the particular effect of

A person is guilty of riot if he participates with five or more others in a course of disorderly conduct: (a) with purpose to commit or facilitate the commission of a felony or misdemeanor; (b) with purpose to prevent or coerce official action; or (c) when the actor or any other participant to the knowledge of the actor uses or plans to use a firearm or other deadly weapon.

A riot is an unlawful assembly. It is only the use of force that distinguishes rioting from an unlawful assembly.”

each sector on the level of violence. Therefore, the chief explanatory variable here is a measure of government expenditure in the education and health sector. Cross-nationally it has been seen that investments made in social sector towards educational upliftment of the masses can help in reducing discontent amongst people (Thyne 2006). Gupta, Verhoeven and Tionson (1999) note that the expenditure allocations within social sectors matter for education and health status.

The main explanatory variables are measured as the *per capita government expenditure in the education sector* and *infant mortality rate* for each state-year and union territories in India between 1999 and 2006. Data on these two variables has been taken from India Stat as reported in the Annual Reports of Ministry of Education and Human Development for each states and Census of India (2001). Rather than using state government expenditure in the education sector as a percentage of its total budget, per capita expenditure of each state in the education sector will demonstrate its effect with respect to a state's population. Indian states are of unequal size and population. Huge percentage of government expenditure in a small (population wise) state would definitely look better than the same amount spend on a large number of people. In order to unravel the actual investment made by government in the education sector, per capita expenditure for each state-year has been used as one of the main explanatory variables. Noteworthy, Thyne (2006) shows that education has different impacts for different levels of violence. Particularly, education expenditure can increase more collective violence, since it is skewed towards university levels. Therefore, this analysis will extend the argument presented by Thyne (2006).

Infant mortality rate is the number of infants dying before reaching age one per thousand live births in the each of the 28 Indian states in each year between 1999-2006. Due to unavailability of data, it was difficult to find health expenditure made by the government. However, there is an added advantage of using infant mortality rate instead of government expenditure in the health sector. Mortality rate amongst infants is also indicative of the standard of living of people (Goldstone 2002). Therefore, it would also help us to see how general living standards of the populace can affect their decision to participate or not in violent collective action against the government.

Intuitively, one observes that conditions leading to low-intensity civil violence are distinct from that of civil wars. Since initial mobilization is relatively cheaper, grievances might be sufficient to motivate the disgruntled to participate in low-intensity civil violence (Regan and Norton 2005). Nonetheless, to be in tandem with cross-national analysis, similar control

variables have also been used in this analysis in order to better tease out the effects of the principal explanatory variables. Cross-national literature argues that poor countries are always more prone to civil war (Collier and Hoeffler 2000; Fearon & Laitin 2003). In order to see whether this national phenomenon also holds at the sub-national level, I control for the state level of wealth. I add *per capita measure of state's domestic product*. It also indicates state level economic and social development (Justino 2007). I use the natural logarithm of this variable. The data for this variable is taken from State Ministry of Economic Development for each state-year.

I also add a control for structural characteristics like presence of natural resources or terrain which is considered in the cross-national literature to have some effect on onset of civil wars (Collier and Hoeffler 2000; Fearon 2002; Fearon and Laitin 2003). Although riots are also a form of collective action like civil wars, these are slightly different with respect to its organization structure. Most importantly, it is spontaneous, so there is no such organized recruiting required for the rebel's group. For participating in riots, what matters more is willingness, rather than an opportunity in the form abundant natural resources. Further, presence of unfavorable terrain like mountains or forests does not help in rioting. Therefore, the structural characteristics emphasized in the cross-national literature have more significance for civil wars which is more violent and lasts longer than riots. Nevertheless, I have controlled for the presence of abundant natural resources and percentage of forest area in my analysis.

Some Indian states had experienced couple of secessions (Jharkhand seceded from the state of Bihar in 2001) and agitations motivated by the *presence of natural resources* in those states (Assam). Although cross-national studies used share of primary commodities export in the GDP of the country, the variable measuring abundance of natural resources here is the value of all mineral deposit present in a state as a share of the state's domestic product. Due to unavailability of state-wise export data, I used the revenue share of mineral resources in the State GDP for each year. There are some states with oil deposits also like Assam. But due unavailability of data, I could not add a control for value of oil reserves in those states to match cross-national analysis (Fearon 2005; Fearon and Laitin 2003). The data on mineral deposits and *percentage of forest area* for each state is also taken from the Annual Reports of respective state department on Mineral Resource and Oil and Natural Gas, and Census of India (2001) as available on India stat.

Remaining control variables are demographic characteristics – population, percentage of rural population. Large *populations* are always a source of chaos for all practical reasons (Fearon & Laitin 2003). It increases pressure on the government to keep tab on all rising resentments and

also raises difficulty in allocating resources. Like civil wars, one can imagine that states with large population are more prone to all forms of civil unrest. I add a control for log of population for all states during the time period under review. Data for this variable is taken from Census of India (2001, 2003).

I also control for the percentage of *rural population* in each state. It becomes important to see the effect of urbanization, since large section of the population in each state lives in the rural areas and there exist huge discrepancy between the urban and rural lives. India is a developing country and modernization and its various aspects have different manifestations for this country. As Huntington (1968) argues that as a country urbanizes, the rural population gets more and more information and becomes more conscious of the inequality between rural and urban lives. There are several social movements in India working for ameliorating the conditions of farmers and people living in the villages, in general. Similarly, several political parties have their main base of support among the villagers. The inequality of rural and urban living has been a potential source of grievance for people and issue of political mileage for leaders. For example, the corrupt Communist government of West Bengal enjoys most of the support from the rural areas of the state. Again, in 2004, Congress party was able to win the election in Andhra Pradesh by using rural-urban inequality as its propaganda tool. Further, Fearon and Laitin (2003) also mention that rural base greatly favors insurgencies by preventing denunciation of rebels by local people.

Hypothesis Test

Besides looking at the independent effect of the structural and political opportunities of collective action, I would also use interactive effects between these opportunities and grievances caused by unavailable basic facilities to verify my third hypothesis.

Indian population is diverse with regard to ethnicity, religion, language, caste and class. Horowitz (1985) notes that plural societies face numerous pathologies which make conflicts imminent, and at the extreme, violence. Therefore, Indian states with such diverse population are always at risk of experiencing conflict between some or the other groups. To account for ethno linguistic and religious diversity, I add a control for the *percentage of Muslims* in each state. The data for this variable has been also taken from Census of India (2001, 2003). Besides Muslim, there are indeed people of other religions in India. But Muslim population is the second largest in the country after the Hindus who are in majority. This is commensurate with the ethnic

dominance variable used in cross-national analysis, as it would account for the polarization of Indian population into two major religious groups. People other than Muslims have been quite often very violent in expressing their grievances against the government or other groups, but Hindu-Muslim riots is the most common phenomenon all over India (Varshney 2001). Scholars believe that presence of huge Muslim population in any state makes it more prone to experiencing anti-government activities (Wilkinson 2004). Therefore, the effect of ethnic dominance in ameliorating non-participation problems in collective action can be better captured by an interaction effect of percentage of Muslim population in a state and the principal explanatory variables. If my assumptions about ethnic dominance and collective action solutions are upheld, then this interaction effect should be negatively correlated with the dependent variable implying absence of government attention to the social sector in presence of a large Muslim population in the states increases the risk of civil violence by facilitating community and contract based solutions to rebel's dilemma.

The effect of *youth bulges* on civil violence at the sub-national level would also be tested in the similar fashion. I would measure youth bulge as the percentage of population belonging to the age group of 13-34. The data for percentage of youth population in each state is taken from Annual Reports, Ministry of Youth Affairs and Sports. The interactive effect young generation and government supply of social services on civil violence would indicate the causal mechanism by which youth groups are able to facilitate collective action. If youth groups are really capable of reducing collective action problems, then the interactive effect should be negatively correlated with civil violence in a state. Further, since literature shows that youth groups are potential source of low-level internal armed conflicts (Zakaria 2001), we should expect that the substantive effect of this interaction should be stronger at sub-national level when the dependent variable is riots and not civil wars.

Many argue that the reason why India has not seen any full-fledged civil war so far like Africa or Latin America despite several violent incidents is because of the federal system present in the country (Justino 2007; Hardgrave 1993; Diamond, Linz and Lipset 1995). Largely, the federal system has compartmentalized the conflicts within the borders of the states. Hardgrave (1993) points out that Indian electoral system helps in diffusing various ethnic and regional conflicts by channeling the demands of various groups through the electoral system. However, this may be the case for ethno-linguistic uprisings. But when it comes to basic amenities like education, federal system is not the correct answer.

The constitutional amendment made in 1976 brought education to the concurrent list; both state and central governments are responsible for educational upliftment of the masses, though not with equal power. Tilak (1989) contends that provincial governments require more and more resources for education, hence the responsibility fall greatly on the central government to help the states. Moreover, state and central governments does not always share very good relation, which, in turn, can affect how far the center would be willing to assist the states. In order to keep the vote banks rolling, states having same party in power as the center might be able to stay in the good book. In the changed political scenario of India where we have seen mainly coalition governments at the center, it would make sense to see if the party in power in the states is at least one of the coalition members at the center. Therefore, the dummy variable measuring *political participation* I use is coded as 1 for all those state-years for which the state government was formed by a party that is a coalition member at the center, 0 otherwise. Further, this variable is interacted with the two main explanatory variables to see whether chances of political participation really facilitate hierarchic solutions to collective action problems. If correct, then we should be able to assume that in state-years when the state government is formed by a party which is also a coalition member at the center, there should be more chances of civil violence.

Table 2 presents the descriptive statistics for the main variables used in this chapter for 8 of the 28 states. I choose these 8 states as it provides a good snapshot of the inequality that exists across Indian states. While Maharashtra, Gujarat, Karnataka and West Bengal are the most well off states drawing lot of foreign investments, Bihar, Rajasthan, Uttar Pradesh. and Madhya Pradesh is considered BIMARU (sick) states of India. There have been approximately 17,000 riots in Rajasthan, India, in the year of 1999, while Punjab appears to be a relatively peaceful state. The table reports wide variation in the principal explanatory variables. Infant mortality rate ranges from 10 in some states to, as high as, 97 in other states. Similarly, there exists great variation in the per capita expenditure of the state governments in education. Further, percentage of Muslim population also has a wide range, while some states have less than 1% of Muslims, there are about 67% Muslims in other states. The least amount of variation is of percentage of youth population in Indian states. On an average 40% of a state's population is comprised of people belonging to age group of 13-35.

3.3.2. Variable and Data for South Africa

Dependent Variable

In this section, detailed description of the data and variables used for South African analysis is provided. Our main objective in the chapter on South Africa is also to see that, at sub-national level, whether different provinces of South Africa, exhibit similar or different patterns of relationship between government social expenditure and civil violence, given certain structural opportunities. As for India in the previous chapter, the period under analysis is 1999-2006 which is much shorter than that for cross-national study. It is mainly due to the unavailability of data for the country for the entire period of 1970-99. Further, South Africa has only become a non-racial democracy in 1994.

In similar lines with the case study on India, here also the dependent variable used to measure collective violence is annual count of *riots and protests* in each year in each of the nine provinces, ranging from 0 to 72. It is the number of civil violence in each year in each of the 9 provinces between 1999 from 2006. I collated the data from newspaper articles, magazines and other relevant materials. Like the Indian case study, it is raw number of civil unrest event that took place in a province for that year. A one-year lag of this variable will be included as a control in the model in order to see if violent events in the previous year have any effect on the same in current year.

Table 2: Descriptive Statistics for India States (1999-2006)

Variables	Bihar	Gujarat	Karnataka	M.P.	Maharashtra	Rajasthan	U.P.	West Bengal
Riots in States	9098.25 (1265.95)	2069.12 (693.56)	6627.37 (666.86)	3023.63 (619.22)	6235.5 (727.65)	7735.87 (6029.73)	5070.12 (1973.4)	3045.37 (795.04)
State IMR	61.25 (1.03)	57.75 (4.06)	53.37 (4.13)	82.37 (5.62)	41.87 (5.48)	74.37 (6.09)	77.75 (5.39)	45.62 (6.06)
State Per capita Education Expenditure	2.94 (0.42)	3.47 (0.77)	3.61 (0.46)	3.54 (0.14)	2.28 (0.03)	3.73 (0.07)	1.08 (0.002)	2.61 (0.05)
State GDP percapita (Log)	8.77 (0.08)	9.96 (0.17)	9.77 (0.17)	9.38 (0.05)	10.13 (0.11)	9.55 (0.89)	9.22 (0.05)	9.80 (0.10)
Youth Bulge in States	37 (23)	42.93 (12.37)	43.35 (15.76)	40.09 (20.13)	42.68 (17.65)	39.29 (12.65)	38.34 (13.87)	42.24 (16.74)
State Population (Log)	11.39 (0.09)	10.89 (0.10)	10.91 (0.07)	11.09 (0.11)	11.55 (0.09)	11.02 (0.11)	12.10 (0.11)	11.33 (0.06)
Percentage of Muslim in State	15.94 (1.08)	8.97 (0.15)	12.08 (0.27)	6.01 (0.65)	10.36 (0.43)	8.35 (0.21)	18.20 (0.54)	24.84 (0.75)

Standard deviations in parentheses

Independent and Control Variables

In the case-study for South Africa, the main explanatory variables are measured differently due to non-availability of data on government expenditures in social sector and at provincial level. Nonetheless, some of multilateral endeavors are commendable for their surveys, data coverage and authenticity. I use data for my explanatory variables from one such source called SACMEQ. SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) was designed to provide assessments of the conditions of schooling and quality of education provided by the primary education system in 15 participating countries. There are 2 projects under SACMEQ and together they surveyed 61, 832 Grade 6 pupils, 7327 teachers and 3380 schools. SACMEQ CD-ROM was acquired by contacting the SACMEQ Coordinating Center in Harare, Zimbabwe. This research is first of its kind using this data source to the best of my knowledge. Some other useful data resources for South Africa that has been used for this research are General Household Surveys (GHS) conducted every year in South Africa, Income and Expenditure Surveys (IES) and Labor Force Surveys (LFS) conducted every five year, and Statistics South Africa which is a data dissemination web portal by South African government for research purposes.

For South Africa, government response to the educational sector is proxied as the *average distance* from school to clinic, road, public library, book shop and secondary school, and total *number of resources missing in a school* with a maximum of 22 resources. Data for both of these variables were available from the SACMEQ II studies. Educational sector in South Africa was highly discriminatory under the repressive apartheid regime. Social expenditures were really demarcated by race (Van der Berg 2002). As a result, after 1994, it has been a constant effort by the government to ensure equality in education as far as possible (Van der Berg 2001, 2005 and 2006; Motala 2006). But now with the establishment of non-racial democracy, it can be assumed that people's demand for such basic facilities as education and health has increased. If this is true then we should expect that both variables measuring average distance of schools and school resources should be positively related to the dependent variable, implying as the schools get far and far away from people and there are less resources in schools, discontentment arises.

Due to unavailability of data on province-wise infant mortality rates, expenditure in the health sector is measured here as total number of people who consulted public health professionals (in thousands) as a percentage of total population of each province. The data is taken from General Household Surveys (GHS) conducted every year in South Africa. On similar lines with

education, we should also expect that less number of people consulting public health professionals would lead to discontentment amongst people.

In tandem with my cross-country analysis and previous case-study on India, I control for other factors like wealth of provinces, presence of natural resources, population and area of the provinces, share of youth population and ethnic diversity. *Wealth of the provinces* is measured as the GDP per capita for each province-year. Data for this variable is taken from provincial statistics available from Statistics South Africa. Natural logarithm of this measure is used in the analysis. Data for population, area and share of primary industry is also available from the provincial statistics. *Share of primary industry* measures the contribution of primary industries in the provincial GDP for each year. Primary industries in South Africa include agriculture, farming, mining and quarrying. I include a dummy measure for *gold mine* coded as 1 for all province-year with active gold mines and 0 otherwise. This would help us to see whether the presence of such natural resource makes a province more prone to experience civil violence or not.

Hypothesis test

Ethnic dominance for each province is measured as the *percentage of black African population* in the total population of the province. Data for this variable is available from the General Household Surveys conducted annually in South Africa. Although there are other ethnic groups present in South Africa like Asians and Colored, but black Africans form the majority of the population. The black-Afrikaners were repressed and discriminated against under the apartheid regime. In South Africa, it was the white minority which dominated the black majority, unlike India where Muslim minority feels more threatened by the predominance of Hindu majority. Even after the establishment of non-racial democracy, the discrepancy between white and black population remains stark (Motala 2006; Van der Berg et. al. 2001). Motala (2006) shows there exist severe inter and intra provincial differences between the schools attended by black Afrikaners. Taylor and Yu (2009) argue that socioeconomic conditions of black parents greatly influence the school attainment of their children, but such linkages are unavailable for white South African families. Armstrong et. al. (2008) also shows that limited educational attainment of black Afrikaners under the apartheid regime have limited their possibilities of enjoying the benefits of labor market expansions since demand for skilled labor increased more

than that for unskilled labors. Therefore, one observes that even after the end of apartheid era the legacy of repression and discrimination against black Afrikaners continue.

As it follows from the discussion above, one can expect that provinces with large black African population, are more at risk of collective violence as this would make several collective action solutions probable. The rebel groups will have reduced transaction costs and have a bigger pool of potential recruits. People tied by ethnic values will have similar aspirations and value structure, thereby making mobilization easier, etc. Large share of black African population in the province would help in ameliorating collective action problems and hence, make collective action possible due to lack of government spending in education and health sector. This effect can be better captured by using the interactive effect of ethnic diversity and explanatory variables.

Youth bulges are similarly measured as the percentage of population belonging to the age group of 15-24. Data for this variable will be taken from General Household Survey for each year under analysis. In conjunction with the cross-national analysis and Indian case-study, I would include the interaction effect of youth bulges and government response to education and health sector on civil violence. If correct, here also we should expect a positive relation between the interaction term and the dependent variable.

Finally, my last assumption about *political representation* is tested by using three dummy variables for two important opposition parties, Democratic Alliance (DA) and Inkatha Freedom Party (IFP), and other relevant parties. Each of these dummy variables is coded as 1 for all the province-year when they formed the opposition by acquiring at least 5% of votes in the provincial elections and 0 otherwise. African National Congress (ANC) party formed the state governments for most of the province-years. Although South Africa is also a multi-party parliamentary democracy like India, it has seen the ANC as the dominant party since the establishment of non-racial democracy in 1994 (www.politics.org.za). The only other party that has been able to win substantial popular votes is the Democratic Alliance which received 14.8% votes in the 2004 election. Since provincial legislatures are formed on the basis of proportional representation system, the assumption would be that if one of the other two major parties holds substantial power (at least 5% of the popular vote) in the legislatures that should make the province more risk prone. Therefore, we should expect collective actions facilitated by hierarchic solutions in those provinces where there has been less government expenditure in education and

health sectors and political parties other than ANC in opposition. As a result, we should expect a negative relation between the interaction of this and explanatory variables and civil violence.

We should see some extra patterns in case of South Africa since political culture of the two countries are different. South African population exhibit less tolerance for state authority and less consensual resolution of conflict (Friedman 1995). So we should expect that on a comparative basis lack of government response to educational and health sector would lead more collective violence in South Africa, particularly in province with large youth cohort, with dominant ethnic networks and chances of political representation.

Descriptive statistics are reported in table 3 for the important variables used in the empirical analyses in this chapter. It shows that there is enough variance in all of the main explanatory variables used here. Average distance of the schools in each province from public road, health facilities, library, etc. ranges from 2kms to 20kms. Again, maximum number of resources missing in a school also varies from 7 to 20 out of 22 resources used to measure this variable. This is consistent with most of the analysis conducted for South African educational sector. South Africa's schooling sector fare dismally with respect to promoting social equity implying that students from low socioeconomic status are at greater disadvantage (Van der Berg and Louw 2007). Case and Deaton (1999) also reports that household income influences educational attainment of black students more compared to other white students. Motala (2006) also contends that there exist extreme inter, as well as intra, provincial difference in educational resources and attainments.

3.4. Methodology

Logistic regression is used for the large-N study on data for 128 countries between 1970 and 1999 on the following model:

$$(WarOnset)_{it} = \alpha + \beta_1 EDU_{it} + \beta_2 Health_{it} + \beta_3 X_{it} + \beta_4 Y_{it} + \varepsilon_{it}$$

where, X is the vector of other control variables used in the model, Y is the interaction effects used for hypothesis testing and ε_{it} is the error term accounting for unobserved factors.

