

**ESSAYS IN POLITICAL VIOLENCE AND
INSTITUTIONS**



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Doctor of Philosophy in Economics

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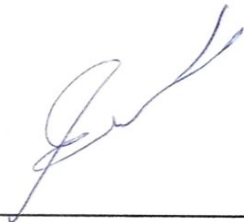
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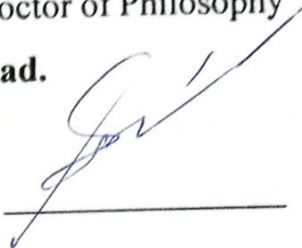
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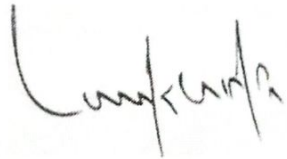
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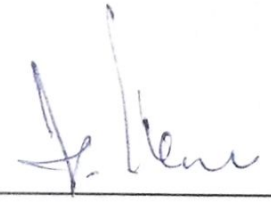
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Dedicated to My Beautiful Mother Fatima

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Abstract

Political violence can have dire implications given its scope and extent leading to destruction of property, key infrastructure and mass casualties, while instigating political instability. Institutions have evolved to prevent violent conflict. The work presented aims to explore the relationship between political violence and institutions. I have explored this relationship from three distinct angles in the course of three essays. The first essay explored the frustration-aggression hypothesis. The first step in this regard was estimating the social mobilization-institutionalization and technological change gap. Then its impact on violence and its intensity is explored and discussed. The second essay investigates the impact of natural resource rents on onset, incidence and intensity of violence and studies the role of institutional accountability in this relationship. In this regard the econometric model is based on the predictions generated from game theoretic framework that depicts institutional accountability may reduce the violence instigating effect of natural resource rents. Further, the relationship is explored in the context of four indicators of institutional accountability i.e. political constraints, polity, media freedom and judicial independence. The third and last essay explores the political violence in Pakistan as commitment problem. Using the constitution of the country as a social contract, the essay explores the incidences of Civil War of 1971, the Balochistan militant separatist movement and unrest in Karachi in 1990s as outcome of breach of contract by the state and the resultant commitment issue. These three essays offer a multifaceted understanding of how institutions can mitigate or exacerbate political violence, highlighting the importance of addressing structural grievances and reinforcing credible commitments to achieve lasting peace.

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INTRODUCTION

Conflict is defined by Hirshleifer (1995) as an “intense” form of competition where, rather than just using the available resources for production and/or consumption, the actors try to stop, disable or hurt their (actual or perceived) rivals. Ultimatum game provided empirical proof of this particular human instinct, where a sense of righteousness or fairness induces individuals to actively pay for punishing those who have “wronged” them. The term “wronged” in this context is quite charged as this may entail actual as well as perceived wrongs that may even be registered due to incomplete or ‘doctored’ information. All interactions, whether economic or social, take place with the explicit or implicit possibility of conflict. Policymakers give in to the demands of different social and ethnic groups depending on the credibility and extent of ramifications of not complying with those demands (Cooter et al., 1982).

Conflict theory endeavors to explain the onset, the forms and the implications of conflict. From a sociopolitical perspective, conflict tends to be an outcome of unequal distribution of scarce resources. Weber identifies three way of classification of individuals in a society, viz. according to class, status and power. If the people think that class, status and power are concentrated in one group, they will consider this as an impediment to their social mobility and question the legitimacy of the prevailing institutions. Karl Marx was of the view that actual as well as perceived deprivation is an outcome of the class system. This real or perceived deprivation results in class

consciousness and resentment, which in turn produces conflict, revolution or social change (Ray and Esteban, 2017).

Within social and national boundaries individuals identify with their respective groups. An individual's inclusion in a group involves certain behavioral expectations, ways of thinking and cultural demonstrations; distinct from individuals not belonging to the group. This defines a group boundary. Coser (1961) believed that conflict makes these differences more pronounced by "strengthening group consciousness and awareness of separateness...". Conflict also induces the group to experience higher levels of solidarity.

The fact of the matter is that all conflicts do not result in violence. Coser (1961) points out that there are two factors that can result in violence during a conflict. First factor is emotional involvement in the cause or in the group which an individual identifies with. In a group, more involved the individual is greater would be the probability of violent behavior, if the group is threatened. Secondly, violence is also likely if the group is perceived to be transcendent i.e. if the members of the group consider their group to be superior to others like racial superiority in Nazi Germany. Coser considers conflict as natural human instinct. Society has to acknowledge that as an ever-present phenomenon and work towards devising norms to manage and regulate conflict. This leads to emergence of formal and informal institutions for conflict resolution, established to prevent violence.

Dahrendorf (1959) augments Coser's analysis with the conception of power. He defines power as the likelihood that an actor (individual or group) within a social relationship would be able to implement its will despite resistance. Power can be derived from the ability to persuade, coerce and constrain. In fact, later on, he acknowledges that social order is not derived through consensus, instead it is an outcome of constraint i.e. norms and values are imposed through authoritative power;

a view derived from the works of the 18th century philosopher Thomas Hobbes. The authoritative power defines rewards for socially desirable behavior and penalty for the undesirable, thus creating social norms and values in the process. He goes further, in explaining that the culture reflects the interests of the powerful elite instead of common good (Dahrendorf, 2022).

In an interest based cultural system minority groups or groups that experience relative deprivation in economic, social and political dimensions, may feel motivated to challenge the existing power arrangements. Dahrendorf (1968) identifies three distinct groups of social factors that may affect the extent and possibility of violent conflict among groups. Firstly, there is organization of a group, which means a more organized group is likely to be less violent. Secondly, the level of relative deprivation is positively related with violence. Third factor is the way conflict is managed and regulated in the society. This links violent conflict to formal and informal institutions.

The nature and quality of institutions can play a decisive role in the onset and intensity of violent conflict, most importantly, the type of political institutions determine the overall mindset and approach towards dealing with dissent and opposition. Thomas Hobbes (1588-1679) believed that an absolute government or authoritative political institution, which he termed as Leviathan, is necessary for maintaining order and peace. According to Hobbes scarcity leads to conflict and only Leviathan can ensure common interests (Yough, 1981). This idea remained popular well into the 20th century; Gottschalk (1944) believed that the inability of the dominant coalition to withstand demands on the political system is the main cause of revolutions. The idea is that decisive government action and social control¹ is more effective in mitigating “hostile outburst” and revolutions. This asserts an inverse relationship between autocracy and political violence (Smelser, 1963; Apter, 1997; Gurr, 2015).

¹Social control refers to sanctions placed by the individual or institutions to discourage socially undesirable or deviant behavior.

On the other end of the spectrum are the more contemporary scholars like Andrzejewski (1954), Eckstein (1965) and Johnson (1966), who suggest a positive relationship between repressiveness and rebellion. The aforementioned scholars are of the view that violent repression by the government to political demands result in frustration among dissidents, which might induce them to adopt violence as an expression of protest and resistance. Johnson (1966) believed that coercion might be effective in short run but in the long run it is highly likely to increase resistance and may compel dissidents to opt for violent avenues. In this context the Political Coase Theorem suggests an alternative path to peaceful resolution of conflicts (Weingast, 1997). Building on Coase's (1960) framework, this theorem posits that if political actors can bargain at low cost and make credible commitments, conflict can be resolved through negotiation rather than violence. The Political Coase framework emphasizes the role of institutional design in enabling voluntary cooperation and peaceful resolution of competing interests. This highlights the importance of institutions not just as enforcers, but as facilitators of credible political bargains.

Given the contrasting theoretical perspectives on the role of institutions in either suppressing or exacerbating political violence, it becomes essential to investigate this relationship in greater depth and across different contexts. In this spirit, I intend to assess the relationship between institutions and political violence from multiple spectrums. I have explored the relationship between institution and political violence from three different angles in my essays. I have started with Schneider and Schneider (1971) social mobilization hypothesis which is the primary theme of first essay. Deutsch (1961) defines social mobilization as the process through which old patterns of social, economic and psychological interactions are replaced by new forms of socialization. Social mobilization leads to rising expectations in terms of living standards and political rights. It also creates discontent with status quo requiring new patterns of societal organization. This enhanced need for services and reform translates into

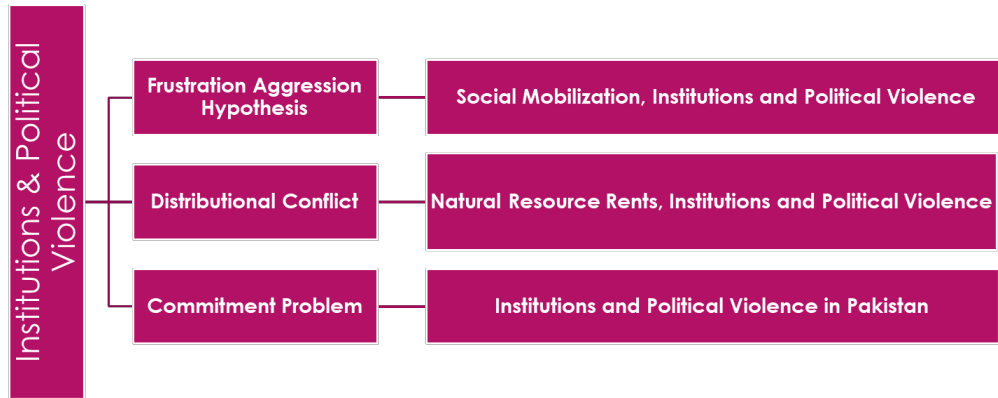
increased political participation, creating potentially severe repercussions for governments that either refuse to or are slow to comply with the increased demands. In short, social mobilization changes people's expectations regarding their economic well-being and political rights and if the institutions and economic conditions of the country do not meet this new set of expectations; it gives rise to frustration and agitation (Huntington, 1965). If this deviation of actual wellbeing from the expected persists, resulting frustration can potentially escalate into acts of violence. My work also borrows from the relative deprivation theory presented by Gurr (1970). The theory states that conflicts are an outcome of relative deprivation in both political and economic terms. He defines relative deprivation as the deviation between individual's expectations and her/his capacity to meet those expectations. This is a concept similar to social mobility outpacing economic and institutional change. I have modeled this deviation in actual and expected outcomes by comparing the levels of social mobilization with the pace of economic development and the changes in institutional setup, as presented by Schneider and Schneider (1971). In institutions I have considered four fundamental traits namely, adaptability, legitimacy, complexity and coherence. These traits make institutions more amenable and accommodating to the changing popular opinions and expectations. Following the methodology put forward in Schneider and Schneider (1971) I intend to use the ratio form to assess the deviation of social mobilization from economic and institutional development. I hypothesize that when the rate of social mobilization exceeds that of economic development and institutional reforms the likelihood of political violence increases. The empirical analysis has been carried out using multiple cross-country datasets. Indices for social mobilization, economic development and institutionalization has been constructed using multiple indicators. Instrumental variables regression has been used to assess the impact of imbalance between social mobilization and economic development and institutional responsiveness on incidence and intensity of political violence.

The second essay deals with the role of resource rents in instigating political violence, following the Collier and Hoeffler (1998) hypothesis. The hypothesis states that, “countries with abundance of natural resources are more prone to violent conflicts”. This relationship has been explored extensively in the literature. Collier and Hoeffler (2005), Bodea and Elbadawi (2007), Arezki and Gylfason (2013), Elbadawi and Soto (2015), Costello (2016) and Farzanegan et al (2018) have empirically and theoretically explored the relationship between resource rents and political violence. Existence of natural resources can trigger conflict due to either greed or grievances (Gurr, 1970). The positive relationship between natural resource rents and political violence has been attributed, primarily, to the greed of the actors involved or the grievances of the groups who are deprived of their “fair” share of benefits from the natural resources. What remains less explored though is the role of institutions in neutralizing this link. Elbadawi and Soto (2015) use a game theoretic framework to explain the effect of institutions on the relationship between natural resource rents and political violence. The theoretical analysis implicitly incorporates institutions. I propose to explicitly demonstrate the effect of institutions, theoretically as well as empirically. For this purpose, I have incorporated institutions that can potentially penalize violence perpetrated by both the state and the rebels. I have used media integrity, latent judicial independence, polity and checks on powers of the executive as indicators for violence inhibiting institutions. The relationship between natural resource rents and conflict is nuanced and complex. There are obviously the rival factions clashing with each for greater share of resource rents. And then there are the external interest groups that are not directly involved in the conflict but have vested interests in the outcome of it. These include multinational corporations, foreign nations or international political organizations. The interference generally takes the form of financial or technical support to the rebel groups to destabilize the state and gain the ability to extract and appropriate natural resources. This interference can counter any violence inhibiting effect of institutions. I have, therefore, also explored

the theoretical relationship between external influence, institutions and political violence.

The third essay deals with the issue of ethnic violence and its institutional aspects. I have used game theoretic framework for explaining the strategic behavior of groups with diverse specialization. Constitutional game is used to depict the social contract between violence and production specialists. The group specializing in production would commit to higher productivity (more effort) and the one specializing in violence (includes state, military and any other group that is part of the dominant coalition) commits to provision of security and no exploitation. This commitment is predicated on an agreed upon tax rate that is to be paid by the productive group. This tax rate is the share of the violence specialist group in total production that the producers are willing to forego. This social contract is precarious and both groups have incentive to violate it. However, it is the actions of the violence specialists (state actors) and their decision to exploit instead of cooperating that can lead to rebellion. One way of preventing this can be to raise the cost of exploitation/ appropriation. The cost of exploitation can be increased only in the presence of working institutions that limit the power of the executive. These institutions are established and protected through the country's constitution. This means that the presence of a strong constitution upheld by apolitical institutions like an independent judiciary can be an inhibitor of exploitation by the violence specialist, thereby quelling the stimulant for group violence itself. As a case, I have analyzed the adoption and development of the constitution of Pakistan and its effectiveness in limiting ethnic violence. I have traced the path to the 1973 constitution in Pakistan and how the power dynamics between the military, the executives and the political leadership affected the development and evolution of the constitution. It is also posited that owing to the lack of protection afforded to it, the constitution has been altered or suspended due to political interests of the elite. The greater concerns of the masses were more or less ignored and

Figure 1.1: **Institutions and Political Violence**



remain unaddressed. From a theoretical standpoint this dynamic explains both inconsistent growth and ethnic strife in the country. Consecutive governments, whether elected or otherwise, failed to make credible commitments despite the constitutional provisions. In the extreme cases the constitution was suspended with little to none judicial oversight, leading to mistrust between the executives and the regional interest groups. This mistrust translated into unreliability of government's commitments and diversion of resources from investment to rebellion. The country lost out on invaluable investment ventures and suffered through repeated bouts of ethnic tension with varying degrees of violence. I have traced the constitutional history of Pakistan vis a vis its link to regional disparities and conflicts. In this regard, popular regional movements will be placed in their institutional context to evaluate the way the process of institution building in Pakistan has created conflict among different groups.

Essay 1

Social Mobilization, Institutionalization and Political Violence

Chapter 1.1.

Introduction

“Among the laws that rule human societies, there is one which seems to be more precise and clearer than all others. If men are to remain civilized or to become so, the art of associating together must grow and improve in the same ratio in which the equality of conditions is increased.”

de Tocqueville

Social mobilization as conceptualized by Deutsch (1961) and expounded by Mannheim (2013), represents a transformative process wherein established patterns of social and economic interactions undergo a profound shift, giving way to new forms of socialization experiences and behaviors. Mannheim (2013) articulates that this complex process unfolds across two distinct stages, each playing a pivotal role in the evolution of society. The process takes place in multiple stages. The first stage involves breaking down of the old setup and second involves induction of the “mobilized” individuals into new pattern of organization, interactions and group identification. The initial stage of social mobilization is characterized by the methodical dismantling of the existing social framework. Here, the entrenched norms, structures, and established approaches of interaction undergo a process of deconstruction, paving the way for change. This phase represents a critical juncture where the foundations of

prevailing social order are shaken, challenging the status quo and creating the necessary conditions for the subsequent transformative steps. The second stage involves the induction of individuals into the newly envisioned social paradigm. This stage witnesses the assimilation of individuals into a redefined pattern of organization, new modes of interaction, and distinctive group identifications. It marks the culmination of mobilization process, where the seeds of change sown in the initial stage come to fruition. Individuals, now attuned to the altered socio-cultural landscape, become active participants in the construction and dissemination of the emergent social norms. It represents a deliberate and often transformative effort to alter established societal frameworks, fostering a paradigm shift towards innovative forms of socialization that reflects evolving values, dynamics, and identities within a community or society (Yamada, 2016).

Social mobilization leads to rising expectations in terms of living standards and political rights (Oberschall, 1969). It also creates discontent with status quo requiring new patterns of societal organizations and emergence of new opportunities. This enhanced need for services and reform translates into increased political participation, creating potentially severe repercussions for governments that either refuse to or are slow to comply with the increased demands. Frustration may also be caused by lack of economic opportunities commensurate with the effort that goes into enhancing capabilities like, rural-urban migration and school enrollment (Weede, 1987). In short, social mobilization changes people's expectations regarding their economic well-being and political rights (Huntington, 1968). If the institutions and economic conditions of the country do not meet this new set of expectations; it gives rise to frustration and agitation. If this deviation of actual wellbeing from the expected persists, the resulting frustration can potentially escalate into acts of violence. The relative deprivation theory presented by Gurr (1970) states that conflicts are an outcome of political and economic relative deprivation. He defines relative deprivation as the deviation

between individual's expectations and her/his capacity to meet those expectations, which is a concept similar to social mobility outpacing economic and institutional change.

Social mobilization is a multifaceted phenomenon. Its processes include rural to urban migration, increased enrollment in institutes of higher learning, access to mass media especially internet and expansion of nonagricultural employment etc. This leads to expansion in the politically relevant strata¹ (Williams, 1982). Growth in this stratum creates pressure for institutional reforms. It also re-orientes politics by enhancing the range of needs that can affect political process and decision-making. This enhanced need for services and reform translates into increased political participation, creating potentially severe repercussions for governments that either refuse to or are slow to comply with the increased demands. At the same time, it generates resistance from the beneficiaries of the previous order, thereby creating a conflictual situation. In his review paper on inequality and conflict Dzuverovic (2013) points out that post-1970s re-orientation of policy towards neo-liberalism has greatly constrained the redistributive role of government(s). This has led to enhanced inequalities and increased conflict potential.

The significance of communication technologies in both instigating and suppressing rebellion became apparent during events like the Arab Spring in the 2010s, the attempted coup in Turkey in 2016 and the BlackLivesMatter protests in 2013 etc. Further, media can also serve as a tool for government control by manipulating public opinion and hence, communication technologies can also serve as a tool for state control leading to instigation of violent activity. Moreover, the pursuance of education by individuals in middle and lower-middle-income brackets in developing nations has reshaped expectations regarding future earnings and job characteristics. However, the economic realities of these countries have not been aligned with these revised

¹Politically relevant strata Includes all those who must be accounted for in politics. It is a much broader group than the elite and includes political activists, union workers, intelligentsia, social media influencers etc.

expectations. Additionally, the political environment in these regions constrains the involvement of youth in activities like electoral campaigns and voting, often sidelining their broader concerns such as securing meaningful employment etc.

Consequently, the mismatch between rising aspirations and limited opportunities, both economically and politically, can give rise to discontent among the population, potentially manifesting as aggressive or violent behavior. Furthermore, disenfranchised young individuals become susceptible to recruitment by rebellious factions (Guichaoua, 2011), which may include religious figures, ethnic leaders, or dissident political groups. In the light of these dynamics, we contend that the mechanisms of social mobilization have evolved since the 1970s, necessitating a reevaluation to ensure the analytical framework remains pertinent to contemporary circumstances. Therefore, our work aims to assess the impact of the gap between rising expectations (social mobilization) and achievements (political institutionalization and economic development) on incidence and intensity of political violence i.e. to investigate the frustration-aggression hypothesis in the current scenario.

1.1.1. Hypotheses

We hypothesize that:

- a. “If social mobilization surpasses institutional change and economic development, it would increase the likelihood and intensity of political violence in the nation”
- b. “Political institutionalization and economic development would reduce the likelihood and intensity of violence”

1.1.2. Objectives

Main objectives of this work are:

- To update the existing measures of social mobilization.
- To utilize more contemporary measures for political institutionalization.
- To determine the magnitude of gap between the rate of social mobilization, economic development and political institutionalization.
- To assess how this gap would affect the likelihood, intensity and onset of violence for the sample of countries.

While relative deprivation hypothesis has been widely explored, the social mobilization aspect of it remains in need of an update. The hypothesis first presented by Huntington (1968) was explored extensively during the 1970s, most notably by Schneider and Schneider (1971), Hoan (1972), Duvall and Welfing (1973), Ruhl (1975) and Yough and Sigelman (1976). Social mobilization processes have evolved after the advent of internet and expansion of social media. It needs to be incorporated in the analysis carried out.

The role of communications technologies in instigating and thwarting rebellion (Pierskalla and Hollenbach, 2013; Trujillo et al., 2014) was evident during the Arab Spring of 2010s and the 2016 attempted coup in Turkey. More over media can also serve as a tool for government control by manipulating public opinion. Communication technologies can also serve as a tool for state control leading to instigation of violent activity. Additionally, with expansion in school enrollment in developing countries the expectations regarding prospective remuneration and nature of work may be revised upwards. However, the economic situation of the countries may not correspond to this revision. Furthermore, the political landscape of the countries may limit the participation of these young educated individuals to electoral campaigning and voting, with little to no attention given to their greater concerns such as productive employment, etc. Therefore, lack of employment opportunities combined with

limited venues for political participation may lead to frustration among the masses, which can then translate into aggressive and violent behavior. Additionally, these deprived young people present a viable recruitment source for the rebellious factions, which may include religious elite, ethnic leaders or political dissident groups. Therefore, we posit that the nature and processes of social mobilization have changed since the 1970s and need to be revised to make the analysis relevant to contemporary scenarios.

We have used data from 1989 to 2021 from sixty countries. Our list of countries includes those countries (Appendix 1A), which have experienced at least one episode of internal violence during the aforementioned time period. Using and updating the methodology of Schneider and Schneider (1971) and Yough and Sigelman (1976), we have constructed indices for social mobilization, political institutionalization and economic development. The panel data regression results reveal quite interesting results for our analysis of violent event and intensity of violent conflict.

This essay comprises of five chapters. The current chapter is followed by literature review. Chapter 1.3. explains the methodology used to assess social mobilization, political institutionalization and technological change. The chapter further elaborates on the econometric models adopted and the estimation techniques employed. Chapter 1.4. presents measurement and estimation results. Finally in Chapter 1.5. we have summarized the conclusions drawn from Chapter 1.4.

Chapter 1.2.

Literature Review

Impact of social mobilization, institutional reforms and economic development has been explored in varying contexts. In this chapter I have presented both empirical and theoretical literature on the relationship between social mobilization, political institutionalization and technological development, and political violence. Further, the available albeit limited literature on mobilization, institutionalization and development gap, and political violence is also explored. The first section (1.2.1) presents theoretical literature on the issue and the second section (1.2.2) deals with the empirical literature.

1.2.1. Theoretical Perspective

The seminal work of Dollard et al. (1939) links frustration with violence. The authors are of the view that when an individual is inhibited from attaining a certain objective, the said individual becomes “frustrated” which leads to a “disturbed psychological balance” and strain. Relief from this imbalance is sought in acts of aggression against the source of frustration. Therefore, any acts of aggression pre-suppose frustration experienced due to the inability to attain important goals (Berkowitz, 1989). This theory has been further explored with a more nuanced interpretation by Kruglanski.

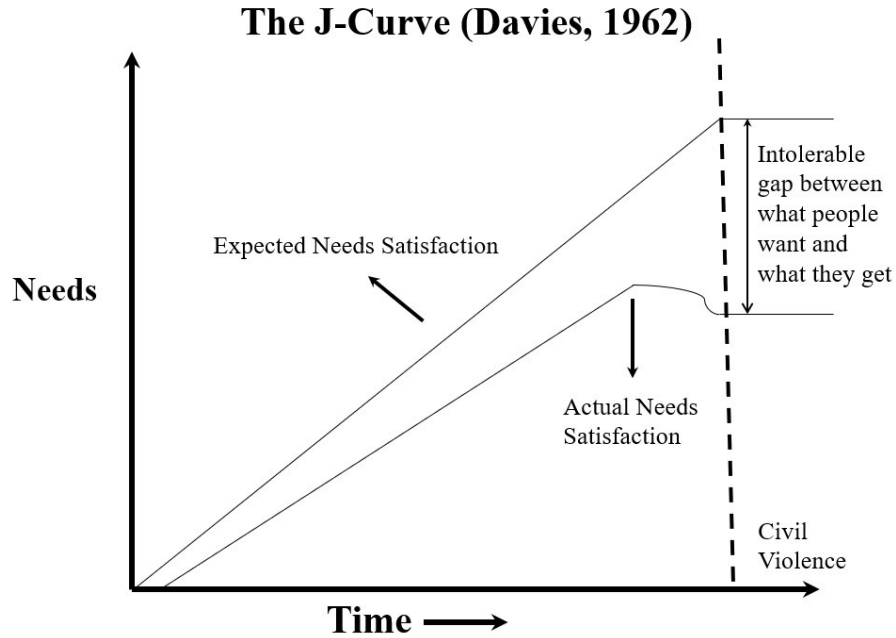


Figure 1.2.A Davies J-Curve

et al, (2023) which stipulates that frustration arises from an individual’s need for mattering/ importance and aggression is an instrument for establishing significance and mattering. The theory suggests that a loss of significance, manifesting as insufficient voice and representation, can lead to a tendency for violent reactions unless mechanisms for ”significance restoration” are in place. Additionally, the theory asserts that the potential for gaining importance can intensify the inclination toward aggression.

Davies (1969) represents a J-Curve style model for explaining the difference between “expected need satisfaction” and “actual need satisfaction” as a source of frustration and subsequent aggression at the macro level. Gap between expected and actual needs satisfaction is tolerable to a limited extent and for a limited period of time. When the gap persists for too long or/and widens to an intolerable extent it leads to retaliation and civil violence. Deutsch (1961) presents the concept of *social mobilization* that would lead to increasing expectations, which may widen the gap

between expectations and achievements. If the real change in economic opportunities and institutional development fall short of these new expectations, it results in frustration and aggression (Schneider & Schneider, 1971).

However, frustration leads to aggression only under certain conditions. It means that for violence to take place an aggression stimulus may be necessary (Berkowitz, 1978). This follows Deutsch (1961)'s social mobilization framework that would lead to *increasing expectations*, which may widen the gap between expectations and achievements. Social mobilization can be defined as an all-encompassing process of transformation undertaken by a significant proportion of the population as the country transitions from traditional to a more modern lifestyle. Social mobilization may entail a change in residence, occupation, ways and means of communication, roles, and/or actions leading to rising aspirations and expectations. This involves a reassessment of expectations concerning economic outcomes, social standing, and political freedoms. This in turn increases the demand for government services, especially those related to improvement in quality of life. Further by weakening traditional values and institutional patterns, social mobilization creates a need for new institutional arrangements. These institutional arrangements would have to be adaptable, complex, autonomous, and coherent, allowing the political leadership to cater to the rising aspirations of the masses (Schneider and Schneider, 1971).

Additionally, extensive social change leads to frustration and discontentment among the “politically relevant strata” as rising aspirations may not be accommodated by the levels of achievement. Feierabend & Nesvold (1969) present an interesting point of view using aggression theory¹ and linking aggression to the pace of economic and social development. The authors posit that aggression is an outcome of systemic frustration experienced by a critical number of individuals collectively. The authors define system frustration as culminating from interference in the attainment of goals,

¹The aggression theory simply states that, “the greater is the frustration, the greater would be the intensity of aggression”

aspirations, and values simultaneously experienced by individuals who identify with “social aggregates” and is an outcome of societal structures and processes.

Feierabend & Nesvold (1969) associated systemic frustration with modernity theory. They are of the view that system frustration may be an outcome of the transitional process i.e. traditional and modern societies are less likely to experience collective violence, while societies in transition towards modernity are highly likely to be experiencing system frustration and elevated violence potential. The deviation between want formation and satisfaction, termed as system frustration, would be low in traditional societies, which means that both expectations and actual achievements are low. System frustration is expected to also be low in societies with high levels of economic development due to higher expectations being met with higher living standards. System frustration is expected to be higher at the middle level of development because modernity may have led to an increase in expectations but the middling level of economic development means that a proportion of the higher expectations have remained unfulfilled. At this transitional stage, the gap between aspirations and achievements is highest. This gap, which is the source of systemic frustration, can raise the potential for widespread aggression and collective violence (Feierabend & Nesvold, 1969). A variation of this theory is Gurr's (1969) *Relative Deprivation theory*, which asserts that the disparity between expectations and capabilities generates frustration, subsequently culminating in aggression and violence. Birt and Dion (1987) interpreted relative deprivation as the perception of the comparative standing of one's associated group and that of other groups in terms of status, significance, and privileges. Such a perception would affect one's feelings of frustration and the consequent aggressive actions. This explains a more complicit attitude towards group militancy and individuals' acts of violence.

This view was further elaborated by Gurr (1969), who points out that conflicts are an outcome of relative political and economic relative deprivation. He defines relative

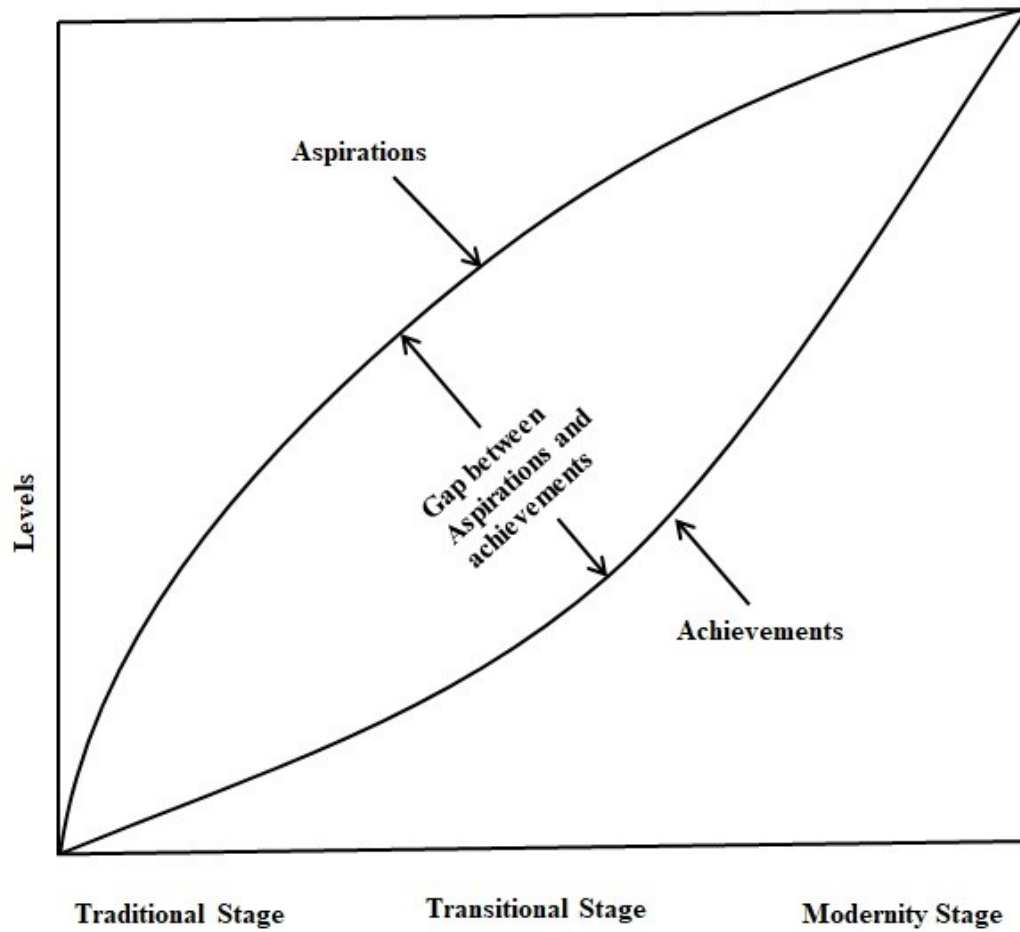


Figure 1.2.B. Modernization and System Frustration

deprivation as the deviation between an individual's expectations and her/his capacity to meet those expectations. This concept is similar to system frustration presented by Feierabend & Nesvold (1969). These expectations are formed from observing the consumption patterns of other individuals. The objective existence of relative deprivation, in effect, leads to frustration (Runciman, 1961). The persistence of deprivation is not without its social and political fallout. If the conditions in the society add to individuals' expectations without augmenting their capabilities, chances of conflict rise significantly. Same is the case when capabilities are decreasing, while expectations remain unchanged. Gurr (1970) elaborates that the development of frustration transitions towards its politicization, wherein, the opposition groups stimulate support through exploiting the existence of relative deprivation. This finally, culminates in politically motivated acts of collective violence against the state and its institutions (Gurr, 1969; Hobsbawn, 1959). Gurr (1970) identifies three patterns of deprivation, which lead to emergence of discontent and, eventually, violence.

1. *Decremental Deprivation*: In this case, expectations remain consistent over the long run while capabilities decline substantially. Decremental deprivation can take place due to a decline in productivity, complacency of the political elite, foreign interference, deterioration of the social contract between the masses and the state, and disproportionate access to scarce resources.

2. *Aspirational Deprivation*: When there is a substantial increase in expectation without a commensurate rise in capabilities. The individuals or groups in this scenario may not have suffered a loss, but the frustration arises due to stagnation in individuals' economic condition, making them incapable of attaining higher expectations. Milanovic (2007) believed that this happens due to the fruits of macro-level economic progress not being equally distributed. This might point to the existence of early stages of Kuznet's inverted U curve, where an increase in economic growth is accompanied by rising inequality. The rise in overall economic growth leads to an

increase in the expectations of individuals and unequal distribution results in capabilities remaining unchanged. This results in an increase in relative deprivation due to rising aspirations.

3. *Progressive Deprivation*: This occurs when progress is reversed due to a national or global crisis. When both expectations and capabilities increase due to consistent progress and then a sharp decline in capabilities occurs, expectations continue to follow the old trajectory, and progressive deprivation emerges. Violence takes place due to insufficient response of existing institutions to objective changes.

Either way, relative deprivation is an outcome of the imbalance between social mobilization and economic and institutional change. If the level of social mobilization exceeds the speed of economic development and/or institutional reform, it would form a gap between aspirations and achievements at the macro level, adding to frustration among the masses. This gap can emerge because either the speed of social mobilization is higher than the rate of economic development and pace of institutional reforms (similar to aspirational deprivation), a reversal of fortunes may lead to economic and/ or political decline while the social mobilization patterns remain consistent (progressive deprivation) or the rise in social mobilization is accompanied by economic and institutional deterioration (decremental deprivation).

Schneider & Schneider (1971) attribute the rise in frustration and resulting violence at the macro level to a stagnant or slow pace of institutionalization/institutional development. *Institutionalization* is described as the process of advancing and improving the quality of political institutions (Huntington, 1968). According to this view, the level of political institutionalization can be assessed based on four core criteria, which are, adaptability, complexity, autonomy, and coherence. *Adaptability* ensures that institutions remain flexible and capable of addressing diverse needs and accommodating divergent interests. It also equips institutions to effectively nav-

igate challenges without succumbing to debilitating rigidities. *Complexity* facilitates decentralization of decision-making allowing varying interests to be addressed and establishing mechanisms for power sharing, allowing for more peaceful resolution of conflicts. *Autonomy* allows for the separation of power between the government bodies. This separation of power prevents abuse of authority and, at the same time limits the authority of each pillar of governance through checks and balances (Persson et al., 1997). This improves service delivery, reduces corruption, and allows for a more equitable opportunity structure that may complement rising expectations due to social mobilization. Coherence facilitates a political system that engenders consensus-building among diverging interest groups regarding both the direction of polity and formulation of policy. Collectively, these attributes constitute the process of institutionalization (Huntington, 1968; Schneider & Schneider, 1971). If the pace of institutionalization falls short of the rising expectation from social mobilization the Davies (1962, 1969) J-curve mechanism gets triggered with the widening of the gap eliciting violent response due to rising frustrations.

1.2.2. Empirical Literature

Schneider & Schneider (1971) provide an interesting view of the relationship between institutions and political violence by focusing on social change and mobility. They assert that political violence is more likely to occur when institutional change lags behind social mobilization. This implies that if the pace of institutional change is commensurate with that of social change, violence can be prevented. The authors are of the view that social change leads to increased aspirations and expectations from leadership and if the political institutions fail to adapt to new social realities, it can lead to frustration among masses. These frustrated masses then organize politically, leading to political instability and violence. The work also acknowledges the role played by economic development in pacifying the social frustration. Economic development increases the resources available for meeting new demands and expecta-

tions. Therefore, the lag between social mobility and economic development can also produce frustration. An important contention by authors combines the interaction between the three variables i.e. social mobility, political institutions and economic development in creating circumstances that may stimulate or inhibit political violence. Using the data from 10 highly developed countries spanning twenty years (1948-1968), the authors establish that a large gap between social change and institutional development will produce more political violence in less developed nations than in nations with higher levels of economic development.

To factor in the perspective of developing nations Duvall and Welfling (1973) presented a model involving social mobilization, institutionalization, and political violence using data from 28 African nations across the period 1960 to 1969. The authors found that social mobilization itself had little to no effect on internal wars. This evidence goes contrary to the assertions of social mobilization theory. The authors did, however, establish a strong positive correlation between ethnic conflict and social mobilization. Yough and Sicelman (1976) have carried out a critical and empirical analysis of the way social mobilization, political institutionalization, and economic development determine the likelihood and extent of violence in 61 developing countries. The indicator of social mobilization was constructed using school enrollment, literacy rate, radios per capita, and newspaper circulation per capita. For political institutionalization a summary index comprising of four indicators was constructed. The indicators include administrative efficiency, legislative effectiveness, the age of political institutions and military intervention. The results confirm that if social mobilization outpaces institutionalization and economic development that could potentially lead to higher levels of political instability. Revisiting the issue, Yough (1981) accessed data from 73 countries for the time period 1960-67. The study also incorporated social mobilization as exogenous variable incorporating literacy, urbanization and access to newspapers as its constituents. The analysis depicted limited role of

social mobilization in instigating political instability, corroborating the findings of Duvall and Welfling (1973).