Since riots and civil unrest for the case-study on India and South Africa are measured as annual event counts, I used negative binomial regression to analyze this data. This is the most appropriate method of estimating models with skewed distribution of events with a few high violence observations and majority of relatively peaceful ones (Urdal 2008). Further, negative

binomial regressions do not generate implausible negative predictions as might be the case with ordinary least square (OLS) methods due to over/ under-dispersion of data.

Table 3: Descriptive Statistics for South African Provinces (1999-2006)

Variables	E. Cape	Free State	Gauteng	KZN	Limpopo	Mpumalanga	N.Cape	N-W	W. Cape
Civil Unrest in Provinces	2.25 (3.01)	3.25 (5.06)	40.87 (16.94)	5.25 (2.18)	1.75 (1.66)	4.25 (3.69)	1.37 (1.84)	1.25 (1.66)	18.75 (5.44)
Pop using Pub. Health Services	0.064 (0.000)	0.051 (0.018)	0.035 (0.004)	0.051 (0.004)	0.048 (0.001)	0.047 (0.007)	0.087 (0.001)	0.061 (0.003)	0.054 (0.005)
Average Distance of Schools	19.72 (2.73)	2.91 (4.23)	7.07 (2.15)	14.72 (5.33)	20.12 (2.89)	13.32 (7.89)	15.47 (5.23)	12.96 (7.54)	1.92 (12.36)
Missing School Resource	7.21 (3.44)	15.22 (3.78)	17.31 (5.66)	11.43 (7.89)	6.58 (3.47)	8.36 (10.55)	16.64 (4.86)	9.02 (11.23)	19.16 (2.85)
Provincial GDP per capita (log)	2.53 (0.073)	2.54 (0.28)	3.65 (0.42)	2.90 (0.06)	2.54 (0.05)	3.10 (0.04)	3.45 (0.22)	2.88 (0.05)	3.56 (0.44)
Youth (%) in total provincial pop	31.43 (10.83)	17.08 (5.86)	24.93 (10.26)	50.3 (14.28)	28.37 (10.07)	20.06 (7.38)	10.51 (2.90)	20.8 (7.57)	21.51 (7.43)
Black (%) in total provincial pop	16.5 (0.82)	6.85 (0.20)	17.68 (0.98)	22.41 (0.25)	14.8 (0.41)	8.06 (0.051)	0.83 (0.051)	9.61 (0.155)	3.13 (0.362)

Standard deviations in parentheses

Dependent variables like incidence of riots and protests generally violates the two principles of independence and homogeneity associated with event count data (King 1989): neither the occurrence of an event in a time-period independent from another event occurring in same time period, nor are the rates of occurrences homogenous over the time periods. Negative binomial estimation techniques corrects for the problems caused due to violation of the two principles of data generation. Negative binomial model allows the variance to exceed the mean, which is quite common in event count data.

Along with cross-sectional analysis, I run fixed-effects models for the panel data to account for the unobserved province specific effects (Urdal 2008; Justino 2007; Greene 2000; Woolridge 2002). The fundamental advantage of using panel estimation technique is that it allows far greater flexibility in accounting for the differences of behavior across units (Greene 2000). The basic regression model can be given as:

$$y_{it} = \beta x_{it} + \alpha_i + \varepsilon_{it}, \quad t = 1, 2, \dots, T$$

Where x_{it} includes all variables that changes across i or t or both. In modern econometric parlance, “random effect” implies no correlation between observed explanatory variables and the unobserved effect: $Cov(x_{it}\alpha_i) = 0, t=1, 2, \dots, T$ (Woolridge 2002). On the other hand, in micro-econometric application, “fixed effects” imply that one is allowing for unobserved α_i to be correlated with observed explanatory variables x_{it} . The fixed effect approach has one considerable virtue over random effect, as there is no justification for treating the individual effects as uncorrelated with the other regressors. As a result, the random effects approach may lead to inconsistencies in estimation due to omitted variables (Greene 2000). So in the regression analyses at the sub-national levels, α_i would mean state/ province specific effects that we arbitrarily allow to correlate with observed explanatory variables. The principal explanatory variables can be affected due to state/ province specific characteristics. For instance, in India, states with higher levels of development will attract more youth, compared to less developed states. Again, in case of South Africa too, one observes that Gauteng and Western Cape provinces which are among the better developed provinces have maximum number of unrests compared to not so developed Limpopo or Northern Cape, since former two provinces are administrative and financial capitals of the country.

3.5. Concluding Remarks

In this chapter, I outline the research design, variables and data sources used in the empirical analysis of my hypotheses in the next three chapters. Using a large-N dataset, I first test the relevance of my argument that opportunity-willingness combination provides the most comprehensive explanation of collective violence. In subsequent chapters on India and South Africa, I test the relevance of same hypotheses at the sub-national level and for low-intensity armed conflicts. This is the first, to the best of my knowledge, a broad empirical analysis of structural-political opportunity theories and rational-choice oriented collective action theories. Further, it also provides another level of test for the case-studies on the argument that government social expenditure reduces onset of civil unrest. So far the case-studies on direct effect of education have used civil wars as their dependent variable (Richards 2003; Glickman 2000). Thyne (2006) also provides some analysis on low-intensity civil violence using it as a dummy variable. But, using more appropriate event data and better estimation techniques in this dissertation, I test the pacifying effect of education on low-levels of violence as well. If my arguments are true, then we should expect that the interactive effects of youth bulge, ethnic

dominance and political participation and measures of government expenditure in education and health sector should increase collective violence both at the cross-national and sub-national levels.

CHAPTER FOUR: OPPORTUNITY AND WILLINGNESS OF COLLECTIVE DISSENT – A CROSS-NATIONAL STUDY FROM 1970-99

4.1. Introduction

In the previous chapters, I present a detailed discussion why, I think, that a combination of structural political opportunities and misguided government policies can better predict the onset of collective violence by actors. I try to argue that the compartmentalization of focus on structure or agent (Lichbach 1998), leads to inadequate analysis of (in) frequency of collective action by human beings. Consequently, we need a line of theorizing that accounts for the context in which collective action occurs, as well as look at the motivational aspect of the actors involved in such action. I tried to show in chapter one that presence of large youth cohorts, ethnic dominance and chances of political participation provides the context in which one can expect collective action. Youth groups, ethnic ties and an open political system helps in resolving the dilemma faced by dissident groups engaging in a collective action by facilitating several solutions to their dilemma. The contextual opportunity for collective action is provided by such structural-political conditions. I, further, argue that the motivation required to participate in collective action is supplied by the absence of public provision for education and health. If people are discontent by the social services delivered by the government in a society where there are large youth cohorts, polarized ethnic groups and open political system, it would lead to more collective action. This dissertation is not only a first attempt to empirically test the validity of structure-action combination propounded by Lichbach (1998), but also provides a more concrete framework for theorizing on this line by identifying particular contexts in which this combination will lead to a more comprehensive analysis of collective violence.

After having delineated the premise of my arguments and describing the research design in last two chapters, from this chapter onwards, I try to empirically test my hypotheses both at the cross-national and sub-national levels of analysis. At the cross-national level, I attempt to predict the effect of government social expenditure on different levels of collective violence in presence of the aforementioned structural and political opportunities. At the sub-national level, my analysis consists in predicting similar phenomenon within countries. In the country studies, I look at only low-intensity internal conflicts like riots and protests, since both the countries have not experienced large-scale collective violence like civil wars in the last few decades.

Moreover, Lichbach (1998) contends that there is a circular relationship that exists between institutional context and collective action. The dilemma between the state and rebel decides how the inputs of rational rebels affect the public good output of the state (Lichbach 1995). Depending upon the institutional context, rebels can choose to either aim at the reformist change of existing institutions and government policies by low-intensity collective violence, or they can choose to overthrow the existing government and install new institutions by revolutions or civil wars. Therefore, analyzing the effect of structural opportunities on collective violence at different levels of violence adds another advantage to our study of contentious politics. The empirical analysis presented in this chapter has, essentially, two subsections – one, revolutionary change of regimes by civil wars and two, reformist change of existing institutions by low-intensity collective violence like riots. I provide a detailed discussion of my findings under these two sections. Finally, I conclude this chapter by summarizing the findings and their policy implications.

4.2. Empirical Analysis

Correlation coefficients of the important variables are reported in table 4. All the variables show expected directions of their relationships. Infant mortality, large population, large youth cohort, urban growth, ethnic dominance is reported to have a positive correlation with civil war onset in a country. On the other hand, low income, low expenditure in the education sector also correlates positively with war onset.

4.2.1. Effect of Government Social Spending and Structural-Political Conditions on Revolutionary Change of Regime

Table 5 reports the results from baseline regressions with civil wars as dependent variable. Column (1) reports the slope coefficient estimates of some of the basic determinants of civil war onset. Low income, large population and rough terrain are the most well-substantiated determinants of civil war in a country (Fearon and Laitin 2003; Collier and Hoeffler 2000, 2004). Results in column (1) lend support to it. I find that, low income of people and large population of a country significantly increases the risk of civil war onset. However, percentage of mountains in the total land area and peace years does not appear to be a significant predictor of civil war onset in most of the models.

The subsequent columns introduce education expenditure, infant mortality rate, primary and secondary enrollment per capita, ethnic dominance and youth bulge as the principal explanatory

variable, while controlling for income, percentage of mountainous terrain, population and years without civil wars (column 2-6, table 6).

Table 4: Correlation Coefficients for Cross-national Study

Variables	war	IMR	Edu	Youth	Pop	Income	Urban	etdom
Civil War Onset	1							
IMR	0.049	1						
Education Expenditure	-0.06	-0.38	1					
Youth Bulge	0.063	0.601	-0.32	1				
Population	0.05	-0.09	-0.11	-0.08	1			
GDP per capita	-0.06	-0.61	0.308	-0.668	-0.02	1		
Urbanization	0.015	0.529	-0.28	0.57	-0.22	-0.258	1	
Ethnic Dom	0.008	-0.09	0.067	-0.029	-0.06	0.057	-0.05	1

Infant mortality rate or the measure of government expenditure in the health sector and per capita enrollment fails to reach significance and also is in the opposite direction. Education expenditure, although insignificant, is in the hypothesized direction, and so is ethnic dominance and youth bulge. From this table, I do not find much support for my argument that youth cohorts, ethnic dominance, low government expenditure creates the opportunity or willingness for actors to participate in a collective action.

Adding more controls to better specify the model improves the results from table 5. Table 6 and 7 reports the robustness check of my earlier results. Percentage of education expenditure does reach significance level at 10% (columns 2-3), implying that decreasing expenditure in education sector increases the risk of a civil war onset. This result is corroborates Thyne's (2006) findings that education does have a pacifying effect on civil wars. Similarly, the structural-political opportunities that I hypothesize as increasing chances of civil war also attain significance with better model specification. Youth bulge is significant and positive implying large youth cohorts are indeed a source of collective violence (Urdal 2004, 2008). Ethnic dominance or severe polarization between ethnic groups also significantly increases the risk of civil war in a country (Collier and Hoeffler 2000). However, the measure for political openness is negative and significant implying that open political systems are less likely to experience civil war as found by other scholars of democratic civil peace (Hegre et. al. 2001).

Table 5: Cross-sectional Analysis for All Countries on Minor Civil Wars (25-999 Battle Deaths) 1970-99

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Independent Variables</i>							
Education Expenditure (per capita)		-0.141 (0.104)					-0.157 (0.101)
IMR			-0.007 (0.004)				-0.003 (0.004)
Primary Enrollment (per capita)				0.000 (0.000)			-0.000 (0.000)
Secondary Enrolment (per capita)				0.000** (0.000)			0.001** (0.000)
Ethnic Dominance					0.313 (0.342)		0.399 (0.323)
Youth Bulge						0.080 (0.059)	0.071 (0.055)
<i>Control Variables</i>							
GDP per capita	-0.270*** (0.062)	-0.238*** (0.055)	-0.288*** (0.084)	-0.359*** (0.097)	-0.279*** (0.061)	-0.180** (0.079)	-0.252** (0.114)
Population	0.260** (0.100)	0.230** (0.097)	0.256** (0.097)	0.233** (0.076)	0.277** (0.096)	0.297** (0.102)	0.282** (0.090)
Mountainous terrain	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.006)	0.005 (0.006)	0.006 (0.005)	0.005 (0.007)
Peace year	-0.003 (0.143)	0.001 (0.142)	0.001 (0.142)	-0.003 (0.157)	0.009 (0.143)	-0.019 (0.142)	-0.015 (0.157)
Constant	-5.919*** (1.042)	-5.256*** (1.115)	-5.760*** (1.124)	-6.196*** (0.892)	-6.205*** (0.995)	-9.051*** (2.570)	-10.413*** (2.490)
N	3223	3197	3197	3223	3197	3197	3197

***p< 0.00, **p<0.05, *p<0.10; cubic splines added

One explanation is that if chances for political participation is more open, then dissidents does not need to aim at overthrowing the regime altogether. They can aim at low-level violence to pressurize the incumbent to respond to their demands by reforming the existing institutions and policies (Lacina 2005). Therefore, one should expect the effect of this variable to be positive for low-intensity armed conflicts like riots.

The results reported in table 6 and 7 also lend support to the findings in the literature. Revenues from oil exports and instability of political system all exacerbate the risk of civil war onset (Fearon and Laitin 2003; Fearon 2005). Although, Fearon and Laitin (2003) does not find

much support for non-contiguity in their analysis, results in table 6 (columns 3-5) shows that countries with non-contiguous territories are at higher risk. However, none of the model specification finds percentage of mountainous terrain as a significant and robust predictor of civil war onset and population tends to lose its robustness as we add more controls. Similarly, like Urdal (2008), results show that urbanization has significant and negative impact on civil war onset which contradicts the literature on population pressure-resource scarcity nexus. Having set the stage by showing that all the structural-political opportunities and low government expenditure indeed increases the risk of civil war independently (hypotheses 1 and 2), I now move on to test my third hypothesis regarding the interactive effect of these variables in the next section.

The interactive effect of youth bulges, ethnic dominance and political representation and government expenditure in education and health sector on civil wars for all countries is reported in table 8. We do not see much change in the results after including the respective interactive effects between structural-political opportunities and education expenditure and IMR. Income and population remains as a robust predictor of civil war onset in all the columns in table 7. On the other hand, almost all of the principal explanatory variables – youth bulge, ethnic dominance political openness, education expenditure and IMR – fail to attain significance and change directions between columns.

Nevertheless, percentage of education expenditure is significant and negative in column (4) of table 8 when we add the interactive effect between education expenditure and ethnic dominance. At the same time, the interaction term between the two variables is also significant and positive. This result indicates that less spending in the education sector increases probability of civil war significantly. In addition, this effect is exacerbated when there is high polarization between ethnic groups present in the country.

Figure 2 clearly shows that as education expenditure decreases in a country where one ethnic group comprises almost 45-90% of the population, the risk of civil war increases considerably. A decrease of education expenditure from 1 s.d. above mean to 1 s.d. below mean in an ethnically dominated country increases the probability of civil war by about 12%. A clear indication of this result is that grievances fomented by lack of educational facilities find a vent when a large section of the population belongs to same ethnic group. It is easier to coordinate within group and impose sanctions or forge contracts (Congleton 1995; Collier and Hoeffler 2000).

Table 6: Robustness Check for All Countries with Per capita Education Expenditure as Independent Variable on Minor Civil Wars (25-999 Battle Deaths) 1970-99

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
Education Expenditure	-0.156 (0.107)	-0.172* (0.100)	-0.143* (0.010)	-0.124 (0.104)	-0.138 (0.110)	-0.109 (0.113)
IMR	-0.001 (0.004)	-0.003 (0.004)	-0.002 (0.004)	-0.003 (0.004)	-0.004 (0.004)	-0.005 (0.004)
Ethnic Dominance	0.406 (0.312)	0.434 (0.320)	0.828** (0.375)	0.281 (0.326)	0.373 (0.311)	0.718** (0.366)
Youth Bulge	0.085 (0.056)	0.056 (0.054)	0.103* (0.058)	0.061 (0.056)	0.064 (0.058)	0.098* (0.058)
<i>Control Variables</i>						
GDP per capita	-0.230** (0.114)	-0.304** (0.122)	-0.273** (0.135)	-0.209** (0.113)	-0.213** (0.105)	-0.331** (0.130)
Mountainous terrain	0.003 (0.007)	0.006 (0.007)	0.006 (0.007)	0.004 (0.007)	0.003 (0.006)	0.007 (0.007)
Population	0.258** (0.094)	0.228** (0.099)	0.120 (0.110)	0.256** (0.100)	-0.286** (0.096)	0.126 (0.116)
Peace year	-0.002 (0.155)	-0.000 (0.156)	0.019 (0.156)	-0.009 (0.158)	-0.018 (0.154)	0.023 (0.164)
Urbanization	-0.095** (0.039)					-0.088** (0.038)
Oil		0.924** (0.397)				0.964** (0.363)
Non-contiguity			1.658** (0.553)			1.614** (0.550)
Polity				0.008 (0.024)		0.023 (0.029)
Instability				0.830** (0.348)		0.687** (0.337)
Executive Recruitment					-0.484* (0.250)	-0.662** (0.368)
Constant	-7.844** (2.720)	-6.904** (2.700)	-7.824** (3.143)	-7.635** (2.745)	-7.351** (2.793)	-7.405** (2.902)
N	3150	3150	3150	3150	3150	3150

***p< 0.00, **p<0.05, *p<0.10; cubic splines added

Table 7: Robustness Check for All Countries with Per Capita Enrolment as Independent Variable on Minor Civil Wars (25-999 Battle Deaths) 1970-99

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
IMR	0.001 (0.005)	-0.001 (0.005)	0.001 (0.005)	0.001 (0.005)	0.001 (0.005)	-0.003 (0.005)
Primary Enrolment (pc)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Secondary Enrolment (pc)	0.001** (0.000)	0.001** (0.000)	0.001* (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.000 (0.000)
Ethnic Dom.	0.209 (0.321)	0.213 (0.324)	0.629* (0.371)	0.077 (0.335)	0.167 (0.320)	0.548 (0.371)
Youth Bulge	0.122** (0.058)	0.106* (0.057)	0.132** (0.064)	0.106* (0.058)	0.099* (0.058)	0.131** (0.064)
<i>Control Variables</i>						
GDP per capita	-0.254** (0.116)	-0.316** (0.125)	-0.285** (0.125)	-0.236** (0.114)	-0.246** (0.109)	-0.327*** (0.125)
Mountainous terrain	0.004 (0.007)	0.006 (0.007)	0.007 (0.007)	0.005 (0.007)	0.004 (0.006)	0.007 (0.007)
Population	0.281*** (0.090)	0.261*** (0.094)	0.152 (0.099)	0.267*** (0.096)	0.307*** (0.090)	0.157 (0.104)
Peace year	-0.013 (0.158)	-0.007 (0.158)	0.012 (0.159)	-0.005 (0.160)	-0.030 (0.156)	0.027 (0.164)
Urbanization	-0.064 (0.055)					-0.074* (0.043)
Oil		0.765** (0.402)				0.881** (0.400)
Non-contiguity			1.526*** (0.517)			1.527*** (0.546)
Polity				0.010 (0.023)		0.025 (0.029)
Instability				0.888** (0.353)		0.692** (0.342)
Exec. Recruitment					-0.654* (0.352)	-0.712* (0.381)
Constant	-10.362*** (2.475)	-9.500*** (2.455)	-10.207*** (2.866)	-10.315*** (2.444)	-9.823*** (2.464)	-9.097*** (2.805)
N	3197	3197	3197	3197	3197	3197

***p< 0.00, **p<0.05, *p<0.10; cubic splines added

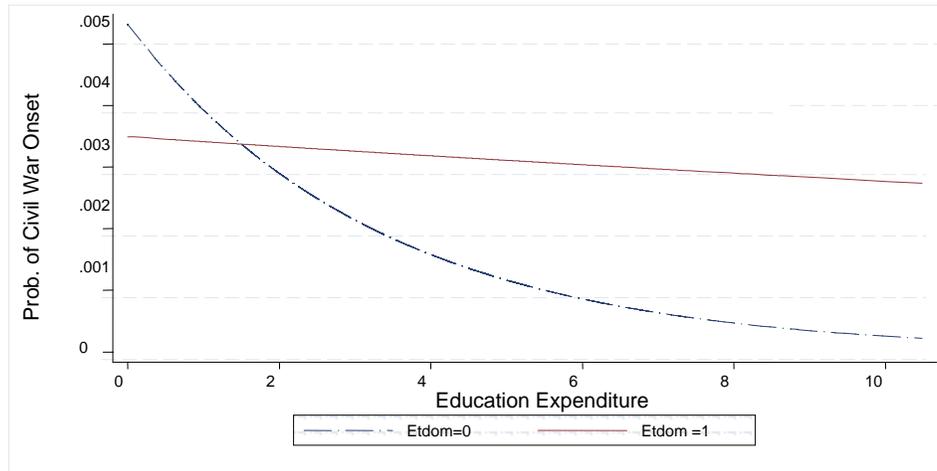


Figure 2: Interactive Effect of Ethnic Dominance & Education Expenditure (per capita) on Minor Civil Wars

Ethnic groups can communicate amongst each other to resolve non-participation problems of collective action to seek redress for their grievances. Since people tied together by ethnic identity share common values and common knowledge base, they tend to see things with similar lens. Further, smaller sub-groups can exist within the larger ethnic groups, who can compete amongst each other to form a revolutionary coalition against the incumbent (Lichbach 1995). For example, youth cohorts in Islamic countries have been instrumental in arousing nationalistic sentiments leading to militancy (Zakaria 2001; Huntington 1996). Such sub-groups can further resolve collective action problems by contractual agreements and self governance. These sub-groups by applying different collective action solutions to their dilemma can coalesce and bandwagon to form a revolutionary coalition with the objective of overtaking the existing regime and provide the good themselves.

As discussed earlier, combination of different structural opportunities and government social expenditure leads to different outcomes. Column (6) of table 8 shows that the interactive effect of political openness and education expenditure is negative and significant.

Figure 3 shows that the slopes of the two lines are different slopes indicating the interaction effect of chances of political representation and education expenditure is significant. In a more politically open country like democracies a decrease of education expenditure from 1 s.d. above mean to 1 s.d. below mean increases the chances of civil war by .05%. This indicates that in a country where executive recruitment is open and competitive like democracies low level government expenditure in education increases the chances of civil war onset significantly.

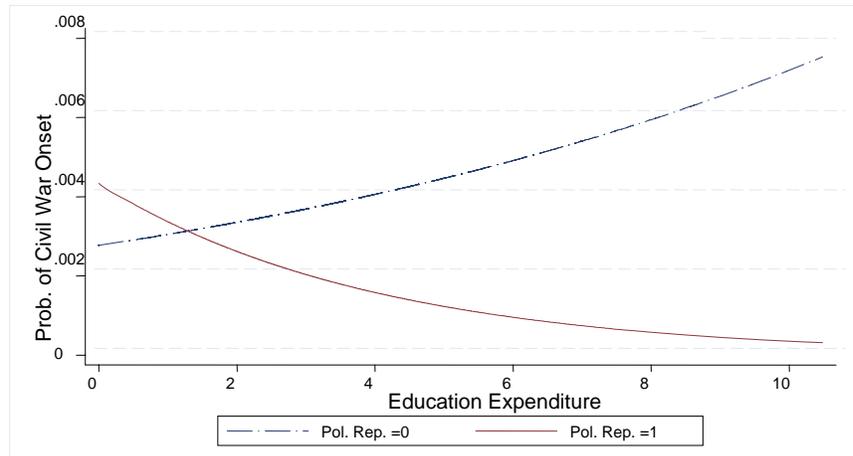


Figure 3: Interactive Effect of Political Representation & Education Expenditure (per capita) on Minor Civil Wars

I believe that in a democratic country where political participation is more open, the grievances caused by the unavailable education opportunities will not increase the risk of large-scale political violence to a great extent. Since dissidents in a democracy believe that they can pressurize the government by low-intensity collective violence and states may be willing to make some concessions rather than using coercion, they will aim at reforming the policies of the existing government, rather than overturning it completely. On the other hand, if political recruitment is closed, like in an authoritarian system, increasing education expenditure would increase the probability of civil war. This indicates that as more people get educated, they would demand more transparency and openness of the political system (Urdal 2004).

Therefore, the results in table 8 indicate that one should expect that different structural and political opportunities plus motivation caused by the grievances lead to different outcomes. While I do not find much support for grievances caused due to low level health expenditure by the government, educational opportunities tend to affect civil war more. This corroborates Thyne (2006) insofar that education does have a pacifying effect, but to some extent. In countries with ethnically polar groups, lack of education expenditure increases the risk proneness. We also find that lack of educational opportunities in a politically open country reduces the chances of civil violence. Youth bulge fail to reach significance both independently and also when interacted with measures of government social expenditure. This can be due to the fact that youth groups are a more potential source of low-level armed conflicts rather than civil wars (Urdal 2008). After analyzing the interactive effect of government social expenditure and structural-political

opportunities for civil war, in the next section I discuss its effect on low-intensity civil violence like riots, where dissidents aim at reforming the policies of existing institutions.

4.2.2. Reformist Policy Change

The results for the effect of government social expenditure on low-level internal conflict are reported in table 9. Table 9 indicates dramatically opposite results for the hypotheses. Reducing infant mortality rate significantly reduces the chance of internal unrest (columns 2 and 6), while increasing government expenditure in the education sector and per capita enrollment rates increases chance of riots (3 and 6). However, ethnic dominance and youth bulge is in their hypothesized directions. Although measure of ethnic dominance fails to reach significance in this table (column 4 and 6), youth bulges appear to be significantly and positively related to riots (columns 5 and 6). This confirms the fact that youth groups are a potential cause of low-intensity armed conflicts. Unlike Regan and Norton (2005), columns (1-6) show that GDP per capita is negative and significant, implying poor countries are more vulnerable to civil unrest of all forms and magnitude. Large pool of population also provides a pertinent source of civil violence in a country (columns 1-6). In analyzing low-level conflict, I find ample support for structural theories, whereas the principal explanatory variables, proxy for motivation, does not show expected direction.

Both education expenditure and infant mortality rates exhibit opposite, yet significant relationship to low-level violence. This warrants more attention exceeding the scope of this chapter. However, I use low-level civil violence as the dependent variable in the case studies on India and South Africa, later. In the case studies, I find enough support for the assumptions made in this dissertation. Both for India and South Africa, deteriorating health and educational facilities significantly increase the risk of collective violence in the sub-national unit. Therefore, I believe that the effect of government social expenditure on low-level civil conflict is relatively difficult to assess in a cross-national basis.

Low-level civil conflicts like riots, protests, strikes or anti-government demonstrations are more diffused all over the country and most of the times involves less than 1000 peoples, which is used as a cut-off point to code riots in cross-national datasets (Alvarez et. al. 1999). As a result, most of those events get past the researcher coding low-level civil conflict for all countries. On the other hand, at the sub-national units the cut-off point is low. Riots are those spontaneous events which involves more than 5 people (Gurr 1970; Indian Penal Code Section

141, 1980). This helps accounting for more events that qualify as civil conflict short of a civil war.

Table 8: Effect of Structural Opportunities & Government Social Expenditure on Civil Wars 1970-99

Variables	Youth		Ethnicity		Pol. Rep.	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
IMR	-0.047 (0.040)		0.002 (0.005)		-0.002 (0.005)	
Education Expenditure (per capita)		-1.196 (0.996)		-0.304** (0.143)		0.095 (0.177)
Youth Bulge	0.018 (0.073)	-0.023 (0.108)				
Ethnic Dominance			0.931 (0.646)	-0.421 (0.579)		
Executive Recruitment					-0.353 (0.783)	0.448 (0.685)
IMR * Opportunity (Youth Bulge/ Ethnic Groups/ Exec Rec.)	0.001 (0.001)		-0.007 (0.006)		-0.003 (0.007)	
Education Expenditure * Opportunity (Youth Bulge/ Ethnic Groups/ Exec.Rec.)		0.030 (0.028)		0.280* (0.156)		-0.348* (0.215)
<i>Control Variables</i>						
GDP per capita	-0.238** (0.108)	-0.141 (0.088)	-0.302*** (0.085)	-0.238*** (0.060)	-0.279*** (0.086)	-0.215*** (0.063)
Mountainous terrain	0.005 (0.006)	0.005 (0.006)	0.006 (0.006)	0.005 (0.006)	0.004 (0.006)	0.003 (0.006)
Population	0.304*** (0.094)	0.253** (0.091)	0.291*** (0.082)	0.251** (0.081)	0.289*** (0.082)	0.267*** (0.082)
Peace year	-0.020 (0.155)	-0.012 (0.155)	0.007 (0.157)	0.006 (0.156)	-0.017 (0.155)	-0.011 (0.156)
Constant	-6.743** (2.979)	-4.710 (4.274)	-6.570*** (1.268)	-5.231** (1.046)	-5.652*** (1.215)	-5.886*** (1.120)
N	3197	3176	3197	3176	3197	3176

***p< 0.00, **p<0.05, *p<0.10; cubic splines added

Another explanation for increased expenditure in education leading to unrest may be because education expenditure is skewed towards university level (Thyne 2006). The unequal distribution of the revenue leads to more grievance in the society. On the other hand, increasing enrollment rate leading to more internal violence is indicative of the fact that as people become more educated, they demand for basic and other facilities also increases. Similar argument can be

made about the infant mortality rate. As IMR decreases in the society, it indicates an improvement in the living conditions of the people. As Moore (1966) argues that it is the relatively better off section of the society who are more likely to rebel. Once the basic physiological, security and social needs are met to some extent, people demand fulfillment of their other desires (Maslow 1970). Lichbach (1994, 1995) also contends that intensity of demands for public good is more crucial for better endowed people in the society. Therefore, where these arguments lead to is as general conditions of living starts improving in a country, the intensity of demand for public good also increases. Since dissidents are not completely frustrated with the incumbent, they use low-level civil violence to press for their demands.

Table 10 and 11 presents the results for robustness check of my argument. In all the columns of table 10, increasing education expenditure and decreasing infant mortality increases chances of riots significantly. Similarly, youth bulges are also positively and significantly related to probability of riots in a country, once more confirming my earlier arguments about the relationship between youth and low-intensity collective violence. Additionally one can argue that youth groups are more capable of solving collective action problems within themselves to demand reformist change of existing policies, rather than competing between different youth groups to form a revolutionary coalition to overtake the government.

On similar line with earlier analysis, urbanization decreases chance of civil unrest (columns 1-5, table 10). On the other hand, revenue from oil export has a negative and significant impact on low-level violence like riots (also see Regan and Norton 2005 on discussion of natural resource and civil violence). This can be due to the fact that oil exporting countries do not penetrate deeply into the society (Fearon 2005; Fearon and Laitin 2003) and has money to invest in policing and monitoring services to quell low level dissent. As a result, dissidents in such a country can feel that their demands will not be met by low-intensity collective violence like riots and protests. Rather, they aim at a revolutionary change of the existing regime which is supported by the results presented in table 6. Oil exporting countries are at high risk of facing civil wars. Moreover, as Regan and Norton (2005) argue that extractable natural resources are more useful in sustaining civil violence rather than initiating it.

Another interesting result is that more politically democratic country is significantly at higher risk of facing riots. The polity measure in columns (4) and (5) is positive and significant. This supports the argument of Hegre et. al. (2001) and Lacina (2005). On the contrary, my argument about political openness is not upheld; the measure for open and competitive political system is

negative and significant (column 5) implying that politically open countries are less likely to face low-intensity civil violence.

Table 9: Cross-National Analysis for Low-intensity Civil Violence (Riots) 1970-99

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Independent Variables</i>							
IMR		-0.005*** (0.001)					-0.006*** (0.001)
Education Expenditure (per capita)			0.085** (0.037)				0.062* (0.037)
Primary Enrolment (per capita)				0.000*** (0.000)			0.000*** (0.000)
Secondary Enrolment (per capita)				-0.000 (0.000)			-0.000 (0.000)
Ethnic Dominance					0.119 (0.121)		0.198* (0.120)
Youth Bulge						0.018* (0.010)	0.009 (0.015)
<i>Control Variables</i>							
GDP per capita	-0.037** (0.014)	-0.080*** (0.018)	-0.053*** (0.014)	-0.024 (0.014)	-0.039** (0.013)	-0.014 (0.018)	-0.066** (0.021)
Mountainous terrain	-0.001 (0.002)	0.001 (0.002)	-0.002 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	0.000 (0.002)
Population	0.472*** (0.045)	0.479*** (0.045)	0.498*** (0.047)	0.510*** (0.044)	0.474*** (0.044)	0.477*** (0.045)	0.508*** (0.047)
Past Riots	0.327*** (0.033)	0.307*** (0.032)	0.327*** (0.034)	0.315*** (0.033)	0.327*** (0.033)	0.330*** (0.034)	0.308*** (0.033)
Constant	-5.620*** (0.429)	-5.157*** (0.464)	-6.124*** (0.492)	-6.779*** (0.460)	-5.681*** (0.427)	-6.330*** (0.619)	-6.644*** (0.735)
N	3061	3061	3061	3061	3061	3061	3061

***p< 0.00, **p<0.05, *p<0.10

Table 10: Robustness Check for Low Level Civil Violence (Riots) with Per Capita Education Expenditure as Independent Variable 1970-99

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
Education Expenditure	0.059* (0.029)	0.064** (0.038)	0.068** (0.038)	0.054* (0.030)	0.068** (0.028)	0.079** (0.035)
IMR	-0.004** (0.001)	-0.006*** (0.001)	-0.006** (0.001)	-0.005*** (0.001)	-0.007*** (0.001)	-0.005** (0.001)
Ethnic Dominance	0.157 (0.119)	0.147 (0.118)	0.186* (0.119)	0.148 (0.121)	0.163 (0.119)	0.111 (0.112)
Youth Bulge	0.051** (0.016)	0.038*** (0.014)	0.033** (0.012)	0.036** (0.013)	0.028** (0.013)	0.081*** (0.017)
<i>Control Variables</i>						
GDP per capita	-0.053** (0.022)	-0.061** (0.025)	-0.070** (0.022)	-0.069** (0.022)	-0.069** (0.021)	-0.079** (0.026)
Mountainous terrain	-0.000 (0.002)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)	-0.000 (0.002)	-0.001 (0.002)
Population	0.515*** (0.048)	0.655*** (0.041)	0.489*** (0.047)	0.506*** (0.045)	0.514*** (0.047)	0.602*** (0.044)
Past Riots	0.306*** (0.033)	0.315*** (0.033)	0.305*** (0.033)	0.302*** (0.033)	0.308*** (0.033)	0.255*** (0.030)
Urbanization	-0.124** (0.043)					-0.167*** (0.046)
Oil		-0.375** (0.191)				-0.411** (0.186)
Non-contiguity			0.179 (0.172)			0.381** (0.163)
Polity				0.025** (0.009)		0.037*** (0.009)
Instability				0.177 (0.146)		0.095 (0.134)
Executive Recruitment					-0.205* (0.120)	-0.498** (0.147)
Constant	-6.887*** (0.782)	-6.999*** (0.785)	-6.640*** (0.738)	-6.884*** (0.763)	-6.469*** (0.726)	-7.923*** (0.790)
N	3055	3055	3055	3055	3055	3055

***p< 0.00, **p<0.05, *p<0.10

Table 11: Robustness Check for Low Level Civil Violence (Riots) with Per Capita Enrolment as Independent Variable 1970-99

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
IMR	-0.004* (0.002)	-0.004* (0.002)	-0.005** (0.002)	-0.003* (0.002)	-0.005** (0.002)	-0.002 (0.002)
Primary Enrolment (pc)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Secondary Enrolment (pc)	-0.000** (0.000)	-0.000 (0.000)	-0.000* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000* (0.000)
Ethnic Dom.	0.192 (0.122)	0.181 (0.122)	0.235* (0.129)	0.179 (0.123)	0.199* (0.122)	0.208* (0.127)
Youth Bulge	0.035* (0.018)	0.016 (0.0160)	0.012 (0.015)	0.013 (0.016)	0.006 (0.014)	0.041** (0.018)
<i>Control Variables</i>						
GDP per capita	-0.039* (0.023)	-0.031 (0.023)	-0.050** (0.024)	-0.055** (0.024)	-0.048** (0.021)	-0.050* (0.027)
Mountainous terrain	-0.002 (0.002)	-0.002 (0.002)	-0.001 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.004 (0.002)
Population	0.509*** (0.043)	0.530*** (0.045)	0.494*** (0.046)	0.522*** (0.044)	0.528*** (0.044)	0.504*** (0.046)
Past Riots	0.308*** (0.032)	0.297*** (0.032)	0.304*** (0.032)	0.301*** (0.033)	0.306*** (0.032)	0.285*** (0.032)
Urbanization	-0.142*** (0.045)					-0.149*** (0.046)
Oil		-0.469** (0.200)				-0.336* (0.194)
Non-contiguity			0.266 (0.177)			0.310* (0.177)
Polity				0.024** (0.009)		0.026*** (0.010)
Instability				0.001 (0.147)		-0.040 (0.142)
Executive Recruitment					-0.255* (0.149)	-0.525*** (0.159)
Constant	-6.676*** (0.724)	-7.042*** (0.737)	-6.407*** (0.712)	-6.712*** (0.707)	6.311*** (0.672)	-6.653*** (0.770)
N	3035	3035	3035	3035	3035	3035

***p< 0.00, **p<0.05, *p<0.10

This section verifies first two hypotheses for reformist change of policies by low-intensity collective violence. Most of the literature on these structural and political condition have analyzed its effect for large-scale collective violence like civil war (Fearon 2005; Fearon and Laitin 2003; Collier and Hoeffler 2000, 2004; Urdal 2004, 2008; Sambanis 2001). I do find much relevance of these conditions for low-level internal unrest as well. Further, effect of government expenditure in health and education sector had remained trapped as a determinant of civil wars only (Thyne 2006; Richard 2003). Here, I find that increasing education expenditure substantially increases risk of riots. An increase of education expenditure from 1 s.d. below mean to 1 s.d. above mean increases the risk of riots by 8%. Therefore, I reiterate that the impact of different structural conditions and government policies can lead to different outcomes depending upon which set of solutions to collective action problem becomes applicable.

The interactive effect of government social expenditure and structural-political opportunities is reported in table 12. One observes that the interactive effects are quite different in case of low-level civil violence. The inclusion of the interaction effects does affect the robustness of the principal explanatory variables. Youth bulges and ethnic dominance attain significance intermittently. IMR is also significant in some model specifications (columns 3 and 5). In contrary to the results for civil wars, education expenditure is insignificant in all the models with interactive effect.

Column (2) reports that the interactive effect of youth bulge and education expenditure is positive and significant. This result indicates that in a country with large section of population belonging to young generation, unequal distribution of education funding can be threatening. An increase of education expenditure from 1 s.d. below mean to 1 s.d. above mean increases the probability of riots by 6%. Since educational expenditure is unequally distributed, increasing spending in this sector would foment grievances unless government improves the distributional aspect. However, one can think that increasing education expenditure would benefit the young people more than others in the country, since most of them are of university going age. But as Mayer (1999) points out that funding in primary and elementary schooling helps middle and lower income people, while funding in post-secondary schooling benefits the upper-income families. Therefore, one can argue that even if you are in university going age but belong to the lower-income distribution, the chances of educational attainment are limited and this is a pertinent source of grievance among young generations.

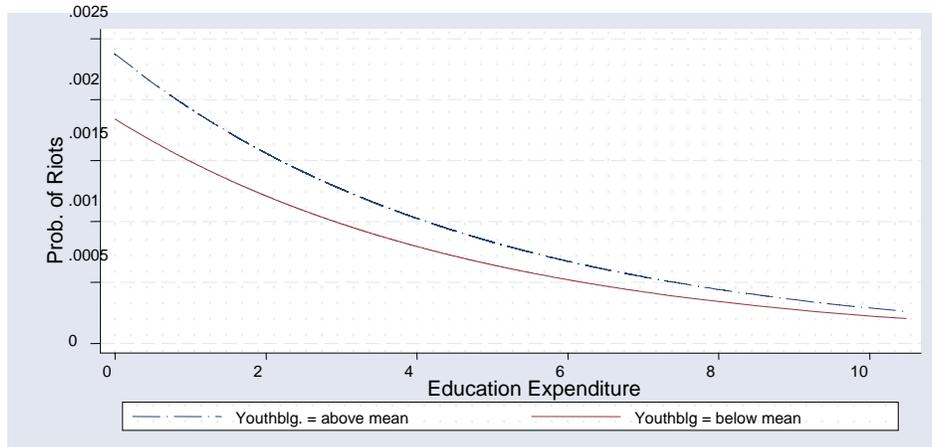


Figure 4: Interactive Effect of Youth Bulge & Education Expenditure on Riots

On the other hand, column (3) of table 10 shows that the interactive effect of infant mortality rate and ethnic dominance is negative and significant. This result indicates that in an ethnically polarized country, improving living conditions increases chances of civil violence. A decrease of infant mortality from 1 s.d. above mean to 1 s.d. below mean reduces the probability of riots by 26% in an ethnically polarized country (Figure 5). Improving living conditions of ethnic groups increases the demand for more PG. Since ethnic groups are better able to resolve CA problem by common values and common base of knowledge, they can engage in collective violence if their demands are not met. Relatively better off people in such ethnic groups will be more willing to supply resources to the groups in form of money and men to initiate and persist a collective action (Lichbach 1994, 1995).