Sigelman and Simpson (1977) tried to confirm the hypotheses regarding the relationship between economic inequality and political conflict. The authors examined the distribution of wealth and several other factors, including the rate at which social change occurs. They carried out the analysis for the sample of 49 countries. The results confirmed the correlation between the inequality in national income and political violence, even though the impact of the inequality proved to be rather moderate. The authors incorporated enrollment rates as indicator for social mobility, and found it to have negative and significant effect on violence measured as internal war.

After the 1980s the literature on political violence focused on an alternate interpretation of relative deprivation, focusing more on aspects of socioeconomic inequalities as source of frustration and conflict (Muller, 1985; Ellina & Moore, 1990; Alesina & Perotti, 1996; Auvinen & Nafziger, 1999; Thorbecke & Charumilind, 2002; Besancon, 2005; Cederman et al., 2011), while the issues of social mobilization and mobilization-institutionalization-development gaps were dismissed from the primary narrative. A reason for that can be weak empirical support in the previous studies. However, even in these studies we can find narrative-based linkages to Huntington (1965), Deutsch (1961) and Gurr (1970).

For example, Alesina and Perotti (1996) examine the relationship between an increase in economic inequalities and political instability. They define political instability as politically motivated murders, the number of people killed during internal conflict, coups d'état, and the frequency and freedom of elections. They researched a sample of 71 states in the period 1960-1985. The results confirmed that economic inequality instigates discontent which can subsequently lead to socio-political instability and finally result in lower investment and decreased economic growth. Based on the

results, the authors conclude that economic inequality and investments are negatively correlated. This would explain why countries that had implemented land reforms and reduced economic inequality, have also attracted more foreign investments, achieved political stability and high economic development. On the other hand regions, where inequalities have persisted, have faced multiple episode of political unrest, thus preventing economic development. The authors also include primary and secondary enrollment in the analysis. Though the work does not explicitly deal with social mobilization, enrollment has been used as the primary indicator for social mobilization (Schneider and Schneider, 1971; Duvall and Welfling, 1973; Yough and Sigelman, 1976). The results confirm a negative relationship between enrollment and violence, showing that social mobilization in itself can be violence-inhibiting. The study, however, does not incorporate the mobilization-institutionalization-development gap.

Auvinen and Nafziger (1999) analyzed the relationship between economic inequality and violence in consideration of the relative deprivation hypothesis for the case of Nigeria. The research is based on the premise that the relative deprivation causes the occurrence of a complex humanitarian emergency, despite a high level of economic growth, if it is followed by social polarization. It is particularly aggravating if economic inequalities coincide with ethnic, regional or religious inequalities which can intensify the magnitude of a complex humanitarian emergency. The authors also emphasize the role of conflict tradition in explaining the outburst of violence. In this context, countries with a history of political violent conflicts (like Colombia or Rwanda) are at greater risk of complex humanitarian emergency outbreak than countries where such a tradition is not distinctive or present. Econometric analysis was conducted on a sample of 124 low- and medium-income countries for the time period 1980-95. The results confirmed strong correlation between violent conflicts and Gini coefficient in case of low-income countries. It was shown that the duration and intensity of violence depended on the level of military expenditure, the history

of armed conflicts and the inflation rate. Inflation rate is also directly related to economic inequalities because inflationary shocks lead to income redistribution, from individuals with lower incomes towards high-earning groups. Nafziger & Auvinen (2002) further elaborated by claiming that economic inequalities are a by-product of historical circumstances (such as colonialism or apartheid), unequal distribution of land, and levels of corruption, projecting the importance of institutions in such a relationship. The work also identified the multidimensionality of inequalities by highlighting unequal educational opportunities, access to the labor market, unbalanced distribution of income, and linguistic discrimination. The work also presented as examples of employment discrimination against the Bengali ethnicity in Eastern Pakistan during the 1950s and 1960s, the Hutu-Tutsi conflict in Rwanda and Burundi, and linguistic and educational discrimination against the Tamils in Sri Lanka. The work of MacCulloch (2005) looks into how economic inequality leads to revolution and rebellion. The analysis carried out on the database of about a quarter of a million individuals shows a positive desirability for revolution in the presence of high economic inequality. This analysis confirms that rational and disadvantaged individuals perceive revolutions and rebellions as viable ways of acquiring rights and access to goods that would have been inaccessible to them otherwise, giving credence to the frustration-aggression theory.

White (1989) analyzed the Provisional Irish Republican Army (IRA) showing that state repression more so than economic deprivation is the major cause of violence. State repression makes peaceful recourse toward grievance redressal like protesting and judicial undertaking ineffective. It also delegitimizes the state authority, making dissent and violence as viable response to conflict. In a similar vein, Hoelscher (2015) posits that poor institutionalization and concentration of political power incentivize violence. The study uses data from 5000 municipalities in Brazil from 1997 to 2010, to establish that local government systems featuring territorial autonomy

would ensure better cooperation between regional groups and reduce incentive for violence. However, the absence of local-level democracies and proportional representation gives rise to frustration and leads to incidences of violence. Posner & Young (2007) traces the transition of power in Sub-Saharan Africa from the early 1960s. The authors explain that up until the 1990s, most heads of state in Africa had been removed from office by political violence including coups and assassinations. The institutional transformation in the 1990s has provided a more peaceful alternative for regime change. Therefore, most leaders since then have been leaving office through voluntary resignations or by losing popular votes for elections, indicating the effectiveness of institutions in ensuring a peaceful transfer of power. Hence, improvement in political institutionalization has the potential to alleviate frustration and prevent aggression. Expanding on that Salehyan & Linebarger (2015) explain liberal institutions tend to reduce violence in the society. However, simple elections are not sufficient for creating palliating conditions in conflicts as weak institutions tend to make even the elections violent. They study the link between elections and conflict in Africa from 1990 to 2009 and conclude that free and fair elections are less likely to result in violence, however, illiberal elections can lead to a greater incidence of violent conflict. Hart (2009) explained the inter-generational nature of violence and fostered aggression, particularly in the context of displaced Palestinian youth. Children growing up under systematic oppression experience a frustrated transition to adulthood resulting in an increased tendency towards militancy and violence.

Fox & Hoelscher (2012) highlight the importance of institutions for violence in society through cross-country analysis. They found that hybrid political systems i.e. anocracies and weakly institutionalized democracies tend to promote violence in society. Weak institutions and anocracies tend to make governments less responsive to the rising needs of individuals. Social factors such as a rural-to-urban migration trend lead to rising expectations and weak institutions keep individuals from achieving

them. Based on longitudinal cross-national analysis Veri & Sass (2023) highlighted the importance of institutionalized opportunities for political participation as a key democratic institution in reducing political violence. Protection for political participation allows the expansion of opportunities, recourse toward the resolution of grievances, and peaceful mechanisms for dispute settlement. This reduces the gap between expectations and achievements, lowering the level of frustration. Wegenast (2013) used multiple country analyses to establish that political competition reduces prospects for conflict within the country as opposition groups would be incorporated into the institutionalized political arena. This would ensure the provision of parliamentary means to the opposition raising the relative cost of violence.

While relative deprivation hypothesis has been widely explored the social mobilization aspect of it remains in need of an update. The hypothesis first presented by Huntington (1968) was explored extensively during the 1970s, most notably by Schneider and Schneider (1971), Hoan (1972), Duvall and Welfling (1973), Ruhl (1975) and Yough and Sigelman (1976). However, the operationalization of the phenomenon needs an update in contemporary times. The impact of social mobilization resulting from the introduction of communication technologies such as the internet and mobile devices on violence has not been thoroughly examined and requires further investigation.

Chapter 1.3.

Methodology

The impact of imbalance between social mobilization, institutionalization and economic development, has not been explicitly explored since the work of Yough (1981). With the advent of newer technologies of production and communication, especially, internet access, the nature of social mobility has evolved and its deviation from institutionalization and proactive capacity has become more pronounced. What I intend to do is to first update the indicators of social mobilization and institutionalization. Secondly, I will assess the magnitude of the mobilization-institutionalization-development gap. Lastly, we will endeavor to ascertain the effect of this gap on the likelihood, onset, and intensity of political violence.

1.3.1. Conceptual Framework

Deutsch (1961) defines social mobilization as, “an overall process of change, which happens to substantial parts of the population in countries which are moving from traditional to modern ways of life.” This transformation leads to changes in consumption patterns, shift into new professions, and enhanced political awareness. The process of social mobilization also leads to rising expectations (both economic and political) i.e. reassessment of wants and entitlements. To ensure peace and avoid

systemic frustration the pace of social mobilization must be commensurate with the corresponding growth in economic opportunities and political institutionalization.

Increase in economic opportunities involves a fundamental shift in a country's production structure towards more capital-intensive and advanced technological methods. The advancement of technology leads to new venues for income generation as well as accommodating new patterns of consumption. Political institutionalization, on the other hand, is a process whereby the political organization in a country acquires reliability, stability and legitimacy. Political institutionalization incorporates adaptability, complexity, autonomy and coherence (Huntington, 1965). Together these traits allow for greater political participation, opportunities and voice, which offer political means to dispel grievances and greater voice pertaining issues of personal and regional importance. However, as the pace of social mobilization hastens political institutionalization would be instrumental in accommodating the rising expectations part.

If social mobilization outpaces economic and institutional reform then meeting the rising expectations would not be possible. This would result in frustration experienced en masse, which would increase if the gap between social mobilization, economic change, and political institutionalization persists. If unresolved, this frustration can escalate into political unrest, aggression, or even rebellion.

My work builds on classical theories by explicitly modeling the relationship between social mobilization, institutionalization and economic capacity, proposing that it is their imbalance that triggers political violence.

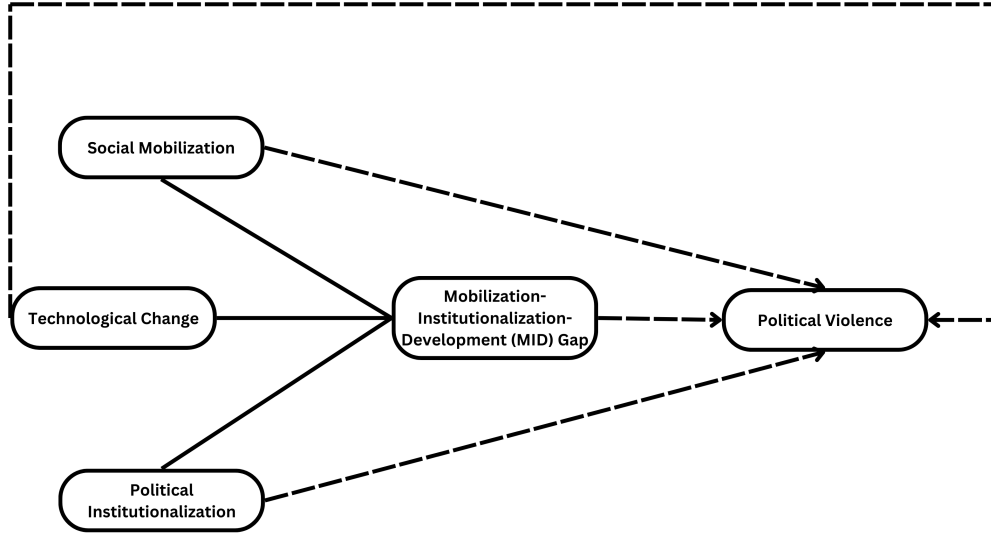


Figure 1.3.A. Conceptual Framework

1.3.2. Econometric Model

The econometric model takes the form:

$$V_{it} = \beta_0 + \beta_1 V_{it-1} + \beta_2 SM_{it} + \beta_3 PI_{it} + \beta_4 ED_{it} + \sum_{j=5}^k \beta_j X_{ijt} + \mu_{it} \quad (1)$$

$$V_{it} = \alpha_0 + \alpha_1 V_{it-1} + \alpha_2 GAP_{it} + \sum_{j=5}^k \alpha_j X_{ijt} + v_{it} \quad (2)$$

$$V_{it} = \lambda_0 + \lambda_1 V_{it-1} + \lambda_2 GAP_{it} + \lambda_3 GAP_{it}^2 + \sum_{j=5}^k \lambda_j X_{ijt} + \epsilon_{it} \quad (3)$$

Where (V_{it}) represents the incidence of political violence. The incidence of political violence tends to be autoregressive as the current incidence of violence can perpetuate future incidences. This requires the addition of a lagged dependent variable (V_{it-1}) as a regressor. SM_{it} , PI_{it} , and ED_{it} represent social mobilization, political institutionalization, and economic development respectively. The second model omits these variables and includes the Mobilization-Institutionalization-Development Gap

(GAP_{it}). The third model adds the squared GAP to capture the nonlinear nature of the relationship. We have incorporated both linear and squared Gap term in the model in order to capture the nonlinear impact of Mobilization-Institutionalization-Development gap. The expectation is that relationship between the gap and political violence may manifest once the gap crosses a certain threshold (Davies, 1962). A statistically significant squared gap term would confirm this assertion. We are expecting at lower levels of magnitude the gap may not be violence inducing but once it crosses a certain threshold the relationship between Mobilization-Institutionalization-Development gap and political violence would change i.e. the gap will result in higher likelihood for violent conflict. The same pattern is repeated for the onset of conflict ($Onset_{it}$) i.e.

$$Onset_{it} = \beta_0 + \beta_1 SM_{it} + \beta_2 PI_{it} + \beta_3 ED_{it} + \sum_{j=4}^k \beta_j X_{ijt} + \mu_{it} \quad (4)$$

$$Onset_{it} = \alpha_0 + \alpha_1 GAP_{it} + \sum_{j=4}^k \alpha_j X_{ijt} + v_{it} \quad (5)$$

$$Onset_{it} = \lambda_0 + \lambda_1 GAP_{it} + \lambda_2 GAP_{it}^2 + \sum_{j=4}^k \lambda_j X_{ijt} + \epsilon_{it} \quad (6)$$

Here we are not including the autoregressive term as multiple onsets of conflict are not necessarily linked with one another, meaning that onset of a conflict may not result in instigation of new conflicts. For intensity of violence the econometric models are similar to equation 4-6 respectively.

$$Intensity_{it} = \beta_0 + \beta_1 SM_{it} + \beta_2 PI_{it} + \beta_3 ED_{it} + \sum_{j=4}^k \beta_j X_{ijt} + \mu_{it} \quad (7)$$

$$Intensity_{it} = \alpha_0 + \alpha_1 GAP_{it} + \sum_{j=4}^k \alpha_j X_{ijt} + v_{it} \quad (8)$$

$$Intensity_{it} = \lambda_0 + \lambda_1 GAP_{it} + \lambda_2 GAP_{it}^2 + \sum_{j=4}^k \lambda_j X_{ijt} + \epsilon_{it} \quad (9)$$

Dependent Variables

We intend to assess the impact of the mobilization-institutionalization-development gap on the likelihood of violence, onset of violent conflict, and intensity of violence. In the first instance the dichotomous variable of whether violence (V_{it}) took place in the country for a given year will be used as the dependent variable.

$$V_{it} = \begin{pmatrix} 0, & \text{if no violence took place in country } i \text{ in year } t \\ 1, & \text{if there was a violent event in country } i \text{ in year } t \end{pmatrix}$$

Here, violence refers to internal armed conflict where at least one party was the state. The second dependent variable is onset of violent conflict. This is different from likelihood of violence because it marks the beginning of a violent movement, which may or may not continue over the following years. This variable will enable us to analyze the role MID gap would play in starting violent conflict. This variable also has dichotomous values.

$$Onset_{it} = \begin{pmatrix} 0, & \text{if no onset of violent conflict in country } i \text{ in year } t \\ 1, & \text{if there was onset of violent conflict in country } i \text{ in year } t \end{pmatrix}$$

The last dependent variable is intensity of violent conflict. The intensity variable is measured as number of battle related deaths in year t .

$$intensity_{it} = battledeaths_{it}$$

Explanatory Variables

Social Mobilization

Deutsch (1961) introduces social mobilization as a composite of several constituent social processes. If the generalized social mobilization process is represented by the symbol M , its constituent processes would be represented by m_i with $i= 1, 2, 3, \dots$

These processes are associated with one another and reinforce each other's impact. All of the processes represent the catalysts for social change. For example, m_1 can represent exposure to facets of modern life, m_2 can stand for use & access to mass media, m_3 for change of residence, m_4 for urbanization, m_5 for agricultural to non-agricultural employment, m_6 for literacy, m_7 for per capita income and so on (Deutsch, 1961).

The problem with incorporating a measure of economic development i.e. per capita income in the indicator is that this particular process represents value achievement not aspiration, which makes it a process distinct from social mobilization. Therefore, per capita income has to be omitted from the indicator of social mobilization (Huntington, 1968).

Schneider & Schneider (1971) constructed the index of social mobilization using four indicators. The first (m_1) represented percentage of male labor force engaged in nonagricultural sector, the second (m_2) percentage of urban population, third (m_3) access to mass communication including televisions sets, radios and new papers per 1000 persons and last (m_4) percentage of population enrolled in higher studies i.e. universities and colleges. Yough and Sigelman (1976) used school enrollment, literacy rate, radios and new papers per capita as indicators. Yough (1981) extended the measure by adding urbanization to his previous indicator and omitting radios per capita. At the same time primary and secondary enrollment were added as separate indicators.

So far as we know this index has not been updated since the work of Yough (1981).

We first propose updating the indicators used for social mobilization. Our proposed indicators are:

m_1 – Urbanization

m_2 – Percentage of labor force employed in nonagricultural sectors

m_3 – Female labor force participation

m_4 – Enrollment in primary education

m_5 – Enrollment in secondary education

m_6 – Internet use

m_7 – Cellular phone subscriptions per capita

m_8 – Fixed telephone subscriptions per capita

m_1 represents the “spatial aspect” of mobilization. Urbanization not only represents the relocation of a significant proportion of the population to urban areas but also enhances exposure and access to better government services and, at the same time greater competition for jobs and other resources. Canclini (2017) explains that the use of urban space and increased means of communication cause discontent and frustration. Indicators m_2 and m_3 represent changes in the labor market. Increased female labor force participation (m_3) increases competition in job markets as well as challenges existing societal norms. Conversely, it allows for more efficiency and better use of human resources. An increase in nonagricultural employment leads to a shift towards industrial and services sector jobs which generally require more training and are subject to greater competition. A trend towards greater enrollment in primary (m_4) and secondary education (m_5) represents an improvement in human re-

sources and results in rising expectations. Finally, internet use (m_6), cellular phone usage (m_7), and telephone usage (m_8) represent access to and use of technologies of communication. This is expected to improve exposure to previously unfamiliar consumption possibilities and readily allow access to information about new opportunities. Jacobson (2015) on the other hand signifies that internet use makes it much more difficult for dissidents to formulate a coherent strategy for rebellion. While the author acknowledges that for radicalization of lone-wolf terrorist internet may be an enabling factor but for organized group violence real life interactions are more effective for coordination. Warren (2015) also posits that the extent of mass media coverage produces significant pacifying effects on the public. Wilson & Wilson (2009) signify that digital divide creates impediment to peacebuilding efforts. Additionally, Surratt (2017), Brignall & Valey (2005) and Zhang (2018) assert that internet use is an essential element of social change. Weidmann (2016) is of the view that the reporting bias over-estimates the positive impact of cellphone use on political violence, while Bergren & Bailard (2017) concluded that mobile phone do not encourage violence in Myanmar. Absher & Grier (2019) established that mobile phone network reduces the violent collective action based on evidence from Libya. Similarly, Shapiro & Weidmann (2015) found that mobile phone communications reduce insurrection in Iraq. There is sufficient evidence to assert that use of internet and cellphones not only constitute a major social change but also can be instrumental in pacifying dissidence. That said, there does exist evidence to the contrary (Pierskalla and Hollenbach, 2013; Ackermann et al., 2021; Gallacher et al., 2021). It changes consumption patterns, opens new venues for economic activities, and raises expectations regarding opportunity structure, public service delivery, and political representation. Moreover, the media can function as an instrument of governmental control by shaping public opinion. Consequently, communication technologies may also be utilized as mechanisms of state authority, potentially inciting violent actions. Following Yough and Sigelman (1976) and Yough (1981) we will first normalize each indicator using

standardization.

$$m_{ijt}z = \frac{m_{ijt} - \mu_{ij}}{\sigma_{ij}}$$

In this m_{ij} represents j^{th} indicator of social mobilization for i^{th} country, μ_{ij} is the mean value of j^{th} indicator for i^{th} country and σ_{ij} is the standard deviation of j^{th} indicator for country i^{th} . Since we are dealing with interval variables the final index i.e. Social Mobilization Index (SMI) will be constructed using Principal Component Analysis (PCA). PCA is used to reduce the dimensionality of a multifaceted latent phenomenon without losing a lot of information. This is done by transforming a large set of variables into a smaller one that still contains most of the information in the large set (Maćkiewicz & Ratajczak, 1993).