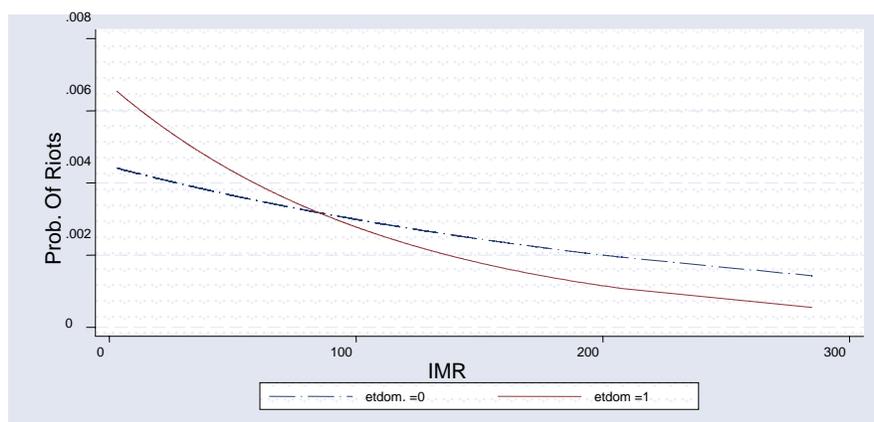


Figure 5: Interactive Effect of IMR & Ethnic Dominance on Riots

We find ethnic polarization affect collective violence differently. While we see in our analysis of civil wars that the interactive effect of ethnic dominance and education expenditure

significantly increases the chances of civil war, it has almost no impact on low-level collective violence. On the other hand, its interaction with infant mortality rates as an indicator of standard of living, significantly affects riots. Improving living conditions of the ethnic groups increases demand for more public good, thereby leading to more collective violence of low-intensity.

An explanation for this diverse result can be that in absence of proper educational opportunities for all people of an ethnic group, smaller sub-groups emerge. These sub-groups are able to resolve their own collective action problem and engage in competition with other similar groups to form an anti-regime coalition which pools in diverse social forces. Revolutions can only occur when diverse and heterogeneous social forces are present (Lichbach 1995). On the other hand, it is difficult to account for how other groups arise by just looking at infant mortality rate. Therefore, it will not be wrong to assume that improving living conditions as indicated by deteriorating mortality rate, will help in resolving the dilemma within the ethnic groups as a whole.

4.3. Conclusion

This chapter tried to show how structural opportunities can interact with motivation of rational actors, thereby increasing the probability of collective action. The empirical analysis on data for 128 countries for the period of 1970-99 show that the structural conditions like large youth cohorts, ethnic dominance and chances of political representation create opportunities but that is not sufficient for collective violence. It is important to see how these opportunities translate into action of agents and also the willingness of agents to choose one action over the other. I try to show that actors are motivated due to grievances caused by lack of government provisions for basic services like education and health. The probability of collective action increases because under these particular structural conditions it becomes easier for the dissident groups to solve free-riding problems facing collective action problem.

Results indicate mixed support for my hypotheses. I find that the interactive effect of structural-political opportunities and government social expenditure leads to different outcomes under different circumstances. For instance, the interactive effect of infant mortality rate and ethnic dominance affects only low-level civil violence, while ethnic dominance increases the chances of civil war when there is unequal distribution of educational funding. Again, youth bulges have implications for low-level violence and not for civil wars. The independent effects of the principal explanatory variables also vary with level of violence. While education reveals a

largely pacifying effect on civil wars, increasing expenditure in the education sector can foment more riots.

Table 12: Interactive Effects of Youth, Ethnicity and Political Representation on Riots 1970-99

Variables	Youth		Ethnicity		Pol. Rep.	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
IMR	0.001 (0.014)		-0.004** (0.002)		-0.004* (0.002)	
Education Expenditure		-0.219 (0.173)		0.067 (0.048)		0.028 (0.080)
Youth Bulge	0.040** (0.017)	-0.018 (0.023)				
Ethnic Dominance			0.410** (0.206)	-0.011 (0.255)		
Executive Recruitment					-0.037 (0.287)	-0.309 (0.282)
IMR * Opportunity (Youth Bulge/ Ethnic Groups/ Exec Rec.)	0.000 (0.000)		-0.004* (0.002)		-0.001 (0.003)	
Education Expenditure * Opportunity (Youth Bulge/ Ethnic Groups/ Executive Recruitment)		0.009** (0.003)		0.045 (0.068)		0.074 (0.088)
<i>Control Variables</i>						
GDP per capita	-0.043** (0.022)	-0.022 (0.018)	-0.090*** (0.018)	-0.057*** (0.013)	-0.083*** (0.018)	-0.053*** (0.014)
Mountainous terrain	0.000 (0.002)	0.000 (0.001)	0.001 (0.002)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)
Population	0.490*** (0.044)	0.500*** (0.047)	0.490*** (0.044)	0.503*** (0.046)	0.482*** (0.045)	0.498*** (0.047)
Past Riots	0.307*** (0.032)	0.323*** (0.034)	0.305*** (0.032)	0.328*** (0.034)	0.306*** (0.032)	0.329*** (0.034)
Constant	-6.599*** (0.681)	-5.603*** (0.922)	-5.407*** (0.468)	-6.165*** (0.505)	-5.111*** (0.513)	-5.905*** (0.540)
N	3035	3055	3055	3055	3055	3055

***p< 0.00, **p<0.05, *p<0.10

These results have important policy implications for the governments. Governments need to focus more on the distributional aspect of education funding, rather than just increasing it. Particularly, if the bulk of countries' population is young generation and belongs to the lower

and middle order of income distribution, government should target more at education sector to reduce grievances among its people. Again, if the ethnic polarization is high in a country, it becomes imperative for the government to focus more on the social sector. Therefore, the analysis presented here substantiates the argument that neither structure nor rationality of agents can predict civil wars or low-level collective violence like riots unilaterally. Structural and political opportunities should provide the context in which actions of the agents can be rationalized.

CHAPTER FIVE: ANALYSIS OF OPPORTUNITY-WILLINGNESS COMBINATION AT THE SUB-NATIONAL LEVEL: THE INDIAN CASE

5.1. Introduction

Civil unrest and the associated violence are not uncommon in India. Although non-violence is the virtue of Hindus and so successfully used against the British Raj by Mahatma Gandhi in his struggle for independence, the trend seems to be changing with the current generation. No country appears as often in the top ten ranks of various forms of conflicts and violence in most of the data archives as India (Taylor and Jodice 1983; Kinloch 1988). In the recent years, India has experienced almost all other forms of collective violence – political strikes, riots, terrorism, and assassinations. However, there is dearth of literature studying systematically the roots and causes of these different manifestations of violence.

Most of the studies done so far deal with social and ethnic cleavages as the main source of unrest (Unnithan 1995; Varshney 2001). Varshney (2001) concludes that intercommunal civic networks have been a major reason for peace at a proximate level between different social and ethnic groups in the country. Similarly, Unnithan (1995) also forwards argument that deep-rooted social cleavage in unequal society leads to more collective violence. There is also evidence in the literature that contradicts results regarding the effect of multiple cleavages on collective violence (Ross 1930; Blau and Schwarz 1984; Coser 1967). However, so far there has been no study conducted trying to unravel the relationship between government expenditure in the social sector and collective violence in India. Further, in these previous studies it is difficult to find much policy prescriptions. Since social cleavages in an old civilization like India is extremely deep-rooted and difficult to get rid off, it becomes important for the government to find a way around.

India is a developing country with over one billion population and extremely diverse in all respects. As a result, the government faces all sorts of challenges in allocating its limited resources. This challenge is further heightened due to the region where the country is situated. With politically unstable neighbors like Pakistan, Sri Lanka, Myanmar and Bangladesh, the situation for India becomes further precarious. It becomes imperative that it dedicates substantial amount of its resources in protecting the borders, as well as prevent infiltration into its own area. It has been always a challenge for the government and leaders of the country as to how they protect the country from within and outside.

Besides this trade-off between guns and butter, social heterogeneity of this country is a severe impediment to internal security. Although civil upheavals in India has not so far broken into large-scale wars, like in other developing countries it has been badly affected by these local conflicts (Baron, Kaiser and Pradhan 2004; Boix 2004). These social conflicts have led to the destruction of livelihoods and markets, increased risk of investments, loss of trust between economic agents and wasted substantial human and economic resources (Justino 2007). Therefore, India serves as the most suitable case to study the nexus between structural opportunities and collective action.

It has all the pre-requisite structural conditions, which I hypothesize as an important background cause for collective action. About 40% of India's current population belongs to the age group between 13 and 34, which the Ministry of Youth Affairs has marked as young generation. Over 800 million Indians are Hindus, the largest religious group in the country, approx. 80.5%. Other religious groups include Muslims (13.4%), Christians (2.3%), Sikhs (1.9%), Buddhists (0.8%), and many more religious groups. Tribal groups make up 1.8% of the population (Census of India 2001). Ethno-linguistic fragmentation score for India is 0.89 in Fearon and Laitin (2003) dataset. A major source of riots and other forms of civil violence is caused by the Hindu-Muslim rivalry (Varshney 2001; Unnithan 1995). Despite the high ethnic fractionalization index, polarization between Hindus and Muslims has affected the country in all respects. As far as political representation is concerned India is a multi-party system with SMDP electoral rules, which has led to mostly coalition governments in the recent elections – National Democratic Alliance (NDA) in 1998 and United Progressive Alliance (UPA) in 2004. Coalition politics creates more opportunity for political representation. There are nine national parties and more than 15 state parties in India (Indian elections, Government of India 2007). All these situations make India as a perfect case for testing the hypotheses presented in this dissertation. Using data on 28 states and 3 union territories, we find that all the structural opportunities discussed here are important in facilitating collective action at different levels and for different policies. Youth bulges appear to be an important facilitator of collective action at the state levels and they demand both educational and health facilities from the government. On the other hand, ethnic groups are aggrieved due to absence of basic health facilities and similarly, it can also be used as an effective tool by the aspiring rebel leaders seeking political representation.

5.2. India Country Overview

Developing countries does not offer a very conducive setting for a peaceful democratic government (Przeworski et. al. 2000). Indian democratic system has puzzled most scholars due to its poverty, ethnic diversity and immense complexity of developmental problems. The decades after independence were a constructive enterprise of consolidating a political system while socially-deepening its political structures (Dasgupta 1995). Earlier leaders of the country, like Nehru, Mahatma Gandhi, due to their commitment to the liberal democratic virtues were able to mobilize the masses based on these principles. The experience of Indian citizens with democratic political system had ensured the survival of the country for more than fifty years.

The trend seems to be changing with the new political recruits. The political base of the country expanded over the decades to include more and more heterogeneous groups into the system. However, these new entrants seem to not well train in the norms of civility (Dasgupta 1995). As a first expression of their engagement in the political life of the country, they press for more social mobility or at least affirm their political rights. In doing so, many a times such act take the form of rage and outbursts caused by the accumulation of distress over the centuries. Fortunately, such moments have been short, diffused and largely non-cumulative.

In India democratic institutions at all levels of governance and decision-making have incorporated popular participation. Further, popular participation has been also characterized by the more organized and institutional forms of resistance to the authority. At the same time, popular politics has also introduced unfamiliar people, patterns and idioms of political action. One observes change in the background of political leaders, the goals they champion, the shifting base of support of masses and political parties and several other departures from the earlier institutionalized politics of India. Consequently, as popular demands get choked in the earlier institutions, it has led to disorder and ungovernability in many areas (Dasgupta 1995).

Although one could find similar patterns between the decision-making structures of central and state governments until recently, the era of coalition politics have changed this pattern and we find regional parties becoming more and more prominent in national politics. With the growth of regional parties, the struggles between groups which had been heretofore local have become issues of national importance. The changing political situation necessitates more analysis on the roots of rising discontentment of the people.

India also provides potential case for testing the hypotheses laid out in this dissertation. In India, the number of youth in the age group of 13-35 years, as per the 1991 Census, was

estimated at about 34 crores, and about 38 crores in 1997, which is anticipated to increase to about 51 crores by the year 2016 (Ministry of Youth Affairs and Sports, Government of India 2001). The percentage of youth in the total population, which, according to the 1996 Census of India is estimated to be about 37% in 1997, is also likely to increase to about 40% by the year 2016. The availability of a human resource of such magnitude for achieving socio-economic change and technological excellence needs commensurate infrastructure and suitable priorities to maximize its contribution to national development. The Ministry of Youth Affairs pursues the twin objectives of personality-building and national-building, i.e., developing the personality of youth and involving them in nation-building activities (Annual Report 2007-08, Ministry of Youth Affairs, Government of India). The youth policy of the Department of Youth Affairs aim to provide appropriate education and training to render them socially useful and economically productive, gainful employment and adequate opportunities for personal development, social defense, clean environment and basic health facilities along with other basic provisions (National Youth Policy 2003, Department of Youth Affairs, Government of India).

Despite the lofty goals of Ministry of Youth Affairs, in India, youth unemployment has been high and expansions of educational opportunities have been, at best, very slow. There are several programs under the Ministry of Youth Affairs for the development of population belonging to the age-group of 13-35 yrs like National Service Scheme (NSS), National Youth Awards, Rashtriya Sadbhavana Yojana, Rajiv Gandhi National Institute in Youth Development, Nehru Yuva Sangathan, etc. Union and state governments jointly fund programs under NSS in a ratio of 7:5 in all States except North-East region, Sikkim and hilly terrain where the ratio is 3:1. Expenses pertaining to training, research, administration, orientation, evaluation and publications regarding the NSS are fully borne by the Union government. NSS programs also fund schools for basic education in all Union Territories and Jammu & Kashmir. Similarly, Union and State governments have also collaborated in providing lot of health facilities to the younger generation. However, these efforts, although expanded over the years, have not been able to cover all due to the rising population in India.

The religious composition of India show a preponderance of Hindus (83%), followed by Muslims (11%) who forms the largest religious minority group. There are other religious groups like Christians (2.4%), Sikhs (2%) and other religions. At the state level, Hindus lack majority in many states like Jammu & Kashmir, Punjab, Meghalaya, Mizoram and Nagaland. Language and regional loyalties cut across religious communities. The major religious groups Hindus,

Muslims, Christians are spread across the states in India and they speak a variety of regional languages. All of these linguistic and regional communities further belong to several social classes and thousands of castes and sub-castes. As a result, there cannot be ethnic domination in India due to these cross-cutting cleavages.

Nevertheless, social divisions that reflect loyalties based on religion, region, caste, class, language and ethnicity do not clearly show how, why and when these divisions will translate by political mobilization and lead to what consequences (Dasgupta 1995). Dasgupta (1995) further argues that any easy linkage between Muslim religion and separatism is problematic for the rest of Indian Muslims, who are engaged in different aspect of the country. On the other hand, scholars believe that presence of huge Muslim population in any state makes it more prone to experiencing anti-government activities (Wilkinson 2004). There has been a lot of unrest in India caused due to Hindu-Muslim rivalries and the tensions keep rising between these to dominant religious groups due to foreign patronage (Justino 2007; Varshney 2001). There had been other instances of violence triggered by religious animosities, like the secessionist movements in Punjab in early eighties by the Sikh religious groups.

India is a multi-party parliamentary democracy and a federal state using single-member-district-plurality electoral rules to choose the representatives of people to the legislatures. As of now, there are about nine national parties in India and several state-level regional parties which are largely functional in particular states. Indian National Congress dominated the political arena for about 25 years after independence in 1947. It lost election for the first time in 1977 to a coalition of more socialist based parties like Janata Dal, Lok Dal, etc. That was the beginning of representation of other parties in the national legislature and a decline of Congress supremacy (Dasgupta 1995). Since then Congress (INC) have failed to get a clear majority in the national elections to be able to form the government single-handedly. The period under review in this chapter, 1999-2006, has witnessed 2 coalition governments at the center – National Democratic Alliance (NDA) led by Bharatiya Janata Party (BJP) and United Progressive Alliance (UPA) led by INC. In both cases Bharatiya Janata Party or Congress could not win a clear majority in 1999 and 2004 elections, respectively, hence, were supported by several other smaller parties.

India is a federation composed of 28 states and 7 union territories (Census of India 2001). Decentralization of powers between center and state and several other local bodies was initialized in 1919 under British rule and further broadened in 1935 (Tilak 1989). The Indian Constitution lays down the prerogatives of each level of governments in three lists – center list,

state list and concurrent list (where both center and state share power and responsibilities). Most of the basic facilities along with education and health fall under the concurrent list after the constitutional amendment of 1976. Provincial or state governments need more and more resources for providing these basic facilities to its people, hence greater reliance on the union (center) government becomes inevitable. Particularly, with respect to education, though it was explicitly listed as a state subject, the constitution delegated more educational responsibilities to the central government. This was justified on the basis that wide variations exist with respect to development of the states and the state governments are themselves constrained by their limited resources (Tilak 1989). Despite this clear delineation of responsibilities, there has been several discrepancies regarding funding of these basic provisions between the center and state. Tilak (1989) noted that states receive just one-fifth of their budgeted expenditure on education from the center and rest of it is funded by the state governments themselves. This discrepancy is further aggravated if the political accident of same party being in power at the center and in the states does not occur (Naik 1962). It has been seen that political party at the center, in order to keep their vote banks rolling, will favor the states where it is in power.

The above discussion proves India as a fertile case for testing my arguments at the sub-national level. It satisfies both the conditions of opportunity and willingness that would help in resolving the collective action problem of any dissident group in a country. Having laid out the foundation for using India, in the next section I present the empirical analysis of the hypotheses with respect to this country. Since, there have been no civil wars in India in the recent decades aimed at overthrowing the incumbent I use low-level violence as the explanandum for this case study.

5.3. Empirical Analysis

Correlation coefficients reported in table 13 exhibit expected relationship between the variables. Decreasing per capita expenditure in education sector and increasing infant mortality rates increases the chance of riots in a state. Similarly, states with large share of Muslim population and low-income are also expected to experience increase of civil violence. Previous incidents of riots make state more prone to experience such events in future, as successful repertoires of past incidents increase the confidence in such actions (Tilly 1978).

Table 14 reports the results from the cross-sectional analysis of the data. In this table I try to highlight the independent impact of the principal explanatory as a test of my first and second

hypotheses. In this table, almost all the principal explanatory variables which are hypothesized to provide the opportunity and willingness for collective action are insignificant independently, except percentage of Muslim population in each state.

Table 13: Correlation Coefficients for India (1999-2006)

Variables	Riots	IMR	EDUpc	SDPpc	Youth	Pop	Muslim
Riots	1						
State IMR	0.34	1					
State Education Expenditure per capita	-0.42	-0.53	1				
State GDP per capita (Log)	-0.39	-0.54	0.3	1			
Youth Bulge	-0.53	-0.67	0.57	0.7	1		
Population	0.66	0.66	-0.81	-0.38	-0.64	1	
Percentage of Muslim	0.25	0.08	-0.26	-0.23	-0.16	0.27	1

Column (4) shows that high percentage of Muslim population in the state makes it significantly more risk prone. A change in the percentage of Muslim population from 1 s.d. below mean to 1 s.d. above mean increases the chance of riot by almost 3% in a state. This confirms to the findings of Wilkinson (2004) and Varshney (2001). Although infant mortality rate, a measure of state government's expenditure in the health sector, fails to reach significance independently (column 2), it becomes highly significant when we control for rest of the explanatory variables. An increase in the rate of infant mortality from 1 s.d. below mean to 1s.d. above mean increases the probability of riots in a state by 2%. Per capita education expenditure is insignificant and retains the same relation with the dependent variable as we find in the cross-national study in the previous chapter. However, youth bulge is neither significant nor in the hypothesized direction.