Social mobilization leads to heightened political awareness and increased participation in public life, as citizens demand rights, services, and representation. At the same time societal transformations can reduce the likelihood of political violence under certain conditions. These processes contribute to individual empowerment, information access, and awareness, that may increase political engagement through institutional rather than violent means (Brysk, 2018). Social mobilization can reduce the intensity of political violence by enhancing the capacity of individuals and groups to express grievances through nonviolent and institutionalized means. As communities become more educated and connected, they gain greater political voice and legitimacy. Consequently, even when conflict arises, it is more likely to be managed through lower-intensity forms of contention, reducing the scale, duration, and lethality of violence.

Political Institutionalization

Huntington (1965) defines political institutionalization as the process of political development. Institutionalization refers to the process that facilitates and ensures

stability and effectiveness of political organizations and procedures. Political institutionalization may reduce the likelihood of political violence by providing stable, predictable, and legitimate channels for conflict resolution and grievance redressal. This diminishes the incentives for actors to resort to violence as a means of achieving political goals. Political institutionalization can limit intensity of political violence by enforcing rules, regulating security forces, and enabling dialogue between conflicting parties. In contrast, weak institutionalization often fail to contain violence once it erupts, leading to more deadly conflicts.

The level of institutionalization can be having four major characteristics i.e. adaptability, complexity, autonomy and coherence (Huntington, 1965). Our objective is to quantify and measure these criteria, in order to determine the level of political institutionalization in the nation.

Adaptability is a function of the age of existing political institutions, with the rationale being that the persistence of institutions indicates their adaptability to changing requirements. Huntington (1965) identifies age of political parties as a valid indicator of adaptability. This is so because age of the political parties show their ability to adapt to changing circumstances, implying the existence of flexibility in their institutional framework to adjust to unfavorable situations, even forming unlikely alliances and/or resorting to dynastical pedigrees to remain relevant. Schneider and Schneider (1971) also incorporate the age of major political parties as the measure of adaptability. Our measure of adaptability consists of two indicators: The age of existing polity (Adap1) and the average age of major political parties (Adap2).

Complexity involves greater divisions in the organizational units. In the political arena, it refers to a greater decentralization of government authority (Schneider & Schneider, 1971). According to Huntington (1965) complexity requires that the decision-making is not carried out by one actor. A simple political system with cen-

tralized decision-making is generally less stable compared to a more devolved and decentralized government system. This allows for a more vibrant regional political participation and creates incentives for local leaders to pursue political means like elections and campaigning for achieving regional goals and conflict resolution. In this regard, we are considering the indicator called local democracies (Comp).

The third dimension of political institutionalization is the extent to which political organizations exercise independence from other non-political organizations. This means that an autonomous political system would not disproportionately serve the interests of particular groups leading to inter-group grievances. According to Huntington (1965), an autonomous political system seeks to minimize the use of coercion and limit the influence of the elite. In this regard, we are considering four indicators for autonomy of political institutions: Whether chief executive of the nation is a serving military officer (Auto1); whether the ruling party lists issues pertaining to a particular region as a key component of the party's platform (Auto2); Legislative Electoral Competitiveness (Auto3) and Executive Electoral Competitiveness (Auto4).

The last aspect of political institutionalization is coherence. An effective political system is characterized by a definitive consensus on the direction of polity as well as policy. Our indicators for institutional coherence are the share of seats held by the largest government parties (Cohr1); the number of parties in the government (Cohr2) and whether the country's polity can be characterized as an anocracy (Cohr3).

Since the indicators in this case are categorical, PCA would be unsuitable for the construction of an index. However, a polychoric correlation matrix would allow for the application of PCA with mixed data. That allows for mixed data analysis using PCA and calculation of index for political institutionalization.

Economic/ Technological Development

Economic development here stands for technological change in the country. The level

of economic development and technological change represents the scale of resources available in the economy to meet rising expectations due to social change. Economic development may reduce the likelihood and intensity of political violence by improving available economic opportunities and communication infrastructure. These improvements can alleviate grievances and facilitate peaceful political engagement. However, economic development may also incentivize violent actors to engage in war-like activities for enhancing their share in national wealth, making its overall effect context-dependent.

Our indicator of economic development comprises four components: GDP per capita; medium and high-tech industry as a percentage of manufacturing value added, energy use per capita, and medium and high-tech exports as a percentage of total exports. PCA was used to construct the index of economic development as all the variable that constitute technological change are interval variables.

Mobilization-Institutionalization-Development (MID) Gap

The MID Gap has been operationalized by Schneider and Schneider (1971) by incorporating ratio terms in the final econometric model. The gap between social mobilization and political institutionalization has been measured by the ratio of the two variables i.e.

$$Gap_1 = \frac{SMI}{PII}$$

While the gap between social mobilization and economic development (ED) is measured as:

$$Gap_2 = \frac{SMI}{ED}$$

We are inclined towards following the approach of Yough and Sigelman (1976). The index of social mobilization will be regressed on political institutionalization and economic development i.e. $SMI_{it} = \alpha_0 + \alpha_1 PII_{it} + \alpha_2 ED_{it} + \vartheta_{it}$

In this case $Gap_{it} = \alpha_0 + \vartheta_{it}$

If $Gap_{it} > 0$, then the nation for that time would be considered more mobilized than expected on the basis of its institutionalization and economic development which would lead to higher levels of frustration resulting in acts of aggression. On the other hand, if $Gap_{it} < 0$ then the opposite is true i.e. the levels of institutionalization and technological change are higher than the level of social mobilization. If $Gap_{it} \rightarrow 0$ then that indicates balance between mobilization and institutionalization, and development.

The deviation between rising social mobilization and lagging political institutionalization and economic development i.e., the MID gap, creates frustration and unmet expectations. When socially mobilized populations face unresponsive institutions or stagnant economic opportunities, their collective grievances face dearth of legitimate outlets for redressal. This gap weakens state legitimacy, fuels aggression, and increases the probability of both the onset and escalation of political violence.

Control Variables

Literature identifies a number of prospective control variables. The most commonly used control variable in this respect is population growth. High population growth is expected to increase competition for scarce resources and can potentially increase frustration leading to a high likelihood of conflict (Yough & Sigelman, 1976; Yough, 1981; Sigelman and Simpson, 1977; Miguel et al., 2004).

Yough (1981), Ree & Nillesen (2009) and Nielsen et al. (2011) posit that economic dependence can have important implications for likelihood of violence. However, Ree & Nillesen (2009) and Nielsen et al. (2011) considered foreign aid as an important determinant of violence and also found it to be violence inhibiting. We will also employ globalization as control variables following Ezcurra & Manotas (2015).

The authors found that globalization leads to increase in the incidence of violence. However, the impact can go both ways as globalization may also lead to instigation of reputation mechanism i.e. the international economic and political linkages may lead to the availability of alternative venues for conflict redressal. Further, globalization may also lead to better economic opportunities and the international reputation mechanism may help in preventing state suppression leading to reduction in political violence.

Further credit to private sector may improve access to capital resulting in enhancement of capabilities for achieving rising aspirations, translating into reduced likelihood of incidence of violence. Another important factor in explaining the incidence is the employment among youth. This particular grievance indicates the insufficiency of the economic incentives lowering the opportunity cost of engaging in violence (Ali, 2014; Urdal, 2008).

Equation 7 capture the impact of social mobilization, political institutionalization and economic transformation on intensity of violence. Equation 8 and 9 capture the effect of mobilization-institutionalization-development gap on the intensity of political violence. As per our expectation social mobilization, political institutionalization and technological development are to have negative effect on intensity of violence. Zwi & Ugalde (1989) expressed that increase in military expenditures lead to increase in intensity of political violence. Collier (2006) also alluded to the positive relationship between military expenditure and political violence.

Foreign aid can be effective in reducing the intensity of violence especially if it is channeled to education and healthcare (Young & Findley, 2011). Lehmann (2021) also posits that humanitarian aid reduces conflict deaths. However, dependency on limited foreign aid may lead to competition among different groups regarding control over distribution of foreign aid. Further, if aid fails to reach its intended beneficiaries,

it may exacerbate existing grievances leading to higher intensity of political violence. Lastly, we have population density as a regressor. Caillaud et al. (2020) were of the view that population density would increase the number of individuals in the proximity of violent conflict leading to increase in casualties.

1.3.3. Data

Considering the diverse and multidisciplinary nature of the work multiple data sources are used. The data on political violence, its onset, and intensity is accessed from the UCDP/PRIO Armed Conflict Dataset, Version 19.1. The data for indicators of economic development and social mobilization can be accessed from World Development Indicators (WDI) by the World Bank, while specific indicators of political institution- alization are accessed from the Database of Political Institutions 2020 published by the Inter-American Development Bank as well as Global State of Democracy Indices (GoSDI) by Institute of Democracy and Electoral Assistance (IDEA) and Polity5 dataset by Center of Systemic Peace. While most of the data of control variables can be accessed from WDI, the data for globalization can be obtained from KOF Swiss Economic Institute’s disaggregated KOF Globalization Index.

Table 1.3.3.a. Explanation of Variables

Sr.No.	Variable	Explanation	Data Source
1	Incidence of Violence	Incidence of a internal violence with as well as without involvement of foreign states	UCDP/PRIO
2	Onset of violence	Whether a violent conflict started in the year t for country i (1) or not (0)	UCDP/PRIO

3	Intensity of Violence	Number of battle deaths	UCDP/PRIO
<i>Social Mobilization</i>			
4-i	Urbanization	Urban population (% of total population)	WDI 2022
4-ii	Industrial Employment	Employment in industry (% of total employment)	WDI 2022
4-iii	Services sector Employment	Employment in services (% of total employment)	WDI 2022
4-iv	Female Labor Force Participation	Employment to population ratio, 15+, female (%)	WDI 2022
4-v	Primary enrollment	School enrollment, primary (% gross)	WDI 2022
4-vi	Secondary enrollment	School enrollment, secondary (% gross)	WDI 2022
4-vii	Internet use	Individuals using the Internet (% of population)	WDI 2022
4-viii	Cellular phone usage	Mobile cellular subscriptions (per 100 people)	WDI 2022
4-ix	Fixed telephone usage	Fixed telephone subscriptions (per 100 people)	WDI 2022
<i>Political Institutionalization</i>			
5-i.	Adaptability		
5-i-a	Polity2	Combined Polity Score (-10 to +10)	Polity5, 2020

5-i-b	Average Age of Major Political Parties	This is the average of the ages of the three major political parties	DPI, 2020
5-ii.	Complexity		
5-ii-a	Local Democracies	Whether the local government is elected and whether it is empowered in relation to the central government, while another indicator assesses the freedom and fairness of subnational elections.	GoSDI, 2020
5-iii.	Autonomy		
5-iii-a.	Military as executive	Whether chief executive of the nation is a serving military officer	DPI, 2020
5-iii-b.	Focus on Regional Issues	Whether the ruling party lists issues pertaining to a particular region as a key component of the party's platform	DPI, 2020
5-iii-c.	Legislative Electoral Competitiveness	Legislative Index of Electoral Competitiveness	DPI, 2020

5-iii-d.	Executive Electoral Competitiveness Executive	Index of Electoral Competitiveness	DPI, 2020
5-iv.	Coherence		
5-iv-a.	Polity2	Combined Polity Score (-10 to +10)	Polity5, 2020
5-iv-b.	Average Age of Major Political Parties	This is the average of the ages of the three major political parties	DPI, 2020
Technological Development			
6-i.	GDP	GDP per capita (constant 2015 US\$).	WDI 2022
6-ii.	Medium & High-Tech Exports	Medium and high-tech exports (% manufactured exports)	WDI 2022
6-iii	Medium & High-Tech Value Added	Medium and high-tech manufacturing value added (% manufacturing value added)	WDI 2022
6-iv	Energy Use	Energy use (kg of oil equivalent per capita)	WDI 2022
Control Variables			
7	Unemployment among Male Youth	Unemployment, youth male (% of male labor force ages 15-24)	WDI 2022

8	Foreign Aid	Net official aid received (constant 2021 US\$)	WDI 2022
9	Population	Population in Millions	WDI 2022
10	Population Den- sity	Population density (people per sq. km of land area)	WDI 2022
11	Credit to Private Sector	Domestic credit to private sector (% of GDP)	WDI 2022
12	Globalization	KOF Index of Globalization	WDI 2022
13	Military Expen- ditures	Military expenditure as a percentage of gross domes- tic product	SIPRI 2021

1.3.4. Estimation Techniques

The data spans 60 countries from period 1990-2019. The countries have been selected based on data availability for the key variables and the incidence of at least one episode of political violence during the time period considered. This ensures the sample includes empirically observable instances of the phenomenon under investigation. The reason for selection of this time period was the fact that internet was not used publicly till 1989 and internet usage is a key component of or measure of social mobilization. Secondly, major institutional changes occurred in Eastern European and Central Asian countries after the end of Cold War in 1989, making 1990 as a more suitable starting time period for our research.

1.3.4.i Principal Component Analysis

In our analysis, the variables of social mobilization, political institutionalization, and economic/ technological development all represent phenomena that can be captured through multiple indicators (discussed in the previous section). Incorporating all these

indicators in our analysis could lead to redundancies and muddling up of the information generated. Further, no one indicator adequately represents in phenomenon we are trying to analyze, so a combination of variables has been employed. PCA is used to create an index from a group of variables that provide similar information. This enables us to keep maximum amount of information without having to use a large number of variables to give similar information in the analysis. At the same time, it also ensures that we don't have to choose one variable among many. To do so we need to condense multiple variables into a single indicator and make a complex phenomenon simple (Shlens, 2014).

The first step is to determine weights to be assigned to selected indicators in order to correctly represent each variable's significance in capturing the phenomenon being studied. PCA allows for the identification of the explanatory power for assigning weights. It involves deriving eigenvalues and eigenvectors from the covariance matrix, representing correlations between all indicators (Richardson, 2009). Eigenvalues depict the variance captured by each principal component by arranging the eigenvectors based on the highest to lowest eigenvalues. Through this, we find the principal components based on their significance with the first principal component explaining the highest level of variation in the data, and so on. The next step is to discard components that explain the least amount of variation and then construct the relevant index based on the remaining components¹.

For mixed data as in for deriving the index for political institutionalization, the nature of indicators incorporated is such that PCA does not obtain meaningful results. There are implications if the observed variables with discrete character are used directly in the standard PCA. The traditional approach to Principal Component Analysis (PCA) operates under the assumption that the variables follow a normal distribution. It is most effective when applied to continuous data (Ramaul & Ramaul,

¹See, <https://builtin.com/data-science/step-step-explanation-principal-component-analysis>

2016). This assumption is violated in the case of political institutionalization as the data include variables that are ordinal, dichotomous as well as continuous. Kolennikov & Angles (2004, 2009) explained a solution to this issue. The authors suggested use of Polychoric Correlations for incorporation of categorical variables into PCA. Basto & Pereira (2012) hold the view that polychoric correlation is suitable when dealing with ordinal data. Kolennikov and Angles (2004, 2009) recommend using Polychoric PCA. It uses maximum likelihood, assuming normality of latent underlying variables.

1.3.4.ii Dynamic Panel Probit Estimation

In the context of incidence of political violence, the variable has to be modeled as a dynamic variable i.e. $y_{it} = f(y_{it-1}, X_{it})$. A dynamic probit/logit model is needed. Muller (1972) and Flanigan & Fogelman (1970) express that past experiences of violence are important in explaining the current state. In such a model y_{io} is likely to be correlated with μ_i also known as unobserved heterogeneity (Miranda, 2007). Grotti & Cutuli (2018) posit that in the presence of a dynamic dichotomous response variable, any realistic empirical analysis would cater for the initial condition problem. This would affect y_{it} . That is called initial condition problem. The econometrics literature identifies three different techniques for dealing with the issue (Miranda, 2007), namely, Heckman (1981), Orme (1996) and Wooldridge (2005). Wooldridge (2005) suggests a dynamic model conditional on the first observation and to specify a distribution for the unobserved individual heterogeneity term (μ_i) conditional on the initial state and any other exogenous explanatory variables. In this context our model is updated based on changes suggested by Rabe-Hesketh and Skrondal (2013):

$$V_{it} = \beta_0 + \beta_1 V_{it-1} + \beta_2 SM_{it} + \beta_3 PI_{it} + \beta_4 ED_{it} + \sum_{j=5}^k \beta_j X_{ijt} + \vartheta_i + \varepsilon_{it}$$

$$V_{it} = \beta_0 + \beta_1 V_{it-1} + \beta_2 SM_{it} + \beta_3 PI_{it} + \beta_4 ED_{it} + \sum_{j=5}^k \beta_j X_{ijt} + \theta_0 V_{i0} + \sum_{l=1}^q \theta_l z_{i0} + \sum_{s=1}^q \theta_s z_{sm} + \vartheta_i + \varepsilon_{it}$$

Where, z_{i0} represent initial value of exogenous variables that may explain unobserved heterogeneity, while z_{im} represents their respective mean values. $\vartheta_i \sim N(0, \sigma_\vartheta^2)$ and is independent of y_{i0} and z_i . The resulting equation can then be estimated by using standard Random Effects (RE) probit technique.

1.3.4.iii. Random Effects Probit

The equation for violence onsets is estimated by using Random Effects Probit model. While the variable $Onset_{it}$ is not dynamic, it is dichotomous i.e. $Onset_{it} = 1$ if the country i in time period t has experienced onset of a violent conflict. Let the probability of $Onset_{it} = 1$ be p and the probability of $Onset_{it} = 0$ be $(1-p)$. Then $E(Onset_{it}) = p$. This probability is a function of a vector of explanatory variable (X_{it}) and that of a vector of coefficients (β_i) i.e. $p = f(\beta X_{it})$. The probit model corresponds to $f(\beta X_{it}) = \phi(\beta X_{it}) = \int_{-\infty}^{\beta X_{it}} \frac{1}{\sqrt{2\pi}} e^{-\frac{u^2}{2}} du$.