Other interesting results that we find this analysis are that of income and terrain. Wealth of a state, measured as per capita state domestic product, is not significant in most of the models, and also changes direction. Similarly, percentage of forest area in a state, although significant, is in the opposite direction. This indicates that states with less area covered by forest should experience more civil unrest. Population and previous events of riots are positively and significantly related to the dependent variable implying that states with large population and past riots are more risk-prone, as expected.

Table 14: Cross-sectional Analysis of Effect of Structural Opportunities and Government Social Expenditure on Riots in India from 1999-2006

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
State Infant Mortality Rate		0.000 (0.004)				0.009** (0.004)
State Education Expenditure (per capita)			11.533 (8.443)			-0.511 (8.243)
Muslim (% in total State pop)				0.020*** (0.003)		0.024*** (0.003)
Youth (% in total State pop)					-0.016 (0.041)	-0.052 (0.042)
<i>Control Variables</i>						
Ln State Domestic Product per capita	-0.149 (0.140)	-0.134 (0.165)	-0.311** (0.153)	0.082 (0.132)	-0.115 (0.167)	0.457** (0.229)
Ln State Population	0.734*** (0.056)	0.729*** (0.070)	1.002*** (0.073)	0.768*** (0.051)	0.724*** (0.062)	0.690*** (0.088)
Forest (% in total area of State)	-0.010*** (0.002)	-0.010*** (0.002)	-0.013*** (0.002)	-0.007** (0.002)	-0.010*** (0.002)	-0.003 (0.003)
Past Riots in State	0.002*** (0.0003)	0.002*** (0.0003)	0.002*** (0.0003)	0.001*** (0.0002)	0.002*** (0.0003)	0.002*** (0.0003)
Constant	0.839 (1.802)	0.691 (1.944)	0.543 (2.079)	-2.121 (1.705)	1.287 (2.140)	-3.507* (2.102)
N	218	218	218	218	218	218

***p<0.000, **p<0.05, p<0.10

The results for robustness check of the cross-sectional analysis are reported in table 15. In column (1), I add share of mineral export in SDP as a control. Several Indian states have experienced secessionist movements triggered by their mineral wealth. For example, Jharkhand broke out of the state of Bihar mainly because most of the coal mines were located in the area now under the new state of Jharkhand. However, the measure for mineral exports in SDP fails to reach significance in the model. This might be because not all states are rich in mineral resources in India. So on a national basis, share of natural resource is not an important predictor of civil unrest, unlike predicted in the civil war literature. Even after adding this control, IMR maintains its significance level indicating the fact that health facilities are highly demanded by the Indian population. Similarly, states with large population, high percentage of Muslims and past riots should see more unrest.

In column (2), I add control for the percentage of population living in rural areas in each state. It is highly significant and negative indicating that as less people are left in the countryside the

chances of civil unrest increases. This is in tandem with the assertion that modernization and urbanization breed unrest (Huntington 1968). Finally, in column (3), I control for political openness measured as a dummy variable, coded as 1 if state governments are formed by a party that is also a member of the coalition government at the center. This measure is highly significant and positive implying that if a state government is formed by a coalition member it increases the probability of riots. All the principal explanatory variables are robust to this new model specification. IMR remains as a significant predictor of civil unrest. The analysis presented in tables 14 and 15 clearly point to the fact that increasing rates of infant mortality and percentage of Muslim population is a robust predictor of civil unrest in India. Therefore, these results upheld my first two hypotheses partially, i.e. decreasing health conditions of the people does make them angry, frustrated and willing to contest the state, while a large section of the state's population being Muslim and having a state government with the same political party as center provides sufficient opportunity to undertake collective actions.

Third hypotheses state a combined effect of opportunity and willingness on collective violence. Table 16 reports the result for the combined effect of the structural-political opportunities and the willingness caused by the low level government expenditure in the education and health sector. In cross-sectional analysis we do not see a lot of effect produced due to youth bulges in situations of low government expenditure in education and health sector. Although on an average 60% of Indian population is comprised of the younger generation, on a pan-Indian scale it does not seem to facilitate collective action, unlike what we see in the case of South Africa (chap. 6). Both the interactive terms, youth with per capita education expenditure and health, are insignificant in columns (1) and (2) in table 16. Since the constitution does not clearly lay down the responsibilities of central and provincial governments in South Africa, the effect of youth bulges is felt all over the country.

Unlike youth bulges, ethnic dominance measured as percentage of Muslim population in a state appears to be significant predictor of unrest all over India. For a long time, several riots have been caused due to Hindu-Muslim rivalries and Muslim grievances for their minority status. These results lend support to the long held belief of Muslim aggressiveness in India. Table 16 column (3) shows that low government spending in health sector in states with large Muslim populations is at very high risk of experiencing civil unrests (Figure 6). An increase of infant mortality rate from 1 s.d. below mean to 1s.d. above mean increases the probability of unrest by almost 31%.

Table 15: Robustness Check for Cross-sectional Analysis on Riots in India 1999-2006

Variables	(1)	(2)	(3)	(4)
<i>Independent Variables</i>				
Infant Mortality Rate	0.006* (0.003)	0.016** (0.005)	0.009** (0.004)	0.015** (0.005)
Education. Expenditure (per capita)	-5.566 (8.580)	2.991 (8.500)	-0.533 (8.306)	2.662 (9.187)
Muslim (%)	0.023*** (0.003)	0.026*** (0.004)	0.024*** (0.003)	0.026*** (0.004)
Youth Bulge (%)	0.002 (0.044)	-0.076* (0.042)	-0.052 (0.042)	-0.059 (0.038)
<i>Control Variables</i>				
Ln State Domestic Product per capita	0.380 (0.245)	0.533** (0.227)	0.458** (0.226)	-0.426* (0.254)
Ln Population	0.750*** (0.083)	0.684*** (0.087)	0.690*** (0.088)	0.763*** (0.080)
Forest Area (%)	-0.001 (0.003)	-0.001 (0.003)	-0.003 (0.003)	0.005 (0.003)
Past Riots	0.002*** (0.000)	0.002*** (0.001)	0.000*** (0.000)	0.002*** (0.001)
Share of Mineral Wealth in SDP	-0.005 (0.019)			-0.003 (0.018)
Percent of People in Rural Areas		-0.009** (0.003)		-0.013*** (0.002)
Coalition Partners as State ruling party			-0.005 (0.098)	0.296** (0.114)
Constant	-5.356** (1.975)	-3.176 (2.035)	-3.534* (2.054)	-3.544* (2.089)
N	216	216	216	216

***p<0.000, **p<0.05, p<0.10

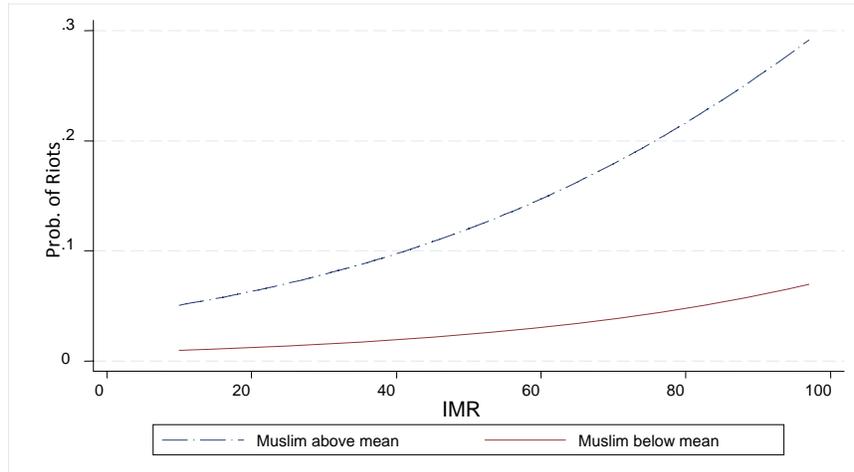


Figure 6: Interactive Effect of Ethnic Dominance & IMR on Riots in India

As expected, on a cross-sectional basis the interactive effect of political participation and government social expenditure does not reveal significant impact (table 16, columns 5-6). This is because how the state performs due to opportunities created by chances of political representation cannot be captured in pooled analysis, like in South Africa where mainly one party dominates at the center and almost always in the states. The dominance of Congress party in India has declined since 1990s. The last time Congress party was able to form the central government single-handedly was from 1991-1996. Although it has started regaining its power after Sonia Gandhi became the party president in 2000 and has held the largest seats in the coalition government that came to power in 2004, it has become a distant thought for the party to enjoy equal amount of electoral popularity as it did earlier. At the state level also Congress has lost in most of the states to other parties like BJP, Communist Party of India, DMK (Dravida Munnetra Kazagham), Janata Party, BSP (Bahujan Samaj Party), SP (Samajwadi Party), etc. Regional parties have gained more prominence in the coalition era. India provides a true example of multi-party system. These non-Congress parties have intermittently supported the central coalitions and are essentially prominent in particular states. Therefore, I assume that the center-state controversy can be better captured in a panel study where we account for state-specific heterogeneity.

5.3.1. Panel Estimation

Cross-sectional analysis is inadequate to assess the differences that exist across the sub-national unit. All 28 states of India differ from each other in almost all respects – wealth, language, size, population composition, active political parties, etc.

Table 16: Interactive Effect of Structural-Political Opportunity & Government Social Expenditure on Riots in India (1999-2006)

Variables	Youth		Ethnicity		Pol. Rep.	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
Infant Mortality Rate	0.001 (0.004)		0.024*** (0.007)		0.002 (0.006)	
Per capita Education Expenditure		-11.956 (9.062)		-13.185 (11.512)		-14.509 (10.102)
Youth Bulge	0.000 (0.044)	-0.001 (0.045)				
Muslim (%)			0.079*** (0.016)	0.015*** (0.003)		
Coalition Partners					0.200 (0.243)	-0.024 (0.117)
Health*Opportunity (Youth bulge/ Muslim/Coalition Partners)	-0.226 (0.191)		-0.001*** (0.000)		-0.002 (0.004)	
Education Expend*Opportunity (Youth bulge/ Muslim/Coalition Partners)		0.000 (0.000)		3.189 (2.084)		14.549 (11.606)
<i>Control Variables</i>						
Ln SDPpc	-0.124 (0.199)	-0.097 (0.199)	0.359** (0.171)	0.056 (0.131)	-0.154 (0.162)	-0.164 (0.137)
Ln Population	0.683*** (0.095)	0.662*** (0.097)	0.638*** (0.071)	0.784*** (0.076)	0.723*** (0.072)	0.694*** (0.077)
Forest Area (%)	-0.010*** (0.002)	-0.009*** (0.002)	-0.004 (0.003)	-0.006** (0.002)	-0.010*** (0.002)	-0.011*** (0.002)
Past Riots	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
Constant	0.999 (2.080)	0.927 (2.049)	-5.015** (1.952)	-2.005 (1.806)	0.845 (1.932)	1.422 (1.835)
N	218	218	218	218	218	218

***p<0.000, **p<0.05, p<0.10

Pooled analysis assumes homogeneity across cases and hence, most of the times, unable to capture any unobserved heterogeneity (Woolridge 2002; Justino 2007). In order to account for the vast heterogeneity that exist between the Indian states and union territories and also to account for how the relationships between variables changed over time, I use panel estimation techniques on the same data. Results from the panel estimation are discussed below.

Table 17 replicates the baseline cross-sectional analysis presented in table 14. One observes that there is some departure from the earlier results when we account for state specific heterogeneity. For example, state level of development is an important predictor of internal order. Unlike cross-sectional analysis, the coefficient for state domestic per capita is negative as well as significant. Further, the first two hypotheses are strongly upheld as all the indicators of opportunity and willingness are significant independently and in expected directions, except education per capita. An increase in rates of infant mortality from 1 s.d. below mean to 1 s.d. above mean increases the probability of riots by 8%. Similarly, if the percentage of youth population in a state increases from 1 s.d. below mean to 1 s.d. above mean, the chances of that state facing internal unrest increases by 1.4%.

Education per capita expenditure also becomes significant when I control for other factors in column (6) but shows opposite relationship with dependent variable. It is positively and significantly related to the dependent variable. An increase in per capita education expenditure from 1 s.d. below mean to 1 s.d. above mean leads to an increase in unrest by about 3%. This result is analogous to what we find for low-level violence in cross-national analysis (table 8 and 9). It will not be far-fetched to extend the explanation from the cross-national level to sub-national units. The unequal distribution of education funds between levels of education foments grievances. Therefore, it is important for the states to improve the distributional aspect of education expenditure, rather than just increasing it. How much of this expenditure is properly used in building schools and improving resources to people needs to be assessed. The literacy rate in India ranges from 90% in Kerala to 47% in Bihar (UNESCO 2004). The corruption rate of different state governments is also very high. So by looking at the budgeted expenditure it is difficult to say how much government is doing to meet the demands of the people.

Table 18 reports the robustness check of the results in earlier table. All the results are robust to inclusion of other variables. Increasing infant mortality rates, education expenditure, percentage of Muslim and youth population make a state significantly more prone to experience internal unrest. In similar lines with cross-sectional analysis, as less and less people live in the rural areas, chances of riots increases. If the state government is formed by a political party which is also a coalition partner at the center, one should expect significantly more riots in those states. Therefore, once more my hypotheses about structural-political opportunities and grievances caused by faulty government policies and internal unrest are verified even while controlling for state specific characteristics.

Table 17: Panel Estimation of Effects of Structural-Political Opportunities and Government Social Expenditure on Riots in India (1999-2006)

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
State Infant Mortality Rate		0.012** (0.004)				0.019*** (0.004)
State Education Expenditure (per capita)			8.307 (11.808)			18.401** (9.637)
Muslim (% in total state pop)				0.056*** (0.010)		0.048*** (0.011)
Youth (% in total state pop)					0.228*** (0.059)	0.242*** (0.061)
<i>Control Variables</i>						
Ln SDPpc	-0.361** (0.147)	-0.148 (0.177)	-0.330** (0.154)	-0.191* (0.102)	-0.680*** (0.151)	-0.219 (0.142)
Ln State Population	0.243*** (0.051)	0.220*** (0.053)	0.280*** (0.070)	0.145** (0.055)	0.410*** (0.068)	0.386*** (0.100)
Forest (% of total State area)	-0.001 (0.003)	0.001 (0.003)	-0.000 (0.003)	-0.000 (0.003)	-0.002 (0.003)	0.003 (0.003)
Constant	3.138** (1.581)	0.620 (1.944)	2.427 (1.765)	1.793* (1.119)	-4.892** (2.583)	- (3.026)
N	250	250	250	250	250	250

***p<0.000, **p<0.05, p<0.10

Table 18: Robustness Check for Panel Estimation on Riots in India (1999-2006)

Variables	(1)	(2)	(3)	(4)
<i>Independent Variables</i>				
Infant Mortality Rate	0.016*** (0.005)	0.019*** (0.005)	0.018*** (0.003)	0.018*** (0.005)
Education Expenditure (per capita)	22.802*** (8.487)	18.117** (9.793)	20.833** (9.289)	24.733*** (8.776)
Muslim (%)	0.052*** (0.011)	0.052*** (0.011)	0.038** (0.012)	0.038*** (0.013)
Youth Bulge	0.411*** (0.080)	0.397*** (0.092)	0.237*** (0.062)	0.376*** (0.092)
<i>Control Variables</i>				
Ln SDPpc	-0.139 (0.126)	-0.246* (0.153)	-0.311** (0.162)	-0.194 (0.158)
Ln Population	0.454*** (0.105)	0.363*** (0.103)	0.421*** (0.099)	0.443*** (0.118)
Forest Area (%)	0.004 (0.003)	0.004 (0.004)	0.003 (0.003)	0.005 (0.004)
Share of Mineral Wealth in SDP	0.021 (0.015)			0.021 (0.14)
Percent of People in Rural Areas		-0.005 (0.005)		-0.014*** (0.059)
Coalition Partners as state govt. party			0.153** (0.061)	0.144*** (0.059)
Constant	- 19.654*** (4.010)	-18.709*** (4.787)	-10.590** (3.064)	-17.284*** (4.929)
N	180	180	180	180

***p<0.000, **p<0.05, p<0.10

The third hypothesis is verified by using interaction effects between structural-political opportunities and government expenditure in health and education sectors. The results for these interaction effects are reported in table 19. Table 19 clearly shows that, when we account for state specific effects for panel estimation, youth bulges provide great opportunities for collective actions (column 1-2, table 19). Column (1) shows that the interaction term between infant mortality rate and youth bulges is positive and significant implying that deteriorating health conditions creates immense opportunities for collective actions in states with high youth population. A change of mortality rates from 1 s.d. below mean to 1 s.d. above mean increases chance of unrest by 7%, while percentage of youth is held at its mean.

At low levels of per capita expenditure in education the probability of a state experiencing civil unrest increases, though marginally. This effect is further aggravated when the state has

about 40% of population belonging to the 13-35 age groups. Similarly, the interaction between per capita education expenditure and youth bulge is also positive and significant. An increase of education expenditure in a state from 1 s.d. below mean to 1 s.d. above mean increases the probability of riots in that state by 2%. This further supports the assertion in the literature that youth are more aggravated with limited educational and employment opportunities (Urdal 2004, 2008). When it is difficult for governments to change structural conditions like size of population or land area, it becomes imperative for the government to focus on providing basic facilities to its people, particularly in states where youth groups constitute more than average of the population.

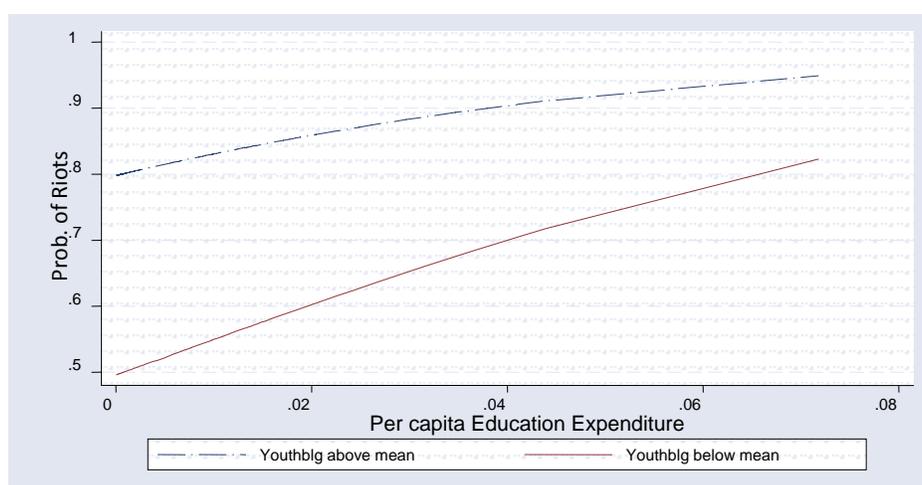


Figure 7: Interactive Effect of Education Expenditure & Youth Bulge on Riots in India

The results of panel estimation of the same model corroborates to the fact that state governments should target social sectors more than the Union government. This may be due to the controversy that exists between center and state responsibilities for education and health sector. As mentioned earlier, although education now falls under the concurrent list after 1976, state governments shoulder an uneven share of the burden of financing education. This leads one to assume that state governments with their limited resources are always less able to cover all the people with basic educational facilities and people know that. Therefore, it is important for the state governments increase its expenditure in the social sectors, particularly where youth population makes up more than 40% of the state population.

Unlike cross-sectional analysis, the interaction effect between percentage of Muslim population and government expenditure in the health and education sector is not significant (columns 3-4, table 19). However, percentage of Muslim population retains its significance and

positive direction even after including the interaction terms. This indicates and further strengthens the idea that Muslim population in itself is a potential source of unrest in any state, irrespective of the grievances that are caused by low level public health facilities or unequal distribution of education expenditure.

Finally, column (5) of table 19 shows that the interactive effect of chances of political representation and infant mortality rates is a significant predictor of civil unrest in a state. This implies that deteriorating health conditions of people can be successfully used by leaders to induce people into joining collective actions against the governments. If a state government is formed by a political party which is also a coalition partner at the center, an increase of infant mortality from 1 s.d. below mean to 1 s.d. above mean increases the risk of collective action in the state by almost 2% as shown in figure 8. Surprisingly, per capita expenditure in education is not reflected as a significant predictor of civil unrests in the states. This may be once again for the reason that people know that state governments share an uneven burden of funding education.