As these are nonlinear models therefore the marginal effects are reported alongside the standard regression output (Bland & Cook, 2019). This changes equation 4 and subsequent equations to the following form:

$$Onset_{it} = \beta_0 + \beta_1 SM_{it} + \beta_2 PI_{it} + \beta_3 ED_{it} + \sum_{j=4}^k \beta_j X_{ijt} + \mu_i + \epsilon_{it}$$

Here, $\mu_i \sim iidN(0, \sigma_u^2)$ and ϵ_{it} follows standard normal distribution. $\mu_{it} = \alpha_i + \varepsilon_{it}$ where, α_i are treated as random in the random effects model. The coefficients and standard errors are estimated using maximum likelihood estimation technique.

1.3.4.iv. Negative Binomial Panel Regression

The equation for intensity of violence conflict has been regressed using negative binomial regression technique. This technique is used for model over-dispersed count

variables. This means that conditional variance exceeds the conditional mean ². As we are measuring intensity of violence through the number of battle deaths the model qualifies as negative binomial regression. In random-effects overdispersion mode the dispersion varies randomly from one cross-sectional unit to another.

²[https://stats.oarc.ucla.edu/stata/dae/negative-binomial-regression/#:\\(^\\\):text=Negative\%20binomial\%20regression\%20is\%20for,researchers\%20are\%20expected\%20to\%20do](https://stats.oarc.ucla.edu/stata/dae/negative-binomial-regression/#:\(^\\):text=Negative\%20binomial\%20regression\%20is\%20for,researchers\%20are\%20expected\%20to\%20do)

Chapter 1.4.

Results & Discussion

Our work aims to ascertain the impact of social mobilization-economic development-political institutionalization gap on political violence. This chapter presents the results of our analysis. Section 1 of this chapter that deals with the estimated trends of social mobilization, technological change and political institutionalization. The global, regional and income-level based comparisons for the three indices as well as the gap has been carried out in this section. Second section deals with estimation results for the regression models.

1.4.1. Indices for Social Mobilization, Technological Change & Political Institutionalization

Figure 4A represents global trends of the average indices of social mobilization, political institutionalization and technological change. On the secondary axis we are also comparing mobilization-development-institutionalization gap. As we start with 1990s in the sample countries it is apparent that the level of social mobilization is below that of the level of technological change as well as political institutionalization. As we approach mid-2000s, we see that the level of social mobilization tends to overtake that of economic development and political institutionalization. This is also depicted in the form of the mobilization-development-institutionalization gap becoming positive

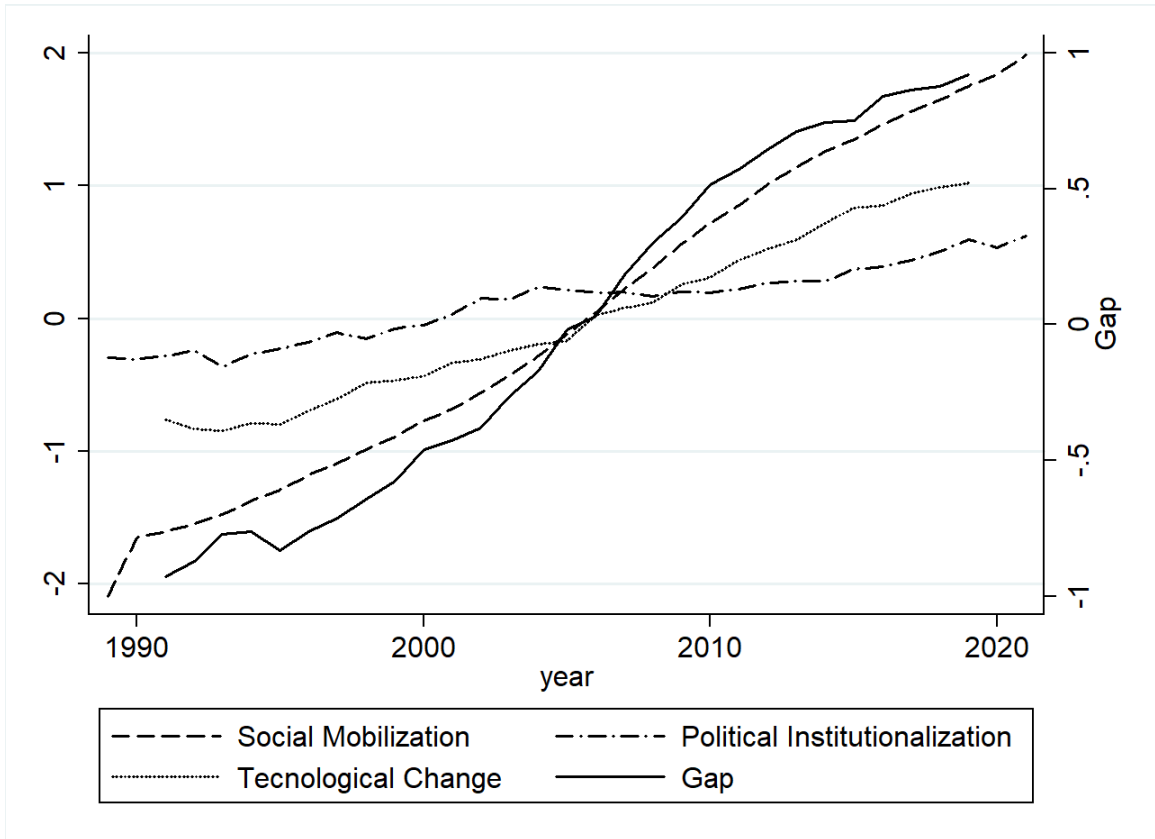


Figure 1.4.A. Global Trends

after 2005.

Figure 4B Compares trends of the three estimated indices and the MID gap for low income, lower middle income, upper middle income and high-income countries. For all groups of countries, we see that social mobilization tends to be following an increasing trend from negative to positive. On the other hand, series for economic development/ technological change is somewhat flat for low income countries while it follows an increasing trend lower and upper middle-income countries. Most interesting variation lies in the trend for political institutionalization. Lower income, lower-middle income and upper-middle income countries tend to show a recent dip in political institutionalization from 2019 onward, with the decline being most noticeable for low income countries. The level of political institutionalization remains consistent and high for high income countries. The MID gap trend depicts consistency in global

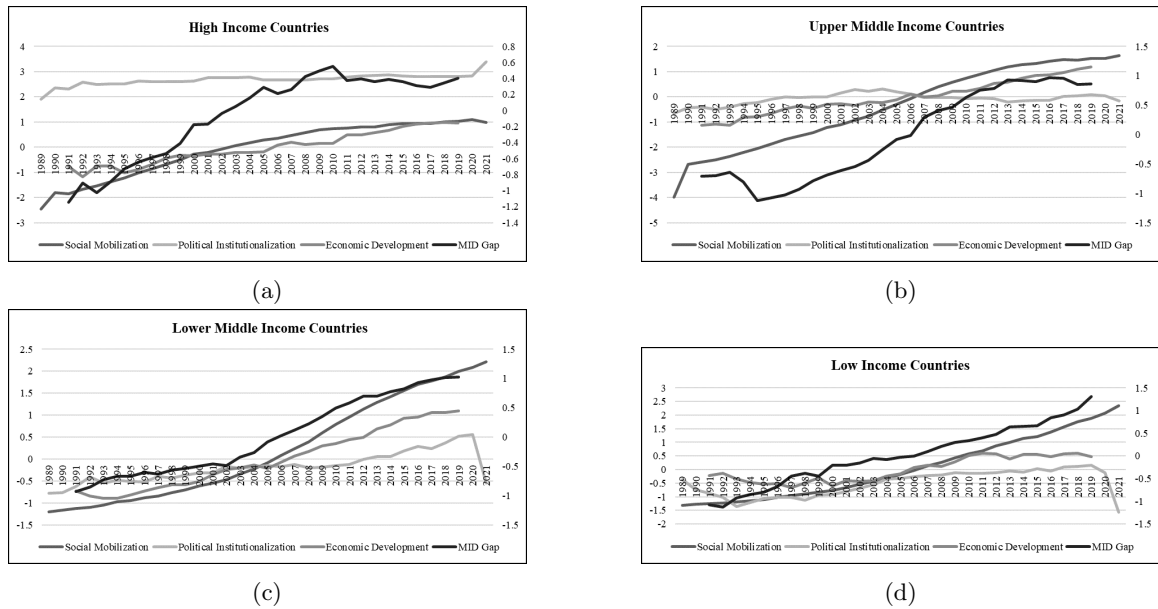


Figure 1.4.B. Trends for Different Income Groups

and income groups i.e. MID gap becomes positive in the mid-2000s. However, the value of the MID Gap is highest for the low-income countries and lowest for the high-income countries. In high income countries the level of political institutionalization is consistently higher than that of social mobilization, while that is not true for low income and lower middle income countries.

1.4.2. Estimation Results

The first results (Table 4.1.) reported are the dynamic probit estimates for impact of social mobilization, technological change and political institutionalization on incidences of political violence based on equations 1-3. The first set of results has been estimated using the full sample of 60 countries, while the second set of estimates represent 37 low income and lower-middle income countries in our sample. The third set of regression estimates comprise of 23 upper-middle income and high-income countries in the sample. The countries selected are ones that have undergone at least one incidence of violence from 1989 to 2021.

The results for models 1, 4 and 7 represent the impact of social mobilization, po-

litical institutionalization and technological change on incidence of violence. The sign for the coefficient of social mobilization is consistent with our expectations i.e. social mobilization has a negative impact on the likelihood of incidences of violence. Coefficient of social mobilization is also statistically significant at 5% level of significance for full sample and low income and lower middle-income countries. For high income countries the coefficient is significant at 1% level of significance.

This evidence suggests that societal transformations, manifested through processes such as urbanization, educational pursuits, change in labor force traits and enhanced access to communication technology can be instrumental in reducing the threat of incidence of political violence. This is so because these changes tend to enhance capabilities resulting in achievement of better functionings and improvement in well-being. This reduces the feasibility of participating in violent activity thereby decreasing likelihood of incidence of political violence. This supports our assertion that social mobilization in itself does not serve as a catalyst for violence. In fact positive social change like higher education attainment and female labor force participation may contribute to a reduction in violent tendencies. Social mobilization facilitates voice, promotes advocacy, encourages broadened worldview and enhances information (Brysk, 2018). Through this it encourages pursuit of peaceful means for conflict resolution, making engaging in violence socially undesirable. Urbanization tends to expand exposure. While increase in urban population may come with its own challenges, it may also result in economies of scale in the provision of public goods allowing for reduction in grievances (Fox & Bell, 2016). It also facilitates state's monitoring of political activity and allows for suppression of nascent dissent (Collier & Hoeffler, 2004). Pursuit of higher education (an essential constituent of social mobilization) increases opportunity cost of conflict, encourages more formal and peaceful political participation like, voting and fosters more tolerance for opposing views (Asadzade, 2022; Østby, et al., 2019). Changes in labor market lead to increased participation

as well as enhanced career choices leading to increase in opportunity cost of violence (Ferreira & Lanjouw, 2001). Improved and increased adoption of communications technology enhances connectivity and allows for exposure to alternative ideas and narratives. This, in turn, can facilitate more peaceful interactions between opposing groups and decrease the probability of political violence. In short, the processes involved in social mobilization can be violence inhibiting as is portrayed by the results.

The coefficient for political institutionalization is negative and statistically significant. It means that increase in the degree of political institutionalization reduces the likelihood of political violence. For low income and lower-middle income countries, political institutionalization is more effective in reducing likelihood of violence, as is evident from the higher absolute magnitude of the coefficient when compared with that for high and upper middle-income countries. The processes involved in political institutionalization tend to be particularly violence inhibiting.

Adaptability ensures that the political institutions adapt to new circumstances and rising expectations. This allows for adjustment of institutions to accommodate rising expectations and changing situations, thus preventing the activation of grievance mechanism for political violence (Schneider & Schneider, 1971).

A more *autonomous* political system is free from nonpolitical influences. However, if the political institutions are not adequately developed, it would be highly sensitive to outside entities. If the political system adheres to the interests of nonpolitical actors like the military, particular regional, ethnic and/or religious groups, the institution in itself becomes extractive. That means political institutions undermine the inclusivity of political organization like the parliament and the senate etc., limiting their capacity to represent minorities and non-incumbent groups (Huntington, 1965).

Complexity refers to the variety and number of subunits involved in functioning of the polity. Greater is this number better the ability of the political system to represent

diverse interests and provide peaceful means for conflict resolution. It allows for more grass-roots level representation in national polity (Huntington, 1965). This ensures that the executive can be approached regarding regional concerns or the regions have access to means of redressal of concerns. It provides a channel to communicate grass-roots issues to the executive authorities and also allows the state to effectively communicate important information to the masses (Schneider & Schneider, 1971). Devolution of political power to local government provides an effective framework for conflict resolution and peacekeeping.

Lastly, *coherence* also allows for higher levels of political institutionalization. It is characterized by higher levels of unification and consensus building. Further, it ensures that the rules of game are clear, the individuals on key decision-making positions are clearly identified and a diverse group is represented in avenues of political power. It makes conflict and resulting aggression less likely, by accommodating a diverse set of interests in the political decision-making process.

Coefficient of technological change was found to be statistically insignificant across the board i.e. for full sample, low and lower- middle income countries, and high income and higher middle-income countries. Also, for full sample and low and lower-middle income countries the coefficient is positive, while for high income and upper-middle income countries it is negative. This shows that technological change does not exert any statistically significant effect on political violence. While the result is counter intuitive, it can be explained and found in literature. Schneider & Schneider (1971) and Yough & Sigelman (1976) found very low correlation between technological development and incidence of violence. This may be attributed to the fact that technological change may not mitigate sources of grievances like unequal distribution of resources and social injustice, making technological transformation ineffective.

The coefficient of mobilization-institutionalization-development gap is insignificant

across samples. This is expected and based on the existing literature (Schneider & Schneider, 1971; Yough & Sigelman, 1976). Further, Davies (1962) and Davies (1969) also postulate that until mobilization-institutionalization-development gap crosses a particular threshold, it does not lead to aggression. Frustration can exist without people resorting to violence and hence in order to assess the relationship between MID gap and incidence of political violence a squared term may be needed. Which is added in the third variate of the model.

The coefficient of the squared gap is consistently positive and statistically significant giving credence to our assertion that the relationship between mobilization-institutionalization-development gap and incidence of violence is nonlinear. As the MID gap increases the level of frustration in the economy also increases. However, for low levels of frustration i.e. MID gap do not cause aggression. As the gap increases the level of frustration in the country reaches a critical level generally achieved as social mobilization out paces the rate of economic development and political institutionalization. Based on Deutsch (1961) social mobilization theory which posits that social transformation from traditional to modernized society leads to increased expectations, potentially creating a disparity between expectations and achievements. Social mobilization involves changes in residence, occupations, communication, roles, and actions, prompting a reassessment of economic, social, and political expectations. This necessitates adaptable, complex, autonomous, and coherent institutional arrangements to address rising aspirations. Extensive social change can result in frustration and discontent, particularly among politically relevant social, ethnic, and/or religious groups, as aspirations may outpace achievements. The aggression theory links aggression to the pace of economic and social development. It points to systemic frustration, arising from hindrances in the achievement of aspirations. It is viewed as a collective outcome experienced by individuals identifying with different social groups during societal change (Feierabend et al., 1969). Feierabend and Nesvold

(1969) associate systemic frustration with modernization, suggesting that transition-ing societies are more prone to collective violence due to unmet expectations. Gurr's (1969) relative deprivation theory asserts that the gap between expectations and ca-pabilities breeds frustration and, consequently, aggression. Gurr (1969) elaborates that conflicts result from political and economic relative deprivation, defined as the deviation between expectations and the capacity to meet them. This concept aligns with Feierabend and Nesvold's (1969) system frustration. Persistent deprivation, when expectations rise without enhancing capabilities or capabilities decrease while expectations remain constant, increases the likelihood of conflict. Gurr (1970) further explains that frustrations can lead to its politicization, with opposition groups exploit-ing relative deprivation to garner support and incite politically motivated collective violence against the state. In summary, the social mobilization framework, coupled with aggression and relative deprivation theories, provides insights into how societal transitions can generate frustration, disparity, and violence, emphasizing the impor-tance of addressing rising expectations during periods of significant social change.

The coefficient for youth unemployment is positive and statistically significant. This indicates that youth unemployment leads to increase in likelihood of incidents of political violence. Interestingly, while the coefficient of youth unemployment re-mains positive, is not statistically significant for high and upper middle-income coun-tries. This could be attributed to more extensive opportunity structures, including greater access to education, vocational training, and diverse employment prospects. Additionally, well-developed social protection and transfer systems in these countries may provide financial support during job searches, partly mitigating the immediate economic impact of unemployment. This result signifies that although youth un-employment is a global concern with implications for political violence, its primary impact is disproportionately felt by low and lower-middle-income countries. This im-plies that the escalation of political violence is predominantly associated with youth

unemployment in low income and lower-middle income countries. Unemployment among youth tends to instigate the grievance mechanism. Young people entering the job market with insufficient job opportunities and poor prospects may be more easily recruited into rebel groups. This may be attributed to lack of alternative opportunities for improving the current standard of living. That in turn leads to reduction in the opportunity cost of violence leading to higher incidences of aggression. Sanford and Mullen (1985) posit that the psychological stress exerted by unemployment may result in making young adults more aggressive, leading to increased incidences of violence. Caruso and Gavrilova (2012) posit that youth unemployment raises both probability and intensity of political violence. Abdelkarim (2017) also identified youth unemployment as a push factor towards violent extremism.

Impact of population as indicated through its coefficient is positive and statistically significant for incidences of violence (Table 4A). The growth in population results in heightened competition for limited resources (Urdal, 2008). At the same time effective monitoring of all opposition groups becomes more challenging for the state. Therefore, a rise in population is associated with higher incidences of violence. High population also makes it much more difficult to provide necessary public services to all, leading to increased deprivation among the masses. This may instigate grievance mechanism resulting in frustration and aggression. Kahl (1998) points out that increase in population may cause environmental stress leading to decline in overall well-being and can translate into greater incidences of civil conflict. This result is corroborated by Witmer, et al. (2017). The authors argue that climatic issues, exacerbated by a growing population, complicate the allocation and management of resources, resulting in increased grievances and aggression.

The coefficient of globalization for the most part has been statically insignificant and negative. Upon a more thorough assessment globalization which is an amalgam of economic, political and social aspects of globalization, is more effective in reducing the

likelihood of violence among high income and upper-middle income countries, while for low income and lower-middle income countries globalization remains ineffective in reducing violence. This is evidenced by the negative but statistically insignificant coefficient for globalization in low income and lower-middle income countries. Globalization can be effective in reducing incidence of political violence through a number of channels. Weede (2004) alludes to the peacekeeping effect of globalization. For starters the cross-border information exchange provides people with a broader perspective on role of government as well as global best practices. Thus, more informed people would be less likely to elect violence as their primary recourse. Globalization also leads to increased exposure to diverse perspectives, engendering more tolerance for opposing points of views and greater acceptance for cultural, religious and ethnic differences (Chisadza & Bittencourt, 2016). Further globalization also gives rise to advocacy networks like Amnesty International, Human Rights Watch etc, which can put pressure on governments to address internal issues more effectively and peacefully (Dubee, 2007). Further they also advocate for provision of human rights thus preventing the emergence of grievances.