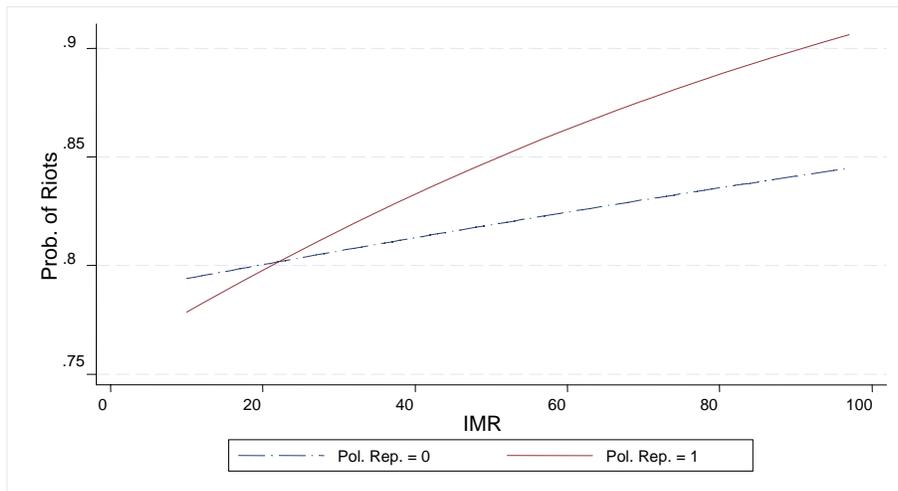


Figure 8: Interactive Effect of IMR & Political Representation on Riots in India

The results from the empirical analysis clearly points out the fact that no one conditions is either necessary or sufficient to ensure collective action. Different opportunities interact with different grievances to remedy the collective action problem of individual dissidents or groups. The structural and political opportunities identified in this dissertation make collective action easier and the combined effect of opportunity and willingness caused by low level public

facilities for basic services increase the chance of collective action by facilitating solutions to the rebel's dilemma.

Table 19: Interaction between Structural-Political Opportunities & Government Social Expenditure on Riots in India (1999-2006)

Variables	Youth		Ethnicity		Pol. Rep.	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent Variables</i>						
Infant Mortality Rate	0.015*** (0.004)		0.019*** (0.005)		0.003 (0.005)	
Education Expenditure (per capita)		21.594** (9.549)		5.100 (11.902)		13.476 (10.571)
Youth Bulge	0.305*** (0.061)	0.288*** (0.061)				
Muslim (%)			0.075*** (0.011)	0.051*** (0.014)		
Coalition Partners					-0.169 (0.201)	0.292*** (0.071)
Health*Opportunity (Youth/ Muslim/Coalition Partners)	0.482** (0.204)		-0.000 (0.000)		0.007** (0.003)	
Education Expend*Opportunity (Youth/ Muslim/Coalition Partners)		0.003*** (0.000)		1.058 (1.925)		-1.088 (15.392)
<i>Control Variables</i>						
Ln SDPpc	-0.479*** (0.171)	-0.478*** (0.171)	-0.065 (0.103)	0.204* (0.116)	-0.227 (0.176)	-0.467*** (0.151)
Ln Population	0.541*** (0.088)	0.541*** (0.089)	0.089 (0.059)	0.194** (0.084)	0.271*** (0.055)	0.307*** (0.070)
Forest Area (%)	0.001 (0.003)	0.001 (0.003)	0.002 (0.003)	0.000 (0.003)	0.000 (0.003)	0.000 (0.003)
Constant	-12.346*** (3.095)	-11.629*** (3.021)	0.071 (1.185)	1.438 (1.304)	1.309 (1.926)	3.396** (1.674)
N	250	250	250	250	250	250

***p<0.00, **p<0.05, *p<0.10

5.4. Conclusion and Policy Implication

The discussion presented in the earlier section clearly reveals the fact that youth bulges, ethnic dominance and chances of political representation are important structural opportunities that in conjunction with faulty government policies can facilitate solutions to collective action problem. It is to be noted the effect of these structural conditions vary with levels of analysis and

also with government provisions. For example, ethnic groups tend to affect collective actions all over India, while youth groups have effects in specific states with large population belonging to the young generation. Similarly, youth groups demand both educational and health facilities, on the other hand, ethnic groups and political parties demand more of health facilities for its people. Therefore, this chapter shows that structural-political opportunities translates into collective action in particular situations and can be considered as an attempt to show structure-action synergy in the literature on contentious politics. It provides rationalization of rebel's action to collectively act in presence of particular structural opportunities and willingness due to grievances.

The policy implications that can be forwarded from the results presented here are that government policies need to be more targeted. For instance, central governments need to become more attentive in providing more funding to the states for education. Again, the state governments should focus more on improving health facilities and living conditions of its populace, since grievances caused due to lack of it can be used as an effective instrument by rebel leaders to attract more people into collective actions. Further, government, both at center and at state, should provide more health benefits to the minority populations. To conclude, this chapter provides important implications for both academia and policy-makers by showing how structural opportunities, in case of faulty government policies, can disturb the internal peace of a country.

CHAPTER SIX: OPPORTUNITY AND WILLINGNESS IN SOUTH AFRICAN CONTEXT

6.1. Introduction

Civil unrests have become a part and parcel of daily life of South Africa. On an average there were approximately 6000 protests officially in FY 2004-05 of which 1000 were banned (Freedom of Expression Institutes, Newsletter, September 2006). The end of apartheid regime has ushered in an era of popular unrest, where the so long suppressed emotions have found a vent.

The apartheid regime in South Africa was plagued with all forms of inequality. Although characterized by repression, the earlier apartheid regime already had redistributive measures underway. During mid seventies there have been some redistributive shifts towards the black Africans in the country (Van der Berg 2002). However, this should not make one doubt about the extent of repression used by the apartheid regime. Van der Berg (2002) contends that even repressive governments often respond to social pressures before political reform actually comes on the agenda. Some amount of parity was already attained before transition.

Government social expenditures increased from 38.7% to 44.4% between 1982 and 92, before the political transition and then further rose to 49.3% in 2002 (Van der Berg 2002). Household surveys conducted post transition show a definite increase in the access to basic facilities like housing, electricity, water and sanitation (Burger et. al. 2004). Further, this improvement in service delivery has benefitted the poorest households (Leibbrandt et. al. 2005). Even then we see that civil violence have been very prevalent in the country. Further, in several instances such actions are caused by the failure in delivery of services. In order to understand the causal link between collective violence and government social expenditure in South Africa, we once more turn back to the opportunity-willingness framework. Are there particular structural political opportunities present that make some of the collective action solutions easy to implement? In particular, how does structural characteristics like ethnic composition, youth bulges and chances of political representation, facilitate market, contract, community and hierarchy based solutions to collective action problems in South Africa?

In comparison with some of the middle-income countries around the world, in South Africa social indicators remain relatively poor. This is partly due to the rampant unequal distribution of income prevents large section of the population from sharing in the benefits of economic growth

(Armstrong, Lekezwa and Siebrits 2008). Currently, the recorded Gini coefficient for South Africa is .70, only after Namibia which records 0.74 (South Africa Statistics 2008; World Bank 2007). Although these statistics portray a rather grim picture, Van der Berg et. al. (2005) show that poverty had been decreasing in South Africa post-transition. This is particularly true for the African-Black population, since jobs are well targeted to this group of the population and that all race groups experienced an increase in the income after 1994 (Van der Berg et. al. 2005).

In South Africa, 79.5% of the population is African-black spread amongst nine provinces with Limpopo having the highest number. Other ethnic groups like Asian/ Indian and colored constitute relatively smaller proportions. Even whites are only 9.2% of the total population of South Africa (Statistics of South Africa 2005). Similarly, young generation in the age group of 15-24 constitute almost 25% of the country's population ranging between 7.9% and 75.9% across the nine provinces. Finally, African National Congress (ANC), the main party in South Africa followed by Democratic Alliance (DA), has been in power in most of the provinces for almost all the years between 1999-2006, period under study. Therefore, all the structural political opportunities discussed in this dissertation are present in the South African context. Put differently, the background support needed for collective action is complete. But task remains to see if these opportunities were enough to facilitate collective action in absence of basic facilities from the government side. Further, I try to see whether the interplay between these structural opportunities and government policies impacted collective action in the same way as it did in my earlier analyses of all countries and India.

Like previous chapters, this chapter also tries to build upon the political opportunity and collective action symposium (Lichbach 1998). The period under analysis is 1999-2006. In South African context, I find that government needs to pay more attention towards providing required resources to the schools. Of all the variables used to measure government social expenditure, missing school resources is seen to have a great impact on collective action when most of the aforementioned structural conditions were present. South African people's dependence on private health care, irrespective of income level, is evident in the analysis as we see the overall demand for expansion of private health care facilities, but the demand starts to reduce its impact on collective action as we account for unobserved provincial differences. Of the three structural conditions, youth bulges appear to make health demands more important. In the next section I provide a country overview followed by analysis of the empirical results.

6.2. South Africa Country Overview

South Africa joined the squad of growing late-twentieth-century fold of new democracies in late April 1994. Most instruments of South African racial domination were introduced by British colonialism as early as eighteenth century (Friedman 1995). But limited suffrage was extended to the Black Africa population who could acquire property and British education. On the contrary, the remnants of Dutch colonizers, who came to Cape in the seventeenth century and considered themselves the legal occupants of the land – Afrikaners, wanted to keep the black Africans from any rights of citizenship. Democracy at this time can be described best as an oligarchy, limited to the whites, Afrikaners and British descendants.

The African National Congress (ANC), the principal instrument for majority nationalism, was formed in 1912 to channelize growing black resistance against white dominance. It became the main vehicle in fifties and sixties on the road to non-racial democracy in South Africa. ANC adopted a strategy of moral suasion and incrementalism, rather than attempted revolution against white domination (Friedman 1995). However, black population of South Africa is multiethnic in nature. As a result, there were other black African dominated parties with which ANC had to constantly negotiate and accommodate.

Another important party in South Africa's fight against racial domination was the Inkatha Freedom Party (IFP) formed by Buthelezi, a Zulu chieftain. IFP, although started its journey as an ANC ally, but soon moved apart and a rift started developing between these two parties with regard to the terms of transition. The rift hardened around eighties when IFP had to depend only on the support of Zulu speaking people in South Africa and its power base became restricted in the Kwazulu province. ANC continued to command the support of the majority of black population.

When non-racial democracy was established in 1994, ANC won majority of the popular vote and formed the first democratic government in South Africa. The new constitution of South Africa provides for a bicameral legislature to which the executive, including the President is responsible. The legislature is elected by closed-list proportional representation system and political parties can nominate a cabinet member for every 5% of the vote they win. Therefore, if a party is able to win at least 5% of the vote to be able to nominate a cabinet member, it has more chances of affecting government policies.

Some of the characteristics of the new democracy are – dominant party system, less executive power sharing, cross-cutting alliances, and a corporatist arrangement. Although constitutionally

South Africa is a multi-party system, ANC continues its dominance in all three elections since 1994. Executive power sharing was not considered as an important element of the new democracy as most of the important societal interest groups – formal business, security establishment and top bureaucrats – do not think National Party (NP) as an important part of the new government. However, National Party of white Afrikaner is still present in the national, as well as, some provincial legislatures with reduced prominence. One important societal influence comes from a very organized trade union group called Confederation of South African Trade Union (COSATU) that closely works with political parties to affect government decision-making. No matter which party forms the government, it cannot ignore COSATU in order to govern effectively. Lijphart's consociationalism was not applicable to South Africa, since it was difficult to form any 'elite cartel' here (Friedman 1995). The best government type suitable and applied here is, therefore, corporatism.

In South Africa, after 1994, most of the employment opportunities are directed towards black youth (Van der Berg et. al. 2005). However, the demand for labor in the South African market has only increased for the skilled labor force. Black population comprises most of the unskilled labor force due to lack of educational opportunities faced by them under the apartheid regime. These unskilled labors are not much in demand and hence, remain unemployed even under the democratic government. The changing labor demands have placed a heavy burden on the black and young population of South Africa (Van der Berg et. al. 2005; Armstrong et. al. 2008).

Inequality and discrimination is also present with respect to educational and health facilities. With respect to educational facilities, although discrimination in resource allocation has been removed, inequalities persist due to several other reasons like ability of parents to pay fees, quality of educators in black dominated schools, poor learner-educator ratios, so on and so forth (Motala 2006). It is seen to carry on with the historical legacy of discrimination which had been difficult to redress and gains of increased expenditure has been washed off by inflation.

The inequality and discrimination a legacy of the apartheid regime makes consociationalism more difficult due to the ethnic diversity of the country. South Africa is ethnically quite diverse with population belonging to whites, blacks, Asian/ India and colored. But whites and Africans constitute the two main ethnic groups – 79.5% blacks and 9.2% whites (Statistics South Africa). The largest linguistic group comprised of the Zulu speaking black Africans that made up 29% of the population; Xhosa speaking people form the second largest group, 24% of population, so on

and so forth (Statistical Publications, Statistics South Africa, Pretoria 2005). Hence, there is no significant majority in South Africa, rather a patchwork of minorities.

The black African population suffered immensely under the apartheid regime. After the establishment of non-racial democracy in 1994, most of the social programs have been targeted towards the black community of South Africa (Van der Berg 2006; Van der Berg et. al. 2001; Armstrong et. al. 2008; Motala 2006). However, the racial discrepancy is still prevalent in the country as we see that there exists vast inequality in income, educational and health facilities between whites and blacks (Armstrong et. al. 2008; Van der Berg 2006; Havemann and Van der Berg 2002; Motala 2006).

One observes that South Africa satisfies both the condition of discrimination and ethnic dominance. Whites still dominates the poverty stricken black population of South Africa even after the demise of apartheid regime. On the other hand, the black community in South Africa is big enough to extract resources from its population, both man and material, to overcome free-riding in any collective action.

South Africa is a federal, democratic republic established in 1994. ANC has dominated the political scenario since 1994. It has also formed the state governments for most of the years after 1994, except for a brief period from 1999 – 2004 in the KwaZulu province. ANC, led by former South African President Nelson Mandela, was instrumental in establishing the non-racial democracy in 1994 and since then has remained the dominant party followed by Democratic Alliance (DA). Although South Africa is a multi-party system, dominance of ANC is still prominent which won 67% votes in 2004 national election.

Besides DA, ANC also faces major challenge from Inkatha Freedom Party (IFP) which is the third largest party in South Africa. IFP is mainly supported by the Zulu population of South Africa and was first established in KwaZulu province. ANC and IFP fought together against the apartheid regime, but this alliance deteriorated when top leaders of ANC tried to maintain their dominance in the initial years after democracy was established. After 1994, IFP won the majority of seats in KwaZulu province in 1999 general elections, where it still enjoys maximum support in the country (Statistics South Africa, Provincial Profile of KwaZulu-Natal 2005). However, it was once again replaced by ANC in 2004 elections.

South Africa follows proportional representation (PR) electoral rules with closed lists in electing members for the National Assembly (lower house). One half of the members are elected from the regional party lists with multi-member constituencies, and the other half is formed from

a national party list in one multi-member constituency list. Unlike SMDP system, this kind of PR electoral systems make possible for smaller parties like IFP a chance for representation in the national assembly. Further, winning in the majority in provincial legislatures also gives them a ticket to be represented in the National Council of Provinces (NCOP) or the upper house of parliament. Buccus (2007) argues that the upsurge of protest activity has been due to lack of democratic participation allowed to general public and calls South African democracy an oligarchy. Further, if a party is able to secure at 5% of votes, it can nominate a cabinet member and hence, influence government decision-making.

6.3. Empirical Analysis

Correlation coefficients in table 20 show that all the important variables have expected direction of relationship with the dependent variable except average distance of schools. Further, percentage of population consulting public health officials and school resources show high correlation with civil unrest events. Prima facie, it can be said from this table that less number of people using public health facilities and more school resources missing increase the risk of internal disturbances in South Africa.

Table 20: Correlation Coefficients for South Africa (1999-2006)

Variables	Civ Unrest	Health	Av. Dist.	Sc Res	LGDPpc	Youth	Black	LCivUn
Civil Unrest	1							
Health	-0.473	1						
Average Distance of schools	-0.464	0.298	1					
Missing School Resource	0.53	0.046	-0.785	1				
Log of GDP per capita	0.5	0.05	-0.392	0.651	1			
Youth	0.063	-0.254	0.249	-0.272	-0.21	1		
Black	0.185	-0.476	0.385	-0.434	-0.272	0.68	1	
Lag of Civil Unrest	0.782	-0.505	-0.481	0.549	0.604	-0.021	0.207	1

Table 21 reports the baseline regression results for pooled data. In similar lines with cross-national and Indian study, in this table I report the results for the independent effect of all the principal explanatory variables. Column (4) shows that as more and more school resources are missing it increase the risk of unrest. An increase from 1 s.d. below mean to 1 s.d. above mean increases the probability of unrest by 6%. Besides school resources, other variables like average

distance and percentage of black population, although significant, are in opposite direction (columns 3 and 6). Average distance becomes positive and significant in the last column when we control for other factors. Result in column (7) indicates that as average distance between schools and other important facilities increases the chances of unrest also increases significantly. But percentage of black population retains its significance and negative relation with the dependent variable, i.e. provinces with less black population are more likely to experience unrest. However, measure of health expenditure fails to attain significance in all the models, although shows expected direction.

Apart from the results of the main explanatory variables, table 21 (columns 1-6) show that increasing wealth of a province increases the chance of unrest, which contradicts the widely held assertion that poor countries are more likely to face civil wars (Collier and Hoeffler 2000; Fearon and Laitin 2003). It also contradicts some of the earlier results in the dissertation. Noteworthy, the Indian case study also shows that wealth of the sub-national units are not robust predictors of unrest (table 14). In this case study also, we find later that per capita income of people fails to retain its significance in most of the models when we add more controls. While large populations significantly increase the chance of collective violence, provinces with smaller areas are more risk prone compared to big ones. Finally, previous history of collective violence significantly reduces unrest in the current period as we start controlling for other factors (column 7, table 19; columns 1-4, table 22).

Table 22 shows the robustness check of these results. Along with the previous set of control variables, share of primary industry, and presence of gold and political parties are included. All of these variables are substantiated in the literature to have immense effect on collective violence. Effect of people using public health improves immensely with the inclusion of more control variables. Further, the magnitude of the effect also increases as we move down the columns (refer to column 1-4, Table 22). Similarly, both average distance and number of school resources exhibit same direction, although significance level changes between columns. This change of result can be attributed to some amount of multicollinearity between the new control variables and with the explanatory variables. For example, share of primary industry in a province GDP and GDP per capita is highly correlates ($\rho = 0.50$).

The variables measuring political representation, Democratic Alliance and other parties also reveal results as predicted. If Democratic Alliance or other political party other than ANC gets at least 5% of popular votes in the provincial elections, it increases the chances of civil unrest.

Table 21: Cross-sectional Analysis of Effect of Structural Opportunity and Government Social Expenditure on Civil Unrest in South Africa (1999-2006)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Independent Variables</i>							
People using Pub Health Care (in '000s)		-24.148 (19.012)					-4.403 (20.507)
Average Distance of Schools in Provinces			-0.066** (0.023)				0.122** (0.064)
Missing School Resources				0.140** (0.041)			0.227** (0.076)
Youth (% in total provincial pop)					-0.010 0.010		0.000 (0.008)
Black (% in total provincial pop)						-0.084** (0.029)	-0.136** (0.059)
<i>Control Variables</i>							
Log Provincial GDP per capita	0.822* (0.458)	0.930** (0.391)	0.718** (0.346)	0.427 (0.381)	0.947** (0.425)	0.836** (0.336)	0.326 (0.367)
Log provincial pop	0.595** (0.250)	0.428 (0.287)	0.555** (0.266)	0.610** (0.260)	0.788** (0.322)	1.231*** (0.379)	1.668** (0.674)
Log province area	-0.101 (0.289)	0.165 (0.383)	-0.299 (0.268)	-0.559** (0.257)	-0.126 (0.293)	-0.459* (0.284)	-0.980** (0.338)
Previous Civil Unrest in Province	0.032 (0.021)	0.033 (0.021)	0.011 (0.013)	-0.006 (0.010)	0.026 (0.021)	0.011 (0.014)	-0.020* (0.012)
Constant	-9.131 (6.015)	-8.684 (6.128)	-4.975 (6.527)	-4.296 (6.547)	-11.834* (6.619)	-13.64** (6.287)	-15.92* (9.471)
N	63	63	63	63	63	63	63

***p<0.000, **p<0.05, *p<0.10

This result substantiates the argument that presence of parties other than ANC in the provincial legislature creates political opportunity, which in turn, increases the probability of winning or at least changing policies. However, percentage of youth fails to attain significance in any of the models and percentage of black, although significant in most of the models, is in opposite direction.

Share of primary industry, although is significant in column (1) of table 22, it fails to retain significance in the latter part of the analysis when I control for active gold mines in the provinces. This can be due to the reason that primary industry in South Africa also includes mining and hence, multicollinearity between the variables can be expected.

Presence of active gold mines in the provinces is significant in most part of the data analysis, but in the opposite direction from what is predicted in the literature of collective violence. I find here that presence of active gold mines significantly reduces the chances of a province experiencing civil unrest. Couple of explanations can be forwarded in this respect. One, low level civil violence like protests and riots does not provide so much opportunity of loot and plunder as would a civil war. As a result, presence of gold mines would not affect participation rate so much. Second, gold is not easily extractable. Gold mines are present in five out of nine provinces in South Africa – Free State, Gauteng, Limpopo, Mpumalanga and North West. All of these gold mines are under government control. However, this second reason can make one think of the South African government as a prized possession for any rebel group, who can aspire to capture the state in order to enjoy the bounty. For that, unfortunately, we will have to wait for a full blown civil war in South Africa and then assess the effect of gold mines.

The results presented in the last two tables show that the structural-political conditions that I hypothesize as potential opportunities for collective violence are verified. Further, lack of government expenditure in health and education sector also leads to considerable amount of willingness among the people to join a collective action. To substantiate my third hypothesis, I present the result of interactive effect of opportunity and willingness in table 23.

Columns (1-3) of table 23 reports results for youth bulges. In cross-sectional analysis, we find that both health and education are important services that youth group demands. All the interaction terms between education and health expenditure and youth bulge are significant. A decrease of 1 s.d. above mean to 1 s.d. below mean in the number of people using public health facilities increases the chance of collective violence by 4% (Figure 9). Similarly, a change of 1s.d below mean to 1 s.d. above mean in missing school resources increases the probability of protests and riots by 5%. However, the variable measuring average distance of schools from other facilities tend to reduce civil unrest.

Columns (4-6) report the result for the interaction between ethnic dominance and government expenditure in health and education. The interaction term between missing school resources and percentage of black population is significant. As more school resources are missing, from 1s.d. below mean to 1s.d. above mean the chances of unrest increases by about 3%. If more school resources are missing in a province where about more than 10% people are black, it would increase the risk proneness of that province for about 3%, compared to others.

Table 22: Robustness Check for Cross-sectional Analysis on Civil Unrest in South Africa (1999-2006)

Variables	(1)	(2)	(3)	(4)
<i>Independent Variables</i>				
People using Pub Health (in '000s)	-36.950* (23.686)	-27.568 (21.322)	-42.437** (24.270)	-43.844** (23.899)
Average Distance of Schools	0.053 (0.062)	0.068 (0.068)	0.024 (0.074)	0.035 (0.071)
Missing School Resources	0.132** (0.072)	0.012* (0.054)	-0.002 (0.122)	-0.027 (0.186)
Percentage of Black	-0.065 (0.063)	-0.129** (0.058)	0.018 (0.080)	-0.053 (0.078)
Percentage of Youth	0.007 (0.008)	-0.008 (0.007)	-0.006 (0.007)	-0.004 (0.009)
<i>Control Variables</i>				
Log GDP per capita	0.855* (0.460)	-0.427 (0.390)	0.201 (0.431)	-0.642 (0.643)
Log population	0.727 (0.790)	0.465 (0.742)	-0.790 (1.081)	-0.696 (1.413)
Log Area	-0.684* (0.380)	-2.035*** (0.518)	-1.299** (0.573)	-1.793** (0.789)
Previous Civil Unrest	-0.021* (0.012)	-0.020* (0.013)	-0.026** (0.012)	-0.026** (0.011)
Share of Prim Industry	-0.496* (0.283)			0.362 (0.661)
Gold Mines in Province		-1.781*** (0.551)		-1.266 (0.958)
Democratic Alliance			1.474* (0.913)	2.808* (1.433)
Inkatha Freedom Party			-0.133 (0.435)	-0.269 (0.468)
Other Parties			1.944** (0.762)	3.415** (1.445)
Constant	0.042 (11.011)	21.887* (12.948)	28.938 (20.581)	34.221 (24.788)
N	72	72	72	72

***p<0.000, **p<0.05, *p<0.10

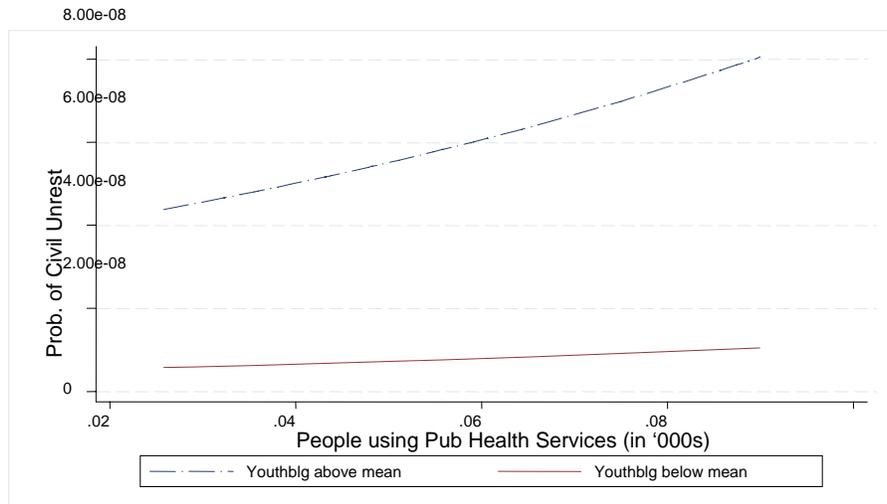


Figure 9: Interactive Effect of Public Health Services & Youth Bulge on Civil Unrest in South Africa

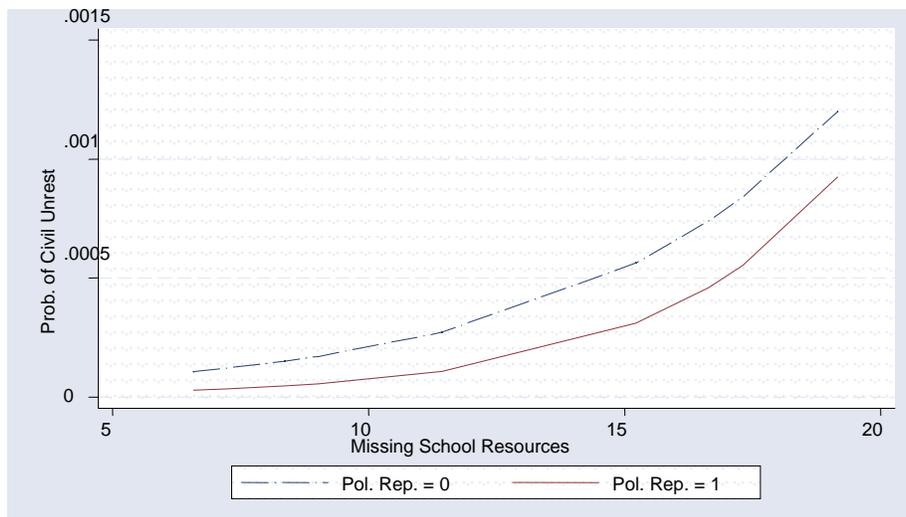


Figure 10: Interactive Effect of Democratic Alliance & Missing School Resource on Civil Unrest in South Africa

Column (7-9) of table 23 reports the results for the interactive effect of political representation and lack of provision for public education and public health. Democratic Alliance is the second party in South Africa after ANC and forms the opposition in national legislature. Column (9) of table 26 shows that if Democratic Alliance receives at least 5% popular votes to be able to choose a cabinet member, more number of resources missing in schools increases the chances of collective violence immensely. Figure 10 shows that probability of unrest increases almost 8%, if school resources missing increase from 1s.d. below mean to 1s.d. above mean.

The cross-sectional analysis upholds three of my hypotheses to great extent. The structural conditions and grievances caused by lack of public provisions for education and health are significant predictor of collective violence both independently, as well as when interacted with each other. On similar line with my earlier case study of India, I present the results of panel estimation in the next section.

Table 23: Interactive Effects of Structural-Political Opportunity & Government Social Expenditure on Civil Unrest in South Africa (1999-2006)

Variables	Youth			Ethnicity			Political Rep.		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Independent Variables</i>									
Pop using Public Health (in '000s)	11.219 (25.948)			32.638 (25.620)			-22.104 (21.615)		
Average Distance		0.018 (0.049)			-0.156 (0.127)			-0.094** (0.044)	
Missing School Resources			0.027 (0.064)			0.381*** (0.116)			0.192*** (0.050)
Youth	0.074* (0.043)	0.044** (0.023)	-0.064** (0.025)						
Black				0.015 (0.097)	-0.085 (0.083)	0.314** (0.163)			
Democratic Alliance							-0.034 (1.189)	-0.533 (0.715)	-1.900** (0.763)
Health*Opportunity (Youth/ Black%/Non-ANC Parties)	-1.738* (0.984)			-2.618 (2.073)			6.856 (20.833)		
Avg Dist. * Opportunity (Youth/ Black%/Non-ANC Parties)		-0.003** (0.001)			0.009 (0.010)			0.019 (0.045)	
Sc. Res* Opportunity (Youth/ Black%/Non-ANC Parties)			0.004*** (0.001)			-0.026** (0.011)			0.085* (0.050)
<i>Control Variables</i>									
Log of GDP per capita	0.973** (0.393)	0.602* (0.354)	0.416 (0.367)	0.705** (0.328)	0.612** (0.331)	0.122 (0.338)	0.754** (0.424)	0.834** (0.392)	0.447 (0.408)
Log of population	0.961** (0.416)	0.797** (0.353)	0.768** (0.307)	1.885*** (0.568)	-0.154 (1.233)	0.217 (0.501)	0.305 (0.376)	0.746** (0.340)	0.979*** (0.363)
Log of Area	0.309 (0.402)	-0.128 (0.277)	-0.345 (0.248)	-0.587 (0.412)	-0.766 (0.598)	-1.883*** (0.588)	-0.060 (0.404)	-0.114 (0.318)	-0.544* (0.295)
Previous Civ. Unrest	0.026 (0.022)	0.012 (0.013)	-0.001 (0.010)	-0.002 (0.012)	0.012 (0.012)	-0.014 (0.012)	0.030* (0.017)	0.009 (0.014)	-0.023** (0.011)
Constant	-20.069** (8.643)	-11.249 (8.011)	-7.532 (6.754)	-23.065 (9.345)	12.230 (24.923)	14.895 (11.855)	-3.985 (8.764)	-9.857 (8.283)	-10.410 (9.132)
N	72	72	72	72	72	72	72	72	72

***p<0.000, **p<0.05, *p<0.10

6.3.1. Panel Estimation

The nine provinces of South Africa differs from each other in almost all respects – incidence of poverty (Armstrong et. al. 2008), educational resources and attainment of students (Motala 2006; Van der Berg 2006), health facilities (Havemann and Van der Berg 2002), so on and so forth. Pooled estimation is inadequate to capture this inter-provincial difference as it assumes homogeneity across provinces (Wooldridge 2002). Cross-sectional techniques of estimation is

based on the assumption $E(x'u) = 0$.³ Thus, it fails to capture any unobserved effect that varies between provinces. Further, it would help us to see whether the relations changed over time as South Africa slowly moved along the path to consolidate its democracy and reduce inter-racial discriminations. In order to find unbiased and consistent estimators, in the next part I discuss the results from panel estimation of the same model controlling for fixed effects.

Table 24 reports the result of panel estimation with fixed effects. With respect to my main explanatory variables, I do not see much change when we account for province specific effects. In column (7) all measures of health and education are significant and in expected direction. As less number of people use public health facilities, school are more distant from localities and more resources are missing from the schools, the probability of collective violence increases in the province. As opposed to cross-sectional analysis, this column shows that as percentage of black population increases in a province, so does its risk-proneness. However, measure of youth bulge fails to reach significance in all model specifications, although shows hypothesized direction.

Table 25 reports robustness check for the same model. Satisfyingly, we do not see much change in the main explanatory variable. The measure of health is robust to inclusion of other control variables. On the other hand, it improves as we move from column from 1-3. School resources and average distance loses out at some places with respect to significance level, but the direction of effect remains consistent, i.e., as these factors increase it leads more discontentment and hence, more violence.

Composition of population with regard to black and young generation also determines stability. Large share of youth and black in a province would mean higher probability of riots and protests. Variables measuring chances of political representation in the provinces also indicate significant and positive results. As we saw earlier in pooled estimation, if there are political parties, like DA, New Nationalist Party, African Christian Democratic Party, IFP, etc., other than ANC it increases the probability of upheaval in a province. Finally, presence of gold mines included in column (2) is significant and negative. It implies less unrest in provinces with active gold mines.

One interesting result in these tables is that per capita income of people is not a robust predictor of collective violence in a province. Although it is negative but fails to reach

³ Where x is the matrix of control variables and u is the error term independent and identically distributed.

significance in most of the models. The effect of wealth on civil unrest remains unsubstantiated, indicating that increasing or decreasing income of people will not always predict internal stability of a province.

Table 24: Panel Estimation of Independent Effects of Structural-Political Opportunities & Government Social Expenditure on Civil Unrest in South Africa (1999-2006)

Variables	1	2	3	4	5	6	7
<i>Independent Variables</i>							
Pop using Pub. Health care (in '000s)		-10.656 (18.636)					-32.85** (17.545)
Average Distance of schools in province			-0.059 (0.070)				0.588*** (0.186)
Missing School Resources				0.164** (0.075)			1.355*** (0.319)
Youth (% in provincial pop)					0.008 (0.009)		0.006 (0.005)
Black (% in total provincial pop)						-0.016 (0.071)	0.396*** (0.109)
<i>Control Variables</i>							
Log GDP per capita	-0.137 (0.288)	-0.143 (0.281)	-0.209 (0.289)	-0.348 (0.248)	-0.103 (0.277)	-0.133 (0.286)	-0.81*** (0.217)
Log provincial pop	0.621 (0.512)	0.322 (0.722)	0.766 (0.520)	0.973** (0.495)	0.439 (0.542)	0.731 (0.705)	-1.590* (0.932)
Log province area	-0.422 (0.480)	-0.479 (0.477)	-0.213 (0.532)	-0.040 (0.467)	-0.636 (0.537)	-0.419 (0.473)	-7.18*** (2.135)
Constant	-3.610 (12.549)	2.244 (15.895)	-7.282 (12.705)	-14.749 (12.208)	1.309 (13.449)	-5.151 (14.153)	-87.05** (25.37)
N	72	72	72	72	72	72	72

***p<0.000, **p<0.05, *p<0.10

Table 25: Robustness Check for Panel Estimates on Civil Unrest in South Africa (1999-2006)

Variables	1	2	(3)	(4)
<i>Independent Variables</i>				
People using Pub Health	-37.766** (19.964)	-38.639* (23.514)	-44.431** (22.284)	-57.989** (30.367)
Average Distance of Schools	0.546*** (0.198)	0.222* (0.136)	0.496** (0.215)	0.104 (0.105)
Missing School Resources	1.262*** (0.361)	-0.002 (0.195)	1.057** (0.484)	-0.165 (0.317)
Percentage of Black	0.381*** (0.112)	0.344** (0.149)	0.367** (0.113)	0.220* (0.135)
Percentage of Youth	0.006 (0.005)	0.004 (0.006)	0.007 (0.005)	0.008 (0.007)
<i>Control Variables</i>				
Log GDP per capita	-0.446 (0.680)	-2.805** (1.154)	-0.682** (0.281)	-1.863 (1.416)
Log population	-1.673** (0.961)	-3.648** (1.506)	-2.218* (1.241)	-4.158** (1.797)
Log Area	-6.944*** (2.183)	-3.298*** (1.084)	-6.636** (2.270)	-2.983** (1.355)
Share of Prim Industry	-0.291 (0.517)			1.498 (1.349)
Gold Mines in Province		-6.396*** (2.102)		
Democratic Alliance			0.965 (1.242)	5.095* (2.811)
Inkatha Freedom Party			-0.401 (0.338)	-0.400 (0.434)
Other Parties			0.979 (1.211)	5.139** (2.821)
Constant	88.971*** (25.722)	89.548*** (32.159)	94.381** (27.862)	88.186** (37.220)
N	72	72	72	72

***p<0.000, **p<0.05, *p<0.10

The interactive effects of the main explanatory variables are also estimated for each province. Results are presented in table 26. Column (3) shows that the interaction term between youth bulges and school resources is significant. If missing school resources increase from 1s.d. below mean to 1s.d. above mean it increases the probability of unrest by about 2% in a province with

average youth population. Figure 11 shows that if a province has high youth population the chances of unrest increases significantly. However, the effect missing school resources appears to be stronger for provinces where the young generation below average.

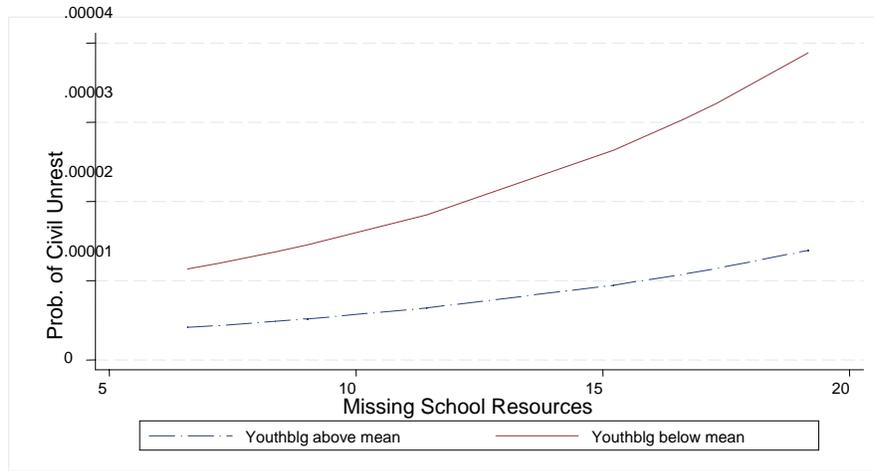


Figure 11: Interactive Effect of Missing School Resources & Youth Bulge on Civil Unrest in South Africa

Column (6) shows that interaction between school resources and percentage of black population is also significant. In tandem with pooled analysis, the change of missing school resources from 1s.d. below mean to 1s.d. above mean increases the chances of violence by about 1% in a province, while percentage of black population is held at its average. Results here indicate that they value school resources as an important input for their social upliftment. Van der Berg and Louw (2007) point out that effect of dysfunctional schools, which is a common feature of majority of South African schools, make student or teacher performance difficult. Consequently, parents of middle-income groups demand higher levels of school funding, better pupil teacher ratio, qualified teacher and other resources. Van der Berg (2005), in a report to the treasury, points out that full equity with respect to government spending per child has been almost attained. But differences still remain regarding better qualified teacher in more affluent schools, particularly formerly white and urban schools. Motala (2006) also argue that race and social inequality patterns have not shifted significantly and the distribution of learners continues to reflect social inequality patterns inherited from apartheid.

Panel estimation results do not indicate such significant impact for Democratic Alliance (column 9, table 26). This implies that Democratic Alliance might not be such an influential party in the provinces separately. It is true for South African provinces where we see other parties like New National Party, Freedom party, etc. forms the opposition. Column (11-12) of

table 26 further substantiates this point. It shows that if political parties other than Democratic Alliance form the opposition in the provincial legislature, it facilitates collective action solutions by providing a chance of political representation to the dissident groups. For instance, a change of missing school resources from 1s.d. below mean to 1s.d. above mean in a province where other political parties form the opposition, the probability of unrest increases by 6%.