The coefficient for credit to private sector is found to be negative and significant. However, it is found to be insufficient and positive for high income and upper middle-income countries. Credit to private sector provides access to capital that would be instrumental in enhancing entrepreneurship and increasing economic opportunities resulting in reduction in incidences of violence. However, its effectiveness can be compromised by the disproportionate allocation of credit towards sustaining established businesses rather than supporting new or small enterprises. This means that benefits derived from provision of credit to private sector accrue to a select group of entrepreneurs and may not mitigate the existing deprivation among low income and middle-income households. This limitation diminishes the effectiveness of private sector credit in reducing the incidence of violence.

Official Development Aid (ODA) is found to be an important variable in explaining incidence of political violence. The coefficient of ODA is positive and statistically significant which means that foreign aid is effective in increasing the likelihood of politically motivated violent incidents. Aid may cause competition over resources it generates leading to conflict over its distribution. Further, due to misallocation, aid may fail to reach its intended beneficiaries leading to persistence of frustrating deprivations and may potentially fuel violence. Over-reliance on development aid may create a Dutch Disease like situation where local economic capacity is neglected for achievement of national goals. This may create economic imbalances and contribute to unrest. Conditionality that generally accompanies aid flows may undermine national sovereignty leading to discontent among groups (Dupuy et al., 2016). The allocation of aid may also be problematic favoring certain ethnic or religious groups over other, elevating existing cleavages and giving rise to conflicts. Further, large scale development projects funded by foreign aid may be the cause of conflict through environmental degradation and forced displacement of indigenous populations (Boutton and Pascoe, 2018). Donor's own intent also matter in explaining the impact of foreign aid on political violence. Especially the aspect of aid conditionality can instigate internal conflicts as groups with diverging interests spar for control, or to resist foreign pressures (Tokdemi, 2017). When allocation of foreign aid programs representative participation, it may not address the actual needs and concerns of the populace. This disconnect can lead to frustration and dissatisfaction, resulting in political violence.

Our analysis of incidences of violence depicts that while social mobilization and political institutionalization are statistically significant and violence inhibiting, technological transformation was found to be insignificant in affecting political violence. Further, our results confirm the nonlinearity between the mobilization-institutionalization-development gap through the statistically significant and positive coefficient of the MID gap. This gives credence to the frustration aggression hypothesis for incidence

of violence. We have also estimated the results for onset of violent conflict and found that social mobilization, technological development and political institutionalization are all statically insignificant in explaining onset of conflict. Further, the MID gap and the squared MID gap were also found to be statistically insignificant. The results of this estimation are attached in the appendix.

Table 1.4.i. Dynamic Probit Estimates for Impact of Social Mobilization, Technological Development & Political Institutionalization on Political Violence

	(1)						(2)					
	Full Sample						Lower Middle Income & Low-Income Countries					
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Lag of Internal Violence	1.4221*** (0.1592)	-	1.4567*** (0.1529)	-	1.4508*** (0.1527)	-	1.4285*** (0.1711)	-	1.4439*** (0.1611)	13.4390*** (0.1612)	-	-
Social Mobilization	-0.1516** (0.0688)	-0.0283** (0.0128)	-	-	-	-	-0.1611** (0.0768)	-0.0369** (0.0174)	-	-	-	-
Political Institutionalization	-0.1273** (0.0638)	-0.0238** (0.0118)	-	-	-	-	-0.1244* (0.0751)	-0.0285* (0.0171)	-	-	-	-
Technological Change	0.0298 (0.0833)	0.0056 (0.0156)	-	-	-	-	0.0564 (0.0836)	0.0129 (0.0189)	-	-	-	-
Mobilization Gap	-	-	-0.0503 (0.0858)	-0.0093 (0.0158)	-0.0421 (0.0786)	-0.0078 (0.0144)	-	-	-0.0558 (0.0908)	-0.0429 (0.0834)	-0.0121 (0.0196)	-0.0093 (0.0180)
Gap ²	-	-	-	-	0.0182*** (0.0048)	0.0034*** (0.0009)	-	-	-	0.0219*** (0.0058)	-	0.0047*** (0.0013)
Youth Unemployment	0.0495*** (0.0158)	0.0093*** (0.0029)	0.0374** (0.0177)	0.0069** (0.0032)	0.0416** (0.0182)	0.0077** (0.0033)	0.0566*** (0.0178)	0.0130*** (0.0040)	0.0405** (0.0203)	0.0464** (0.0209)	0.0088** (0.0044)	0.0100** (0.0045)
Population	1.8600*** (0.6303)	0.3479*** (0.0029)	1.4466*** (0.5588)	0.2676*** (0.0963)	1.4338** (0.5605)	0.2648** (0.0964)	2.2502** (0.9195)	0.5156*** (0.2011)	1.5340* (0.8143)	1.4835* (0.8175)	0.3323** (0.1681)	0.3207** (0.1685)
Globalization	-0.0138 (0.0124)	-0.0026 (0.0023)	-0.0285** (0.0123)	-0.0053* (0.0022)	-0.0286** (0.0124)	-0.0053** (0.0022)	-0.0303 (0.0243)	-0.0070 (0.0055)	-0.0328 (0.0242)	-0.0316 (0.0242)	-0.0071 (0.0052)	-0.0068 (0.0051)
Credit to Private Sector	-0.0150** (0.0072)	-0.0028** (0.0013)	-0.0112* (0.0066)	-0.0021* (0.0012)	-0.0116* (0.0066)	-0.0021* (0.0012)	-0.0079 (0.0083)	-0.0018 (0.0019)	-0.0076 (0.0082)	-0.0084 (0.0082)	-0.0017 (0.0018)	-0.0018 (0.0018)
Official Development Aid	0.2199*** (0.0644)	0.0411*** (0.0013)	0.1791*** (0.0648)	0.0331*** (0.0118)	0.1786*** (0.0652)	0.330*** (0.0118)	0.2169*** (0.0784)	0.0497*** (0.0170)	0.1591** (0.0777)	0.1534** (0.0783)	0.0345** (0.0162)	0.0332** (0.0162)
Intercept	-5.1535*** (1.4011)	-	-3.9973*** (1.3675)	-	-3.9562*** (1.3789)	-	-5.6045*** (1.6576)	-	-3.4734*** (1.5637)	-3.3144** (1.5795)	-	-
Wald (Prob.)	297.39 (0.000)	-	274.27 (0.000)	-	281.46 (0.000)	-	266.68 (0.00)	-	260.32 (0.00)	281.63 (0.000)	-	-
N	1204	-	1204	-	1204	-	864	-	864	864	-	-
Groups	60	-	60	-	60	-	37	-	37	37	-	-

Table 1.4.ii. presents the results for battle deaths/ intensity of violent conflicts as specified in models 7-9. The estimates have been generated through the negative binomial panel regression technique. The coefficient of social mobilization is found to be negative and statistically significant for full sample as well as low income and lower middle-income countries' sample. For high income and upper-middle income countries' sample, the results are found to be statistically insignificant showing that for these countries social mobilization does not play a significant role in explaining the intensity of political violence. For developing nations, the processes involved in social mobilization can be particularly violence inhibiting. For example, urbanization, would make acts of violence more prominent inviting increased international scrutiny. The enhanced visibility of violence in densely populated urban areas would potentially attract greater international condemnation for engaging in acts of violence. This would incentivize the groups engaged in conflict to employ targeted attacks and minimize collateral damage as much as possible. Increased levels of education would be instrumental in developing human capital as well as enhancing the capability to think critically and independently. This enables individuals to explore more peaceful alternatives for conflict resolution and grievance redressal (Aspy & Aspy, 1996). Krueger, et al. (2015) assert that higher levels of education are associated with lower rates of mortality. Increase in nonagricultural employment can potentially open new venues for improving livelihood (DeJanvry & Sadoulet, 2001), increasing the opportunity cost for engaging in violent conflict leading to difficulties in recruitment for rebel groups, thus reducing intensity of violent conflict. Access to internet and other means of communication improves exposure and provide outlet for frustration without having to resort to physical confrontation (Brinkerhoff, 2006). Further, it enables people to expose atrocities committed for political gain resulting in loss of goodwill and increasing the cost of widespread high casualty political violence (Macías-Medellín & Atuesta, 2021).

	(3)					
	High-Income & Upper Middle Income Countries					
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Lag of Internal Violence	1.5299*** (0.3109)		1.7853*** (0.2033)		1.7426*** (0.2128)	
Social Mobilization	-0.3819*** (0.1347)	-0.0288*** (0.0112)	-	-	-	-
Political Institutionalization	-0.2633** (0.1203)	-0.0198** (0.0094)	-	-	-	-
Technological Change	-0.1672 (0.3040)	-0.0126 (0.0229)	-	-	-	-
Mobilization Gap	-	-	0.3559 (0.3759)	0.0292 (0.0296)	0.3275 (0.3814)	0.0265 (0.0300)
Gap ²	-	-	-	-	0.2541** (0.1113)	0.0206** (0.0093)
Youth Unemployment	0.0706* (0.0381)	0.0053* (0.0029)	0.0380 (0.0258)	0.0031 (0.0022)	0.0448 (0.0289)	0.0036 (0.0024)
Population	2.4533* (1.3865)	0.1847* (0.1095)	0.5383** (0.2582)	0.0442** (0.0214)	0.7106*** (0.2505)	0.0575*** (0.0218)
Globalization	-0.0169 (0.0388)	-0.0013 (0.0029)	-0.0684** (0.0307)	-0.0056** (0.0022)	-0.0707** (0.0316)	-0.0057** (0.0023)
Credit to Private Sector	0.0020 (0.0094)	0.0002 (0.0007)	0.0063 (0.0074)	0.0005 (0.0006)	0.0063 (0.0079)	0.0005 (0.0006)
Official Development Aid	0.4322*** (0.1459)	0.0325*** (0.0106)	0.3677*** (0.1242)	0.0302*** (0.0100)	0.4032*** (0.1269)	0.0326*** (0.0103)
Intercept	-14.4975*** (3.7590)		-8.8758*** (2.3006)		-10.3851*** (2.3775)	
Wald Chi2 (Prob.)	99815.79 (0.00)		506.32 (0.00)		589.13 (0.000)	
N	340		340		340	
Groups	23		23		3	

The coefficient of political institutionalization is negative and statistically significant for the full sample and the sample constituting low and lower-middle income countries. For high income and upper-income countries the coefficient of political institutionalization is positive and significant. This shows that for developing nations political institutionalization is instrumental in reducing the intensity of political conflict. For high income countries political institutionalization leads to increase in the intensity of violence. Benson and Kugler (1998) discuss that competitive and participatory institutions lead to reduction in intensity of political violence. Highly institutionalized political institutions make accountability for high casualty violence very likely, leading to increase in cost of engaging in indiscriminate violence. Karstedt (2006) is of the view that more egalitarian institutions would lead to reduction in the intensity of violence as high casualty violent incidents would be generally disapproved and the perpetrators may lose mass favor. Saideman, et al. (2002) posit that proportional representation tends to reduce primordial enmities and create a better environment for negotiations. This tends to reduce the intensity of political violence that may be ethnically motivated.

We see that for high-income and upper-middle income countries the impact of political institutionalization is positive and significant at a 5% level of significance. In high and upper-middle income countries, there is a potential for the emergence of a rebel greed mechanism i.e. the returns from a successful political campaign may be substantial. At the same time, high level of political institutionalization tends to constrain the government from suppressing dissent. Such dual dynamics lower the opportunity cost of rebellion while compelling the state to refrain from resorting to violence, thereby creating room for violent dissent. Typically, by the time the state can effectively respond to violence, the rebel group may have already accumulated a substantial casualty count.

The coefficient of technological transformation is estimated to be negative and

statistically significant for full sample as well as for high income and upper-middle income countries. Conversely, for low income and lower-middle-income countries, it is found to be statistically insignificant and negative. This signifies that economic transformation in the form of technological development leads to a reduction in the intensity of political violence. Goltz et al. (2016) found that technology improves labor market outcomes and enhances social cohesion leading to a reduction in violence intensity. Economic transformation enhances opportunities for both employment and entrepreneurship thereby increasing the opportunity cost of perpetrating indiscriminate violence. Economic development is related to lower incidence and intensity of violence (Humphreys, 2003). Humphreys (2003) presented the view that reliance on natural resources and the agricultural sector increases the motivation for engaging in violent conflict. While the works of Leepipatpiboon et al, (2023) and Janus & Riera-Crichton (2018) contend that economic instability and limited technology adoption are associated with heightened intensity in violent conflicts. This can be explained as improved production technology and infrastructure development amplify potential gains of a successful political campaign. Consequently, high-intensity violence may diminish these benefits. In technologically advanced countries, it becomes more advantageous for rebel groups to opt for low-intensity targeted violence. This also explain the reason of the statistically insignificant coefficient for economic transformation in low income and lower-middle income nations. For developing countries, the level of economic development and technological transformation is low as compared to high income and upper-middle income countries, which renders technological change ineffective in reducing the severity of violent conflict. This result also contrasts with the results for incidence of violence as the coefficient of economic transformation was statistically insignificant. This reflects that while technological development does not reduce the likelihood of violence, it does dampen its severity leading to lower number of battle deaths.

The most striking results for intensity of conflict are those for MID gap and its squared term. The coefficients of mobilization-institutionalization-development (MID) gap are insignificant and negative. The coefficients of squared MID gap are also negative but these happen to be statistically significant for all variants of the model i.e. the MID gap tends to reduce battle deaths at an increasing rate. This is an unexpected result as we have hypothesized that MID gap tends to increase intensity of conflict. This outcome also contrasts with our findings for incidence of violence. In the light of these results we can assert that while MID gap tends to increase the likelihood of political violence. In the event a violent event occurs, this gap can be effective in reducing its intensity. It points to the importance of social change, reducing the intensity of political violence so much so that even if the supportive institutions and economic development are not there, it remains effective in reducing the intensity of violence. The frustration that translates into violence does not manifest in the form of casualties, due to development of peaceful characteristics evolving as a result of expanded exposure, education and possibilities set. This deters individuals from participating in high intensity violent activities like mass murders and suicide bombing, leading them to resort to primarily riots and destruction of properties while actively avoiding casualties.

Among the control variables, the coefficients of military expenditures were found to be consistently positive and significant. This signifies that an increase in military expenditure would increase the intensity of violence represented by increase in battle deaths. Military expenditure tends to enhance the violence capacity of the state which amplifies the intensity of violent events. Nario-Galace & Piscano (2016) established that high military expenditures lead to more deaths during a violence conflict. Further, high military spending leads to weapons proliferation within a country, making it easier for rebel groups to acquire arms thus exacerbating the intensity of conflict. Governments with high military expenditures may be more inclined to use force to

suppress opposition and thus create higher levels of grievances leading to increase in battle deaths.

Official Development Aid (ODA) exerts positive effect on intensity of violence as is evidenced by the positive and statistically significant coefficient of the variable. For high income and upper-middle income countries this coefficient is insignificant, which means that ODA leads to increase in intensity of violence primarily for developing countries. This trend reflects the validity of dependency theories for developing nations. Griffin & Enos (1970) discussed the motivation behind the institution of foreign aid and signify that the conditionality attached with the receipt of aid. Not only does this entail making policies that may not be beneficial for all citizens, it also results in establishment of political alliances that may push the country into conflict. It may happen due to alienation of minority groups with or appeasement of rightwing extremist factions like in the case of Pakistan in the 1980s. This enhances grievances and sense of enmity between groups leading to increase in the intensity of violence.

Population density has been found to have a positive and statistically significant coefficient for the full sample, which is attributed to the positive and significant coefficient of population density for developing (low income and lower middle-income countries) countries. For high income and upper middle-income countries, the coefficient of population density is insignificant and negative. In developing nations incidences of violence tend to cause more damage because of high population density. High population density in a conflict affected area means that a larger number of people would be in close proximity of any incidence of violence. This would increase the number of people being directly affected by violent conflict translating into a higher death toll. Further, conflict in densely populated areas makes self-preservation much more difficult without displacement. Displacement in itself is not feasible for infirm, children and persons with disabilities, leading to them becoming collateral damage in the event of a violent conflict.

Table 1.4.ii. Negative Binomial Estimates for Impact Social Mobilization, Political Institutionalization, Technological Change and Mobilization Gap on Intensity of Violence

	(7) Full Sample			(8) Lower Middle Income & Low Income Countries			(9) High Income & Upper Middle Income Countries		
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
Social Mobilization	-0.06370* (0.0375)	-	-	-0.0822* (0.0471)	-	-	0.1028 (0.0843)	-	-
Political Institutionalization	-0.1256*** (0.0356)	-	-	-0.2377*** (0.0434)	-	-	0.1410** (0.0683)	-	-
Technological Change	-0.1426*** (0.0530)	-	-	-0.0676 (0.0578)	-	-	-0.3960*** (0.1373)	-	-
Mobilization Gap	-	-0.0744 (0.0476)	-0.1125 (0.0647)	-	-0.0681 (0.0516)	-0.1053 (0.0706)	-	-0.0769 (0.1284)	0.0443 (0.1771)
Gap ²	-	-	-0.1121*** (0.0383)	-	-	-0.0788** (0.0331)	-	-	-0.5712*** (0.2015)
Military Expenditure	0.0583*** (0.0146)	0.0747*** (0.0136)	0.0738*** (0.0136)	0.0305* (0.0166)	0.0564*** (0.0157)	0.0560*** (0.0156)	0.2285*** (0.0513)	0.2455*** (0.0509)	0.2596*** (0.0509)
Official Development Aid	0.1188** (0.0537)	0.0904** (0.0527)	0.0867* (0.0525)	0.1482*** (0.0687)	0.0222 (0.0666)	0.0152 (0.0670)	0.1609* (0.0882)	0.1300 (0.0872)	0.1125 (0.0862)
Population density	0.0007** (0.0003)	0.0005* (0.0003)	0.0007** (0.0003)	0.0007** (0.0003)	0.0006* (0.0003)	0.0007** (0.0003)	-0.0037 (0.0025)	-0.0013 (0.0025)	-0.0018 (0.0024)
Intercept	-5.1644*** (1.0939)	-4.5697*** (1.0720)	-4.4367*** (1.0692)	-5.7910*** (1.4059)	-3.1344** (1.3559)	-2.9352** (1.3634)	-6.2660*** (1.7995)	-5.7986*** (1.7945)	-5.2131*** (1.7803)
Wald Chi2 (Prob.)	62.97*** (0.000)	36.27*** (0.000)	44.69*** (1.0692)	56.06*** (0.00)	17.30*** (0.0017)	22.65*** (0.0004)	41.67*** (0.00)	26.61*** (0.00)	35.41*** (0.00)
ln(r)	-1.7015 (0.1654)	-1.7114 (0.1647)	-1.7130 (0.1668)	-1.0434 (0.2705)	-1.2836 (0.3619)	-1.4300 (0.3625)	-1.7083 (0.2733)	-1.7089 (0.2722)	-1.6399 (0.2791)
ln(s)	0.0045 (0.4698)	-0.0418 (0.4597)	0.0070 (0.0003)	3.4539 (0.8081)	2.4649 (1.3975)	1.8683 (1.4994)	-0.6954 (0.6514)	-0.6972 (0.6514)	-0.3088 (0.7903)
Log likelihood	-4291.03	-4305.32	-4297.22	-3185.00	-3184.82	-3199.98	-1082.73	-1089.51	-1082.5804
LR Test	204.59***	196.42***	188.26***	100.51***	105.28***	104.00***	55.21***	71.75***	63.84***
Pooled χ^2	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
N	1431	1431	1431	933	933	933	498	498	498
Groups	61	61	61	37	37	37	24	24	24

Chapter 1.5.

Conclusion

Social mobilization, as envisioned by Deutsch (1961) and elaborated by Mannheim (2013), denotes a transformative process wherein established patterns of social and economic interactions undergo a profound shift, making way for new forms of socialization experiences and behaviors. Social mobilization leads to rising expectations concerning living standards and political rights (Oberschall, 1969). It instigates discontent with the status quo, necessitating new patterns of societal organization and the emergence of fresh opportunities. Lack of economic opportunities commensurate with efforts, such as rural-urban migration and school enrollment, may also contribute to frustration (Weede, 1987). If institutions and economic conditions fail to meet these new expectations, frustration can escalate into acts of violence, aligning with Gurr's (1970) relative deprivation theory, which attributes conflicts to political and economic relative deprivation. Social mobilization leads to the growth of politically relevant strata (Williams, 1982). This growth creates pressure for institutional reforms, reorients politics by expanding the range of needs influencing political processes, and can result in severe repercussions for governments slow to adapt. Simultaneously, it generates resistance from beneficiaries of the previous order, creating a conflictual situation. The resulting mismatch between rising aspirations and limited opportunities, both economically and politically, can lead to discontent, potentially

manifesting as aggressive or violent behavior. Given these dynamics, our work aims to assess the impact of the gap between rising expectations (social mobilization) and achievements (political institutionalization and economic development) on the incidence and intensity of political violence, investigating the frustration-aggression hypothesis in the current scenario.

To this end we have used data from 1989 to 2021 from sixty countries that have experienced political violence since 1989 at least once. We have investigated the impact of social mobilization, economic change and political institutionalization on incidence, onset and intensity of violent conflict. Further, we have also investigated the effect of Mobilization-Institutionalization-Development (MID) gap on political violence. Following the theoretical discussions by Davies (1962) and Davies (1969), we have also incorporated squared terms for the MID gap in the equation to assess the nonlinearity of the relationship between MID gap and political violence.

The results obtained were quite interesting. Social mobilization plays a crucial role in reducing the likelihood of political violence. It enhances capabilities, leading to improved well-being and decreased feasibility of engaging in violent activities. Social mobilization encourages peaceful conflict resolution by facilitating voice, broadening worldviews, and improving access to information. In developing nations, social mobilization processes can reduce intensity of violence. Urbanization would draw international scrutiny to acts of violence, encouraging conflict groups to minimize collateral damage to avoid condemnation. Higher education develops human capital, critical thinking, and peaceful conflict resolution, associated with lower mortality rates (Aspy & Aspy, 1996; Krueger et al., 2015). Internet access provides a non-physical outlet for frustration, exposing political atrocities and increasing the cost of widespread political violence (Brinkerhoff, 2006; Macías-Medellín & Atuesta, 2021).

Increased political institutionalization reduces the likelihood of political violence.

For developing nations, political institutionalization reduces political conflict intensity, while high-income countries experience increased violence intensity. Benson and Kugler (1998) argue that highly institutionalized systems enforce accountability, raising the cost of indiscriminate violence. In high and upper-middle income countries, political institutionalization's impact is positive and significant. Technological development is found to be insignificant in preventing violence. As the MID gap widens, economic frustration increases. However, aggression occurs only when the MID gap widens too much. In the light of these results we can assert that while MID gap tends to increase the likelihood of political violence, it can be effective in reducing its intensity. This points to the importance of social change, which reduces the intensity of political violence to a level that even if the supportive institutions and economic development are not there, it remains effective in reducing the intensity of violence. The frustration that translates into violence does not manifest in the form of casualties due to development of peaceful characteristics owing to expanded exposure, education and possibilities set. This deters individuals from participating in high intensity violent activities like mass murders and suicide bombing, leading them to resort to primarily riots and destruction of properties while actively avoiding casualties. Social change is pivotal in lowering political violence intensity, even without supportive institutions. Frustration turns peaceful through exposure, education, and expanded possibilities, deterring high-intensity acts. Instead, people resort to riots and property destruction while actively avoiding casualties.

The social mobilization framework offers valuable insights into the intricate dynamics of societal changes and their implications for frustration, inequality, and violence. It highlights the transformative nature of social mobilization, which encompasses a myriad of processes. As society undergoes these transformative shifts, the resultant rise in expectations, as posited by Deutsch's (1962) social mobilization theory, can create a divergence between societal aspirations and actual achievements. This diver-

gence often leads to a heightened level of frustration, particularly when the pace of social mobilization outpaces that of economic development and political institutionalization. Frustration arising from unmet expectations during societal transitions can manifest in various forms of aggression and violence.

In summary, the social mobilization framework serves as a crucial tool for understanding the intricate interplay between societal transformations, rising expectations, and the potential for violence. By recognizing the challenges posed by unmet aspirations, societies can proactively address these issues, fostering a more peaceful and harmonious change during periods of significant social transformation.

Essay 2

Natural Resource Rents, Institutions and Political Violence

Chapter 2.1.

Introduction

Buchanan (1983) defines rent as the quantity of economic surplus that is higher than the minimum acceptable in case of availability of alternatives. In case of natural resources rents can take the form of royalties, extraction fees, taxes or profits. Since rents are surplus resources, they can be used for political gains. The existence of natural resources has been both hailed as a blessing (Mideska, 2013) and a curse (Auty, 1994; Gylfason, et al, 1999; Gylfason, 2001; Douangneune, et al, 2005; Gylfason & Zoega, 2006). While it can provide the country ready access to critical industrial raw material, fuel and foreign exchange, reliance on natural resources has been deemed detrimental to economic development. Intuitively the abundance of natural resources should be boon to a developing nation resulting in economic progress and social peace. However, major civil and military conflicts are also prevalent in largely resource rich developing nations, translating into destruction of crucial infrastructure and loss of human life. Auty (1994) went so far as to coin the term “natural resource curse” referring to the damage dependence on natural resources can inflict on the economy.

Karl (1998) elaborates that rents can be utilized to finance support or to suppress opposition, giving the rentier an impressive amount of political leverage. The access and authority over natural resources determines the distribution of rents and given

its political importance the state has the incentive to nationalize the resource. Such a state is termed as rentier state (Mahdavy & Cook, 1970). The ruling elite in the rentier state is mostly not concerned with economic progress or social welfare. They tend to be more focused on maintaining power. The distribution of rent in such a scenario also serves a similar purpose. Even social spending in a rentier state can weaken the social contract whereby, the citizens pay taxes in exchange for representation as the people become dependent on state for survival (Beblawi & Luciani, 2015; Anderson, 1992). Further as rentier class becomes more insulated from the people, it becomes negligent of the greater concerns of the masses (Mahdavy & Cook, 1970; Costello, 2016).

The link between natural resources and political violence was first explored by Collier and Hoeffler (1998) first identified natural resource endowment as a source of civil strife. The authors identified natural resources as a contested source of taxable income, resulting in creating incentive for rebellion. Following the work of Collier and Hoeffler (1998) a number of researchers explored the link between natural resources and conflict. The explanation ranged from grievances, greed to institutional weakness and even Dutch Disease. Humphreys (2005) is of the view that natural resource dependency can cause grievances among citizens.

In Nigeria the appropriation and mismanagement of oil revenues in Nigerian Delta translated into disenfranchisement of minority groups especially the Igbo leading to the Biafran secession in 1967 (Guichaoua, 2009). The 1991-2002 civil war in Sierra Leone was a case of diamond financed civil war spurred on by lack of accountability, corruption and poor governance (Voors et. al, 2007). Ross (2004) established that oil rich nations are 50% more likely to face a civil war than non-oil producing countries. Tariq (2013) trace the secession movement and recent ethnic violence in Baluchistan to natural resource-based conflict attributed to marginalization of the Baluch people. The author is of the view that these grievances are enhanced by resource

exploitation by the center and economic deprivation of the indigenous population. Further, the animosity was enhanced by historically heavy-handed approach of the state of resorting to military action in the region. Hence, the relationship between natural resources and conflict is well documented and widely observed. The work of Fearon and Laitin (2003) point towards inability of rentier states to manage and diffuse conflictual situations as a potential reason for violence. These states do not build adequate institutional infrastructure that could potentially place necessary limits to executive's power to appropriate, providing nonviolent means for addressing grievances and penalizing acts of aggression. These states find themselves susceptible to challenges and thus any opposition may take the form of violent rebellion. Bohle and Funfgeld (2007) illustrated how politicization of natural resources creates conflict over entitlement of natural resource rents. The asymmetric control over natural resources creates selective disempowerment and socioeconomic vulnerabilities in the resource rich regions, laying ground work for political violence. This distributional conflict devolves into major episodes of political violence owing to the attraction of potential return from increased access to natural resource rents by both the dominant coalition and the rebel groups.

This signifies the role independent institutions can play in preventing violent conflict. Besley & Persson (2009) and Elbadawi & Soto (2015) elaborate on the violence inhibiting role of economic and political institutions. If the existing institutions penalize aggression indiscriminately by either increasing the economic cost or legal accountability of the violent actors, they can effectively reduce the likelihood of violence. We would go one step further in saying that external interference can reduce the effectiveness of institutions in reducing the intensity and likelihood of violence. By providing funding or technical support to the rebel groups, third-parties can greatly undermine the effects of institutions and increase the prospects of violent conflict.

However, the type of institutions that can instigate or alleviate violence remains a

controversial issue. If the existing institutions penalize aggression indiscriminately by either increasing the cost to the violent actors, they can effectively reduce the likelihood of violence. In a relatively recent study Ajide, et al. (2020) identifies democracy as means to mitigating violence. The authors also incorporated natural resource rents and found them to be significant instigators of violence. On the other hand, Arezki and Gylfason (2013) hold the view that higher resource rents lead to a decline in internal conflicts especially in less democratic nations. This the authors attribute to the higher capability of the political elite in such nations to direct resources to the public with little hindrance from political rivals. Further, in autocracies dissident movements are generally squashed through threats of violence and persecution. This would increase the cost of rebellion while reducing the benefits from acts of violence for the dissidents. This view mirrors the work of Collier and Rohner (2008) that established that for developing nations democracy may lead to proneness to political violence.

The question then arises how political institutions mediate the relationship between natural resource rents and political violence. Determination of this role signifies the importance as well as efficacy of political institutions in mitigating the violence enhancing effect of natural resource rents. Further, we posit that different type of natural resource rents tend to have differing impact on violence i.e. all types of natural resources do not exert the same effect on violence and do not interact the same way with political institutions. While the literature does deal with the impact of natural resource rents and political institutions on violence, the mediating role of political institutions remains unexplored.

The purpose of this research is to examine how institutions influence the effect of natural resource rents on political violence. We are starting with the work of Elbadawi and Soto (2015) and building our narrative from there. In their analysis, the authors included the indicator for political constraints as a measure of accountability. We

intend to supplement this analysis by explicitly introducing institutions that not only raise the cost of rebellion but also penalize and restrain the government from misappropriating natural resources.

2.1.1. Hypotheses

Our hypotheses, based on existing literature and theories, indicate that natural resource rents increase violence, while acknowledging that this effect is not uniform across different types of rents. Furthermore, we believe that institutions of accountability namely, media integrity, judicial independence, democracy and political constraints, can be instrumental in mitigating violence. Finally, we believe that institutions can help to moderate the relationship between natural resource rents and political violence.

We hypothesize that:

- a. “Natural resource rents have positive effect on likelihood and intensity of violence”
- b. “Institutions that ensure indiscriminate accountability for instigation of violence reduce the likelihood and intensity of violence”
- c. “External involvement has a positive impact on likelihood and intensity of political violence”
- d. “Institutions reduce the effect of natural resource rents on political violence”

2.1.2. Objectives

The main objectives of this work are:

- To devise a measure of institutions that ensure indiscriminate accountability for

violence

- To assess the effect of natural resource rents, institutions and third-party influence on likelihood and intensity of violence
- To ascertain how the effect of natural resource rents would change in the presence of institutions of indiscriminate accountability.

Since Collier & Hoeffler (1998) the link between natural resources and political violence has been explored extensively. However, most studies employ Polity2 variable for democracy as measure of violence inhibiting institutions (Collier& Hoeffler, 2004; Arezki & Gylfason, 2013; Bjorvatn & Farzanegan, 2015; Farzanegan, et al, 2018; Ajide, et al, 2020). Elbadawi & Soto (2015) incorporated the indicator for political constraints as a measure of accountability in their analysis. However, the analysis does not incorporate the explicit cost to the aggressor imposed by institutions. We hope to fill that particular gap in the theoretical work. Further, we are also incorporating press freedom and judicial independence as indicators for institutional accountability, which to our knowledge have not been incorporated as yet. One issue that has not been investigated is the impact of third-party involvement in instigation and aggravation of conflict. Third party intervention can potentially reduce the cost of rebellion for the dissident groups, which would make violence a more profitable endeavor. Third party intervention may also result in diffusing the violence inhibiting impact of institutions and exacerbating the violence causing effect of natural resource rents. So, far in the literature this dynamic has not been analyzed. We aim to fill that gap analyzing both theoretically and empirically this role of third-party intervention.

Our empirical analysis comprises of panel data analysis of 85 countries for the time period 1989 to 2021. We have investigated the effects of natural resource rents and institutions on incidence of political violence, onset of violent conflict and intensity of violence. We have done this exercise for not only overall natural resource rents but also

separately for oil rents, coal rents, mineral rents, forest rents and natural gas rents. Further, we have incorporated four indicators for institutions i.e. media integrity, judicial independence, political constraints and polity. The regression results generate some very interesting insights into the issue being studied.

Chapter 2.2.

Literature Review

The relationship between natural resource rents and political violence is explored extensively in literature. There are a number of theoretical and empirical studies exploring this phenomenon as extensively as possible. This chapter will present a review of theoretical and empirical research conducted on the issue. Section 2.2.1. will present theoretical literature while section 2.2.2. will present empirical literature.

2.2.1. Theories of Natural Resources and Political Violence

Motivations for coercion and appropriation are multifold, ranging from relative deprivations, greed and transcendent nature of groups. Collier and Hoeffler (2004) identify distribution of scarce natural resources as one of the primary drivers of internal political scuffle within the nation. There are multiple mechanisms through which presence of natural resources can affect nature and onset of violence.

2.2.1.i. Rebel's Greed Mechanisms

The ethnic, racial or religious groups may engage in violence to get benefit from the rents of resources independent from the state, through appropriation of extraction points or by disruption of supply channels. This can force the ruling elite to negotiate with the rebels and come to some kind of understanding in terms of sharing the natural

resource rents. This possibility can lead to incentive for militarization of the rebel groups, which can then use ethnic, racial, religious and even geographical proximity for distinguishing themselves from the state and mobilize members of the defined group, leading to unrest and even civil war (Collier and Hoeffler, 2004).

For a large enough group civil war or revolution can be instrumental in regime change, which would then allow the new incumbent government to appropriate rents from natural resources. Thereby, natural resources become an additional incentive for militarization and mobilization of groups (Fearon and Laitin, 2003).

If the natural resources are concentrated in a particular region of the country, this may even lead the disenfranchised or relatively deprived regional group to consider seceding as a viable or advantageous option (Humphreys, 2005).

2.2.1.ii. Outsider's Greed Mechanism

The existence of natural resources may present incentive for third parties like international corporations and even foreign states to interfere. It might be in the interest of the third party that the country remains unstable; therefore, it may be induced to interfere by arming or financing the rebels (Murshed & Tadjoeeddin, 2009).

2.2.1.iii. The Grievance Mechanisms

Countries that are experiencing middling levels of development may experience transitory inequality. Whether, this leads to violent conflict or not depends on the duration of transition and differences between the elite group and the other groups. The longer the country remains in transition and the greater is the difference between groups the more likely and violent would be the conflict (Murshed & Tadjoeeddin, 2009).

Following Singer (1949) and Prebisch (1949), it is believed that economies that are dependent on natural resources are more vulnerable to terms of trade (ToT) shocks,

this can cause dissatisfaction and frustration among the groups that suffer from the shocks. This may reduce natural resource rents, leading to reduction in payments to the warlords, making maintenance of peace a difficult task. Access and extraction of natural resources results in evoking grievances in the affected populace. These grievances may be caused by forced migration, pollution or depletion of means of living of the local population. These grievances can result in militant activism and recruitment into local militias. A popular view is that natural resource wealth is generally more unjustly distributed, giving rise to grievances among the marginalized populace which then translate into violent political activism.

2.2.1.iv. The Feasibility Mechanism

Natural resources present a feasible source of finance for rebellions that may have started due to unrelated reasons. This can be done through either controlling supply during the conflict or, more commonly, by sales of “booty future”, sometimes to Multinational Enterprises (MNEs). Natural resource dependence in this scenario is the “permissive” not the “root” cause of conflict (Cordella & Onder, 2020).

2.2.1.v. Weak States

Economies that are dependent on natural resources may also have weak state structures (Fearon and Laitin, 2003).

Weak states in themselves have been associated with violence and security threats owing to stagnant economic growth and weak governing institutions. They are incapable of maintaining autonomy from third party entities, implement policies or make credible commitments vital for peaceful resolution of conflicts, rendering them more vulnerable to criminal activity, violence by private entities and civil war (Tyagi, 2015; Bodea, 2012; Bjorvatn & Farzanegan, 2015).

Weak states tend to be less reliant on taxation due to the availability of natural

resources, which makes them unaccountable to the masses. Such a state would not be inclined to engage masses in policymaking or resolve the grievances of and/or among groups, leading to less reliance of groups on state structures, like judiciary, for conflict resolution, increasing the likelihood on inter-group violence. Additionally, a weak state that relies on natural resources would not have incentive to develop strong institutions for conflict resolution and penalizing violence, resulting in increased adoption of violence (Fearon and Laitin, 2003).

2.2.1.vi. The Sparse Networks Mechanism

Dependence on natural resources gives rise to the phenomenon of “Dutch Disease”¹ resulting in weak manufacturing sector. Weak manufacturing would translate into low levels of internal trade. This will reduce mobility and communication; both are instrumental in ensuring interregional dependence and social cohesion. This combined with creation of “independent enclaves of production” may increase the risk of violent conflict between groups by making secession less consequential. Increased inter-regional trade aligns economic interests of diverse, geographically separated groups and communication develops a greater understanding and respect of each other’s culture and values. This would result increased socio-economic cohesion and maintain peaceful coexistence (Ajide & Alimi, 2022).