Table 26: Interaction of Structural-Political Opportunity & Government Social Expenditure on Civil Unrest in South Africa (1999-2006)

Variables	Youth			Ethnicity			Democratic Alliance			Other Parties		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Independent Variables</i>												
Pop using Public Health (in '000s)	15.429 (28.154)			-2.122 (37.282)			-24.647 (21.183)			-7.166 (19.799)		
Average Distance		0.040 (0.081)			-0.188* (0.114)			-0.128* (0.071)			0.071 (0.068)	
Missing School Resources			0.093 (0.091)			0.508*** (0.190)			0.174** (0.077)			0.066 (0.095)
Youth Bulge	0.066** (0.036)	0.042** (0.018)	-0.037 (0.030)									
Black				0.050 (0.127)	-0.215 (0.205)	0.566** (0.283)						
Democratic Alliance							-1.114 (0.849)	-1.513* (0.855)	-0.437 (2.743)			
Other Parties										0.544 (0.774)	2.292*** (0.804)	-2.575 (1.762)
Health*Opportunity (Youth/ Black%/Non-ANC Parties)	-1.282 (0.850)			-0.934 (0.398)			23.250 (17.399)			0.011 (17.378)		
Avg Dist*Opportunity (Youth/ Black%/Non-ANC Parties)		-0.003** (0.001)			0.018 (0.014)			0.149* (0.087)			-0.208** (0.083)	
Sc Res*Opportunity (Youth/ Black%/Non-ANC Parties)			0.003** (0.001)			-0.040** (0.022)			0.010 (0.162)			0.178* (0.107)
<i>Control Variables</i>												
Log GDP per capita	-0.138 (0.259)	-0.197 (0.267)	-0.336 (0.235)	-0.196 (0.311)	0.063 (0.341)	-0.043 (0.298)	-0.040 (0.384)	-0.005 (0.376)	-0.217 (0.320)	0.118 (0.287)	0.022 (0.279)	-0.117 (0.306)
Log population	0.361 (0.788)	0.806 (0.522)	0.989** (0.500)	0.357 (1.395)	0.037 (0.852)	0.250 (0.719)	0.569 (0.756)	0.972** (0.528)	1.070** (0.516)	0.542 (0.755)	0.921** (0.499)	1.208** (0.518)
Log Area	-0.738 (0.508)	-0.519 (0.517)	-0.259 (0.485)	-0.484 (0.503)	-1.000 (0.800)	-1.234 (0.810)	-0.283 (0.514)	0.022 (0.523)	0.020 (0.466)	-0.390 (0.477)	-0.061 (0.045)	0.112 (0.468)
Constant	3.257 (17.303)	-5.634 (12.477)	-11.586 (12.122)	1.411 (25.630)	13.195 (19.722)	3.593 (15.097)	-3.412 (16.945)	-12.812 (12.921)	-17.351 (12.533)	-3.363 (16.520)	-13.617 (11.712)	-19.589 (12.370)
N	72	72	72	72	72	72	72	72	72	72	72	72

***p<0.000, **p<0.05, *p<0.10

The results in this section amply substantiate my argument that political opportunity alone is not enough for any collective action. We have to find the mechanism through which such opportunities translate into actions of the agents. Different opportunities make different solutions

possible under certain socioeconomic situations. Simply the presence of ethnic groups, youth bulges or chance of political representation does not lead to collective action. When such structural opportunities are mediated through situations like absence of government response to people's demand for basic facilities, it facilitates collective action by ameliorating non-participation problems in such actions. In the last section I conclude this chapter with some policy implications and future research agenda in this area.

6. 4. Conclusion

This chapter amply substantiates the basic argument purported in this dissertation. Structures need a mechanism to explain collective action of agents. As I attempt to achieve a synergy between structure and action, I try to show that certain government policies coupled with structural opportunities facilitates solutions to the collective problem of non-participation. For example, youth groups facilitates more contract based solutions, while in presence of chances of political representation, dissident groups can choose hierarchy based solutions to remedy their dilemma about collective action.

The principal policy prescription that stems from this analysis is that government needs to adopt more targeted policies towards its citizens. Structural opportunities are given and are difficult to change in the short-run. Given those conditions, government can think about directing its policies to specific areas or specific target groups. In the South African context, government really needs to pay attention to improving resources in the schools by providing more funding, qualified teachers, teacher pupil ratio, etc. Similarly, it also needs to expand the public health care services so that people can depend on those. Low-income individuals ignore health care, since private care is unaffordable and public care unreliable and time-consuming. Although I do not find significant and consistent results for the average distance of schools from other facilities, it should not be neglected from policy perspective. Government surely needs to build more schools so that more people can access them. Without worthwhile education, the black African population will keep losing in the labor market.

Much research still needs to be done in this area both for academic, as well as, policy purposes. Academically, we need to improvise our techniques and find more sophisticated way of try to bridge the structure-action dichotomy. Lichbach (1998) mentions that nested logit can be an effective estimation technique for this purpose. But due to unavailability of relevant data, this technique can become unusable in many cases where we do not have binary dependent variables.

For the policy makers, this kind of research can provide them with insights to improve their policy prescriptions.

CHAPTER SEVEN: CONCLUSION

7.1. Introduction

In this dissertation, I tried to build upon the structure-action framework proposed by Lichbach (1998) in order to provide a more comprehensive analysis of contentious politics. This was done by integrating it with the opportunity and willingness argument of Most and Starr (1989). Structures provide the opportunity and constraints for action, while willingness for action is derived from the grievances of people. The structure-action framework was expanded with the belief that compartmentalization of focus of theories of collective action provides limited understanding of the phenomenon of contention between states and dissidents. By integrating the structure-action logic with opportunity-willingness framework of interstate conflict, I first identified the potential structural and political conditions that create opportunity for collective actions. Second, I tried to show that in order to better understand the decision calculus of actors, along with opportunities, one should also account for their willingness to choose one action from a range of alternatives. The causal mechanism by which structural opportunities translate into actions of the agents can be traced in the contest between the states' and the rebels' dilemma for collective action. I try to show that a good mix opportunity and willingness can resolve the collective action problems of the dissidents and thereby, lead to more or less collective actions depending upon which set of solutions it facilitates. In this chapter, I first summarize the basic findings of the theoretical and empirical analyses of the dissertation. In the following section, I highlight the substantial and policy implications of these findings for first, intrastate contentious politics and then for political science, in general. The concluding portion of this chapter discusses the possible future extension of this dissertation.

7.2. Overview of Theoretical and Empirical Findings

The most pertinent contribution of this dissertation is to provide and test a systematic theoretical approach opportunity and willingness framework to study internal contentious politics. By arguing that structural conditions provide the opportunity and grievances caused by low level government social expenditure provide the willingness for collective action, I provide a theoretical framework for bridging structural and collective action theories. I first established the structural and political condition which create the opportunities and then the socioeconomic conditions that create the willingness for collective action, and then, I used the interactive effect of the two to predict collective violence of different magnitude. Further, I tried to establish the

fact that the combination of opportunity and willingness leads to collective action because it facilitates solutions of collective action problems of the state or the dissidents.

Using cross-national data on 128 countries from 1970-99, I tested three hypotheses discussed in chapter one. In the empirical analyses, I find that absence of educational opportunities is a pertinent source of grievance and exacerbates chances of civil war independently. Similarly, ethnic dominance and youth bulge increase the risk proneness of a country. The interactive effect of grievances caused due to unavailable educational opportunities and ethnic dominance also increases chances of civil war, while the interactive effect between education expenditure and political openness reduces the risk. However, I do not find much support for health facilities leading to grievances neither independently nor in combination with the three structural and political opportunities. For low-intensity collective violence like riots, the willingness or grievance hypothesis yield different implications in cross-national analysis. Increasing education expenditure and reducing infant mortality rate increases chance of riots in a country. Youth bulge appeared the only potential structural condition affecting probability of low level in absence of educational facilities.

In the case studies of India, I find that health facilities create more grievances than opportunities for educational attainment. Youth bulge and political openness when interacted with healthcare facilities significantly increases probability of riots in the states. Similarly, in South Africa, too, we see that absence of public health care facilities create creates substantial grievances in itself. While missing school resources can lead to more collective violence in the provinces with large youth cohorts and chances of political representation. Using different empirical models and different combinations of structural opportunities and willingness of agents, I show that no one set of theories can successfully predict collective violence on its own. These results substantiate the argument that one needs to account for both structural-contextual factors, as well as agent level willingness to understand collective action.

The insight from theoretical and empirical analyses is that structure or agent specific focus of a theory compartmentalizes our understanding of contentious politics that takes place between the state and dissidents. A comprehensive theory of contentious politics should be able to elaborate how structural and political opportunities translate into the actions of agents and, at the same time, should account for the origins of interests and preferences of the agents. Following Lichbach (1995), I try to show that the structural-political opportunities affect collective action by either ameliorating or exacerbating the collective action problems for the state or the rebels.

Further extending this logic, I argue that a good combination of structural and collective action theories can be achieved by looking at the opportunity and willingness facing the rebels or the state. A mix of these two criteria then facilitates or retards solutions to the collective action problems, which in turn leads to collective action.

In the civil war onset literature, there are essentially two foci – structure and agent. Structural theories assume that conditions generated at the structural level create opportunity for collective action. Agent specific implications are that actors mobilize in presence of pre-existing mobilizing structures of the society and use cultural frames to legitimize one action over the others. Due to its limited concerns with actor specific micro-level processes, this approach is inadequate in accounting for the causal mechanisms by which these structural causes affect the interests and preferences of the actors in choosing an action. Scholars for long have argued that one needs a more comprehensive theory to account for processes that operate at the micro-level of individuals and meso-level of groups. This dissertation in an attempt to achieve this end, and systematically showed how grievances generated at the individual and group level interacts with particular structural-political opportunities to influence the choice of actors.

Similarly in the larger international conflict literature, scholars have started to emphasize the need of integrating the micro and meso level processes with structural and systemic characteristics (Sambanis 2002; Lichbach 1998). For instance, Midlarsky (2000) show how collective identities can affect regional civil conflicts. Lake and Rothschild (1998) show that civil conflicts can get transmitted across borders through two mechanisms – diffusion and contagion. These mechanisms were applied by Sambanis (2001) to study ethnic wars. He explores the implications of living in “bad neighborhoods”. But a systematic approach to integrating international conflict theories and civil wars has remained limited, particularly with respect to role of leadership, motivations of actors, etc. Constructivists do a better job in trying to integrate society level factors in explaining civil conflict. They are able to better explain how identity based conflicts are created by manipulative elites or by the perception of discrimination and victimization of one group against the other (Brown 1996; Horowitz 1985; De Figueiredo and Weingast 1999). However, bulk of the constructivist literature of civil conflict concentrates on one type of structural opportunities that can affect the onset of civil violence, i.e., the role of ethnic networks as a proximate cause of conflict, without much reference to other opportunities that might be present at the macro-level to condition the choices of micro level actors.

7.3. Substantive and Policy Implications

The attempt made to bridge the structural and political opportunity theories and agent based collective action theory has broader substantive implications. It provides a platform also to tie in the greed/opportunity and grievance/ deprived actor (DA) hypotheses that had remained compartmentalized in civil war literature. The rational choice based economic theories of civil war argue that economic motives affect the decision calculus of actors, irrespective of grievances. On similar lines, resource mobilization theories have also not accounted for the preferences of actors assuming that those preferences are either falsified or varies over time. As Oberschall (1973) would say that “revolutionary ideas and radical ideologies are not required to create revolts and rebellion.” Grievances are not irrelevant but can be overcome. However, Lichbach (1995) also highlights the point that dissidents will hide their feelings or falsify their preferences so long they feel that the regime is stronger and opportunities are not ripe for action. By identifying certain environmental conditions in which dissidents can resolve their non-participation problem, helps in connecting the two, so far, separate lines of theorizing collective dissent.

Second, in this dissertation, I attempt to improve the predictability of collective action theories as well. Lichbach (1995) argues that aggregate levels and particular outbreaks of collective dissent are essentially unpredictable, the common processes behind these unpredictable outcomes can be studied. The main focus of the collective action research program should be determine the conditions under which a particular or a set of collective action solutions can be adopted and those under which these solutions would be effective in causing collective dissent. Therefore, following Lichbach (1995, 1998), I adopt a mid-range approach of applying collective action theories to conflict studies.

The policy implications of this study are immense. Structural conditions, which are so far emphasized in the literature, as permissive and proximate causes of civil wars are difficult to change, at least in the short run. In developing and underdeveloped countries which faces maximum risk of civil wars, even assuming that the government is not corrupt will not help in ameliorating poverty completely. Similarly problems of governance caused by rough terrains, ethnic compositions, natural resource abundance cannot be resolved overnight. So does this imply that these low-income, large population countries are trapped in anarchy?

Of course not, as several policy-reformations can be adopted to reverse the relationship between these structural factors and civil violence. To cite, Dunning (2005) shows that political

elites of three countries with natural resources faced different incentives for economic diversification and political stability and calls for a more conditional theory of natural resource-conflict linkage. On similar lines, the analyses presented in this dissertation point out that natural resource abundance might not be always a strong predictor of civil war onset or low-intensity civil conflicts. Depending upon the structural conditions present in a country, governments can review their policies and target them properly to ensure stability.

7.4. Future Research Agenda

There can be several ways to extend the arguments presented in the dissertation. First and foremost, I intend to include more case studies. I had to restrict my analysis here to two countries mainly due to unavailability of data at sub-national level for many developing countries. By increasing the scope of comparative case studies, I would be able to extend the generalizability of the analyses presented here. This extension will not only help improve the substantive implications of this analysis for studying collective dissent, it will also provide a broader menu of policy prescriptions for governments.

Secondly, this study can be extended to see the applicability of opportunity and willingness argument for particular revolutions and rebellions. This would help in deepening the micro as Lichbach (1995) would suggest. This can be done by extending the assumptions of rationality or irrationality between leaders and followers, about the motives for collective dissent, across political attitudes, etc. A more in-depth analysis of micro-processes will lead to implications for the macro-structures like order and stability.

Last, but not the least, this study can be extended to develop better approach to study a combined theory like the one presented here. Lichbach (1998) recommends that nested models enable us to understand the limitations of pure theories and the value of combined theory. Such a model can be used to answer questions like what does collective action theories predict about the nature of the participants and political opportunity theories predict about the structural characteristics? What does their combination predict? This would provide a better elaboration and appreciation of the approach adopted in this dissertation to study collective dissent.

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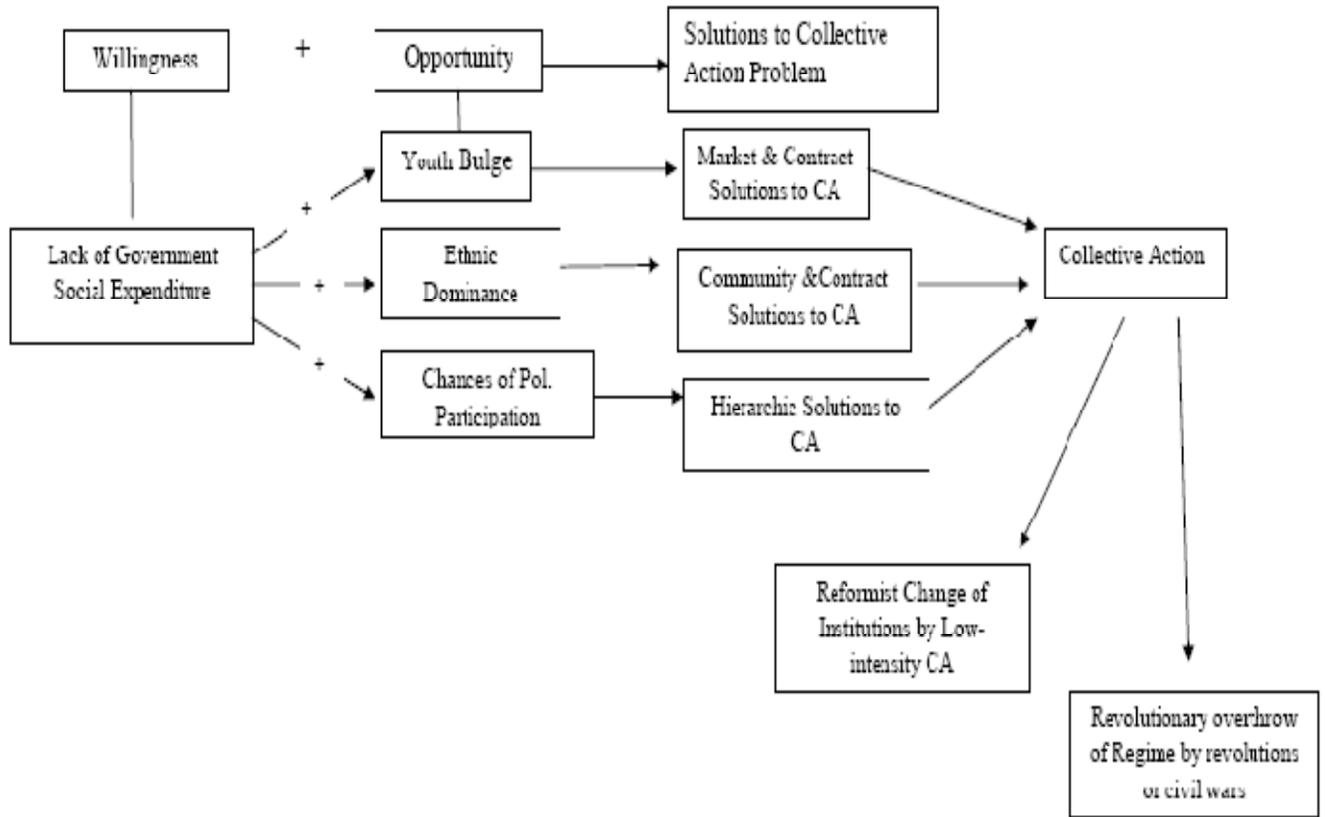
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APPENDIX 1: CONCEPTUAL FRAMEWORK – OPPORTUNITY- WILLINGNESS APPROACH TO COLLECTIVE DISSENT



APPENDIX 2: CIVIL WARS IN CROSS-NATIONAL DATASET 1970-99

year	ccode	country
1981	92	EL SALVADOR
1978	93	NICARAGUA
1983	93	NICARAGUA
1989	100	COLOMBIA
1981	135	PERU
1975	160	ARGENTINA
1995	365	RUSSIAN FED
1993	372	GEORGIA
1995	373	AZERBAIJAN
1998	404	GUINAE-B'AU
1998	451	SIERRA LEO
1997	484	CONGO REP
1998	484	CONGO REP
1997	490	CONGO DR
1998	490	CONGO DR
1979	500	UGANDA
1981	500	UGANDA
1989	500	UGANDA
1998	516	BURUNDI
1991	517	RWANDA
1998	517	RWANDA
1974	530	ETHIOPIA
1998	540	ANGOLA
1981	541	MOZAMBIQUE
1976	552	RHODESIA

year	ccode	country
1989	560	SO AFRICA
1993	615	ALGERIA
1983	625	SUDAN
1979	630	IRAN
1992	640	TURKEY
1974	645	IRAQ
1982	652	SYRIA
1989	750	INDIA
1999	750	INDIA
1971	770	PAKISTAN
1974	770	PAKISTAN
1971	780	SRI LANKA
1989	780	SRI LANKA
1978	840	PHILIPPINES
1981	840	PHILIPPINES
1982	840	PHILIPPINES
1989	840	PHILIPPINES
1976	850	INDONESIA
1990	850	INDONESIA
1999	850	INDONESIA

APPENDIX 3: INDIAN STATES AND UNION TERRITORIES

Andhra Pradesh
Arunachal Pradesh
Assam
Chattisgarh
Goa
Gujarat
Haryana
Himachal Pradesh
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Orissa
Punjab
Rajasthan
Sikkim
Tamil Nadu
Tripura
Uttaranchal
West Bengal
Andaman and Nicobar Islands
Chandigarh
Delhi

APPENDIX 4: SOUTH AFRICAN PROVINCES

Eastern Cape
Free state
Gauteng
Kwazulu-Natal
Limpopo
Mpumalanga
Northern Cape
North West
Western Cape

VITA

Swetasree Ghosh Roy was born to Debabrata Ghosh Roy and Shibani Ghosh Roy in Kolkata, India. She has a younger brother, Debajyoti. Swetasree is married to Subaran Roy, who also has a doctoral degree in economics. Swetasree joined Louisiana State University to pursue the Doctor of Philosophy in the year of 2003. She completed her bachelor's degree in political science and Master of Arts degree in India.