2.2.2. Empirical Literature

The work of Collier and Hoeffler (1998) is the first study that explored the impact of natural resources on political violence. The authors aimed to determine economic causes of civil war and introduced natural resources in their analysis to represent taxable capacity, which provides motivation for political violence. Authors found that initially increase in natural resources leads to higher risk of civil war. However,

¹Dutch disease refers to the causal relationship between increase in the development of one sector and decline in other sectors, owing to the over reliance on the said sector. The term “Dutch Disease” was coined by The Economist in 1977 to explain the decline in manufacturing sector in the Netherlands as an outcome of over-reliance on Natural Gas rents from Groningen natural gas fields.

at the higher level, captured by squared term, natural resources reduce the risk of war. The authors confirmed this result in their subsequent work investigating greed and grievance theories of political violence. The grievance model includes democracy which was found to be insignificant in the final model (Collier & Hoeffler, 2004).

Bodea & Elbadawi (2007) find democracy to be more effective than autocracies in reducing the risk of civil war. The study also includes oil reserves as proxy for natural resource abundance and found them to be instrumental in instigating civil wars, giving credence to the opportunity theory. Bjorvatn & Farzanegan (2015) studies the relationship between natural resource rents, power politics and political stability. The authors used distribution of power as a mediating variable. The researchers carried out the analysis for 120 countries from the period 1984-2004. The empirical results demonstrate the validity of weak state mechanism. However, in contrast to the work of Bodea & Elbadawi (2007), Bjorvatn & Farzanegan (2015) assert that in the presence of concentrated political power, natural resource rents would reduce political instability.

While discussing the link between natural resources and war, Humphreys (2003) signifies the role of government in creation of conflict. The author asserts that governments that rely on natural resources do not establish strong institutions which may in turn play a significant role in internal strife. Such steps make rebellion less costly and more attractive.

Humphreys (2005) found strong support for weak state mechanism² instead of rebel greed mechanism in the context of onset of conflict. Arezki and Gylfason (2013) are of the view that political institutions affect the way resource rents can affect corruption and internal conflict. The authors established that higher resource rents

²The weak state mechanism posits that a weak state structure is more likely in a resource dependent economy because reliance on natural resources may result in reduction of taxation, making states less accountable to the society and this reliance may also inhibit the need for strong formal institutions. The power gap created can then be exploited by the rebels in garnering resources and support for mass rebellion.

lead to decline in internal conflicts especially in less democratic nations. This the authors attribute to the higher capability of the political elite in such nations to direct resources to the public with little hindrance from political rivals. Ross (2015) discusses that petroleum has three harmful effects as it tends to prolong authoritarian regimes and incentivize corruption for appropriation of petroleum revenues triggering violent conflict in developing nations.

Elbadawi and Soto (2015) confirm that resource-dependent societies are more vulnerable to violent conflicts but both the institutions of economic openness and democratic rule are instrumental in reducing the probability of civil war. The institution of checks and balance was found to be the most important factor in neutralizing the positive effect of rents on civil war. Farzanegan, et al. (2018) study the effect of natural resources on internal conflict using data from 91 countries for the time period 1984 to 2004. The empirical results show that existence of natural resource rents increase the risk of conflict, which can be neutralized by fiscal and political decentralization. Ajide, et al. (2020) studied the link between natural resource rents and growth of terrorist attacks for a panel of 49 African countries for the years 1980 to 2012. The study confirms that natural resource rents instigate and amplify terrorism and anocracy acts as an instigator of terrorism. Their work also points to the effectiveness of democratic regime in mitigation of the effects of natural resource rents. Han & Feng (2023) explored the impact of diamond resources and oil reserve on intensity of political conflict in Africa and found that diamond abundance is a natural resource blessing and oil reserves prove to be stimulants for resource curse.

The literature so far deals with the relationship between natural resource rents and conflict. The institutional setting has been incorporated in most of the contemporary literature but it deals with the nature of political institutions namely, democracy, autocracy and anocracy. To our knowledge the concept of accountability was partially introduced by Elbadawi and Sotito (2015) by incorporating the political constraints

index into the analysis. Most of these indicators determine the state's power to appropriate and use force. However, little to no literature exists that captures the impact of external influence in this context. We hope to fill this gap by theoretically and empirically analyzing the roles institutions and external influence play in altering the relationship between natural resource rents and violence.

There is a considerable volume of literature that links natural resources and the occurrence of violent events and also the onset of violent conflicts. Few studies, however, deal with the relationship between natural resources and the severity of violence. The most relevant study in this context is by Lujala (2009), who used data from 258 conflicts to generate a number of important insights. The author found that the availability of natural resources affects the severity of the armed conflict and that type of natural resources determines this impact. This result is in line with the findings of Addison et. al, (2002), who is of the view that for determining the intensity of violence in Africa, the type of natural resources matters more than overall natural resource-related revenues. While Addison et. al, (2002) distinguished between point and diffused natural resources, Lujala (2009) signifies the importance of hydrocarbons in exacerbating the intensity of the violent conflict. However, when the results were estimated for country-level data by Lujala they were found to be insignificant. Rigterink (2020) assessed the national and subnational regions of Africa, focusing in particular on diamonds, to determine the impact on the intensity of violence. The author signifies that a reduction in the opportunity cost of violence as compared to the rents accruing from the resource leads to high intensity of violence in resource-rich areas.

A violent conflict can become severe due to the weak state mechanism. The effectiveness of institutions in reducing the intensity of violence has been explored by Benson and Kugler (1998). Accessing data from 26 countries from South and Central Americas and Eastern Europe, the authors assessed the impact of power balance be-

tween the incumbent and dissident groups as well as institutions on the intensity of violence. The authors found that democratic countries tend to have lower intensity of conflict. On the other hand, among democracies, those with highly participatory and competitive institutions tend to experience lower intensity of political violence. Valentino et. al, (2004) suggests that high-intensity violence can be curtailed in democratic states; facing guerilla warfare; due to the presence of accountability for civilian casualties. Such states become more rigorous in searching for peaceful resolution of conflicts. Lacina (2006) corroborates these findings based on the data for battle deaths in armed conflicts from 1946 to 2002. His analysis confirms that democratic governments tend to reduce the intensity of violence. His study elaborates that democratic states tend to restrict the use of excessive force in case of a conflict for the fear of losing popular support. He goes on to conclude that effective democratic institutions also formally restrict the powers of the executive of the state through political checks and balances, ensuring that any state reaction to a violent confrontation is geared towards minimizing the severity of violence. Heger and Salehyan (2007) replicate Lacina's (2006) results for democracies while elaborating that battle deaths increase when democratic controls are absent. The institutional accountability for battle severity was gauged also by Gartner et. al, (2004) who established that incumbents from states that experience high casualties are less likely to get elected, creating a disincentive against engaging in violent conflicts. Adding another institutional factor into the analysis, Loyle and Binningsbø (2018) posit that the nature and quality of justice during the conflict have an effect on abuses of the conflict along with its severity. They asserted that a more active and independent justice system can be instrumental in reducing the chances as well as the intensity of conflicts. Dancy and Wiebelhaus-Brahm (2018) further elaborated that the prosecution of perpetrators of violence during internal conflict acts not only as a deterrent, it can also be effective in the termination of the conflict.

Establishing the link between violence, natural resources and institutions, Elbadawi and Soto (2015) developed a model that incorporates the mediating effect of the quality of economic and political institutions in the relationship between natural resources and conflict. Using data from 100 countries the authors established the violence deterring role of good quality economic and political institutions. Arif, et. al, (2021) asserted that while natural resource rents increase internal conflict, institutions can play a role in mitigating this effect. The authors' work was based on evidence from 70 developing and developed nations. However, instead of a specific institutional framework, the author focused more on institutional quality instead of institution type. Using data from African economies, Ajide, et al, (2020) explored the link between political institutions, natural resource rents, and terrorism. The authors found that political coherence exerts a negative influence on terrorism while natural resources tend to exacerbate violent conflict. Using interaction terms, the authors established that institutional incoherence amplifies the terror-inducing effect of natural resource rents. The efficacy of democracies, however, has been challenged by the work of Arezki and Gylfason (2011). The authors found that for Sub-Saharan African nations' higher resource rents led to fewer conflicts also that less democratic countries experience a lower likelihood of conflict. The authors are of the view that the greater power asymmetries between incumbent and dissident allow the political elite to exert great control over the masses and potential rebel groups.

The literature validates the assertion that natural resource rents and institutions play a significant role in explaining the severity of the conflict. Additionally, the review of literature also depicts the significance of resource types in determining the intensity of violence. However, other than regime type, the efficacy of institutional accountability has not been explored in this context. It is imperative to assess the role of media integrity, judicial independence and political constraints along with polity in explaining the severity of conflict in the context of different types of natural resource

rents.

Chapter 2.3.

Natural Resource Rents, Institutions and Political Violence: A Theoretical Exploration

While one might expect that an abundance of natural resources would bring prosperity and social harmony to a developing nation, the reality often contradicts this intuition. Resource-rich developing nations frequently experience civil and military conflicts, leading to the destruction of vital infrastructure and loss of human lives. Bohle and Funfgeld (2007) demonstrated how the politicization of natural resources can spark conflicts regarding the entitlement to resource rents. The asymmetric control over these resources results in discriminatory distribution of resources in regions, setting the stage for political violence. According to Besley & Persson (2009) and Elbadawi & Soto (2015) if the existing institutions penalize aggression indiscriminately by increasing either the economic cost or legal accountability of the violent actors, they can effectively reduce the likelihood of violence. In this chapter, we are looking at the effect of external interference on the relationship between institutions and violence. External interference, particularly by providing funding or technical support to the rebel groups can reduce the effectiveness of institutions in reducing the intensity and likelihood of violence. Specifically, we focus on the way institutions and external interference interact in the natural resources led political violence.

We are using the work by Elbadawi & Soto (2015) as our baseline and building our narrative on that. Though the authors have incorporated political constraints as a measure of accountability in their analysis; they do not have anything explicitly on the cost to the aggressor, imposed by institutions. We hope to fill that particular gap in the theoretical work. We believe that third party intervention can potentially reduce the cost of rebellion for the dissident groups, which would make violence a more profitable endeavor. Likewise, third party intervention may also result in diffusing the violence inhibiting impact of institutions at the same time, exacerbating the violence causing effect of natural resource rents.

2.3.1. Natural Resources and Political Violence: A Game Theoretical Framework

Elbadawi and Sotro (2015) establish the link between natural resources and violence and role of institutions using game theoretic framework. We have adapted the framework to explain not only the role of institutions in violence but also the effect of third-party and external interference. We begin by explaining our baseline game theoretical framework as presented by Elbadawi and Sotro (2015). The game under discussion deals with inter-group dynamics in which we consider two groups A and B. We factor in a power asymmetry in terms of violence capacity as well as existing resource-base, with group A being more powerful than group B. Let y_A and y_B represent inalienable endowment of group A and B respectively. Let N denote total population with N_A and N_B being sizes of group A and B respectively. For now, we assume that:

$$N = N_A + N_B \tag{2.3.i.}$$

Further, we introduce the existence of natural resource deposits with returns denoted by Z . If the resources are distributed equally every individual would receive:

$$z = \frac{Z}{N} \quad (2.3.ii)$$

Following Elbadawi and Soto (2015), we start with a two-stage sequential game led by group A. If group A chooses to accept equal distribution of resources, group B does not have any reason to retaliate. Therefore, we will have a conflict-less outcome with groups' payoffs being:

$$y_i + z, \text{ where } i = A, B \quad (2.3.iii.)$$

However, if the group A opts for forceful appropriation, group B will have reason to retaliate. Therefore, in this case group B faces the option to either endure appropriation or retaliate. The final payoffs in this case depend on group B's response. If the group B decides not to retaliate but instead to endure appropriation, the payoff for Group A will be

$$V(C_A)_{(C,P)} = (1 - \delta) \left[y_A + \frac{z}{N_A} \right] \quad (2.3.iv.)$$

And value of payoff for Group B will be

$$V(C_B)_{(C,P)} = (1 - \delta)y_B \quad (2.3.v.)$$

Where, δ is the proportional loss to the economy and $0 < \delta < 1$, assuming symmetric distribution of costs among the group members. If, on the other hand, group B decides to retaliate the payoffs will be different. Here, since Group A is more powerful it will still obtain a larger share (α) of returns from natural resources but owing to the retaliation group B will also get a share $(1 - \alpha)$ of natural resources. However, retaliation will also increase the cost of conflict from δ to Δ , i.e. $\delta > \Delta$. This cost involves not only the cost of enforcement but also the cost of resources destroyed

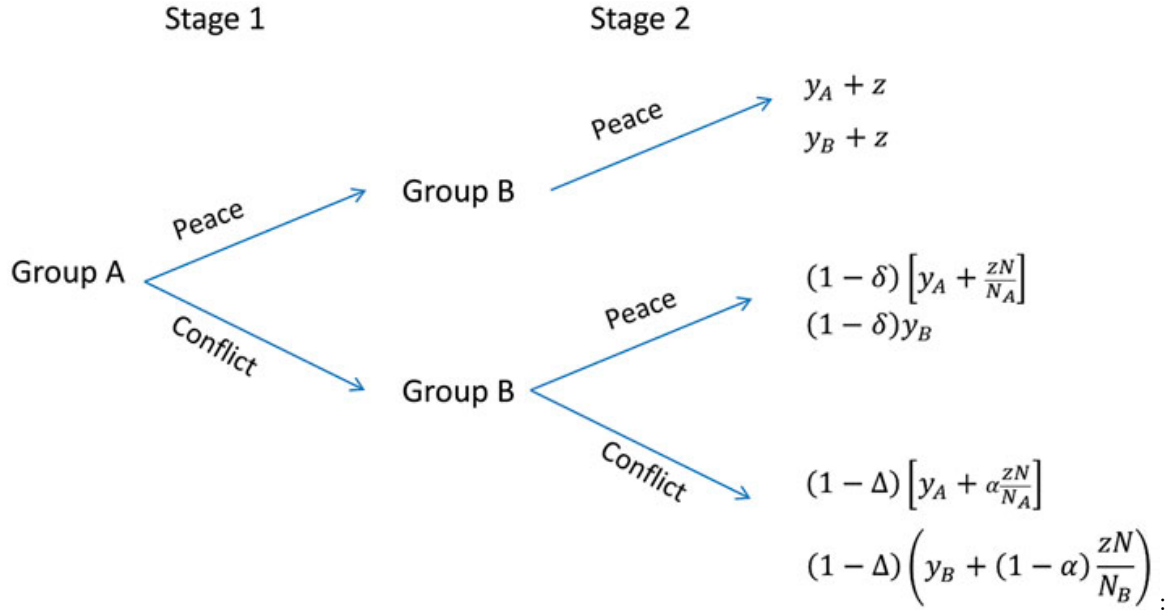


Figure 2.3.A. Natural Resources and Political Violence

because of conflict. In this scenario Group A's payoff for conflict will be:

$$V(C_A)_{(C,C)} = (1 - \Delta) \left[y_A + \alpha \frac{z}{N_A} \right] \quad (2.3.vi.)$$

And Group B's payoffs in case of conflict would be

$$V(C_B)_{(C,C)} = (1 - \Delta) \left[y_B + (1 - \alpha) \frac{z}{N_B} \right] \quad (2.3.vii.)$$

The game is expressed in figure 2.3.A. Whether Group B will retaliate depends on its expectation regarding the probability of success. Denoting $1 - \pi$ as the expected probability of success of Group B, with π being the perceived probability of success of group A, if the value of π is high enough Group B will choose not to retaliate. As for high values of π , group B will expect that group A will succeed in appropriating completely and by retaliating the perceived payoff would be lower than the payoff if group B decides not to retaliate owing to the higher cost of conflict in case of retaliation (Δ).

For Group A the expected payoff from not appropriating (choosing peace) remains:

$$EV(P_A) = y_A + z \quad (2.3.viii.)$$

If Group A chooses to appropriate, its expected payoffs for conflict will be:

$$EV(C_A) = \pi \left[(1 - \delta) \left[y_A + \frac{z}{N_A} \right] \right] + (1 - \pi) \left[(1 - \Delta) \left[y_A + \alpha \frac{z}{N_A} \right] \right] \quad (2.3.ix.)$$

For group A to choose to appropriate and risk instigating a conflict: $EV(C_A) > EV(P_A)$ i.e.

$$\pi \left[(1 - \delta) \left[y_A + \frac{z}{N_A} \right] \right] + (1 - \pi) \left[(1 - \Delta) \left[y_A + \alpha \frac{z}{N_A} \right] \right] > y_A + z \quad (2.3.x.)$$

If we solve the inequality for π we get:

$$\pi > \frac{\Delta y_A + z \left[1 - \left((1 - \Delta) \alpha \frac{N}{N_A} \right) \right]}{y_A (\Delta - \delta) + \frac{zN}{N_A [(1 - \delta) - \alpha (1 - \Delta)]}} = \tilde{\pi} \quad (2.3.xi.)$$

$\tilde{\pi}$ is the reservation value or threshold such that if the perceived probability (π) exceed $\tilde{\pi}$, Group A will initiate conflict by appropriating natural resource rents. For group B the expected value of peace or conflict depends on the Group A's strategy. From Group B's point of view if π is high then group A will choose to appropriate and if it is not high enough group A will choose not to appropriate. Therefore:

$$EV(P_B) = (1 - \pi)(y_B - z) + \pi(1 - \delta)y_B \quad (2.3.xii.)$$

The expected value of conflict for group B is strictly conditional on group A's choice of conflict:

$$EV(C_B) = (1 - \pi)(1 - \Delta) \left(y_B + (1 - \Delta)z \right) + \pi(1 - \delta)y_B \quad (2.3.xiii.)$$

Solving we get:

$$\pi < 1 - \frac{(1 - \delta)y_B}{(1 - \Delta - \delta)y_B - z \left[1 - (1 - \Delta)(1 - \alpha) \frac{N}{N_B} \right]} = \ddot{\pi} \quad (2.3.xiV.)$$

Group B will not retaliate unless the probability of group A's success in conflict is less than $\ddot{\pi}$ Conflict will be the dominant equilibrium strategy if:

$$\tilde{\pi} < \pi(\tilde{\pi}, \ddot{\pi}|I) < \ddot{\pi} \quad (2.3.xv.)$$

Which can also be written as,

$$\tilde{\pi} < \ddot{\pi} \quad (2.3.xvi.)$$

Elbadawi and Soto (2015) were of the view that π represents strength of institutions and its higher value depicts weakness of institutions or failure of institutions in preventing violence. However, it can be an indicator of military ability, economic capacity and access to resources as well. Therefore, we postulate that strength of institutions needs to be explicitly factored into the analysis instead of incorporating as part of a plethora of possible aspects and the next section does exactly that.

2.3.1.i. Incorporating Institutional Cost of Violence

In this section we have introduced an explicit institutional cost of aggression (λ). This cost will be accrued for engaging in violence may it be appropriation or retaliation. While this will not affect the payoff for the group that chooses peace, the payoff of opting for appropriation or retaliation will be discounted by λ , which would be added to the cost of violence by the aggressor. If the group B decides not to retaliate but instead to endure appropriation, the payoff for Group A will be

$$V'(C_A)_{(C,P)} = (1 - \delta - \lambda) \left[y_A + \frac{z}{N_A} \right] \quad (2.3.xvii.)$$

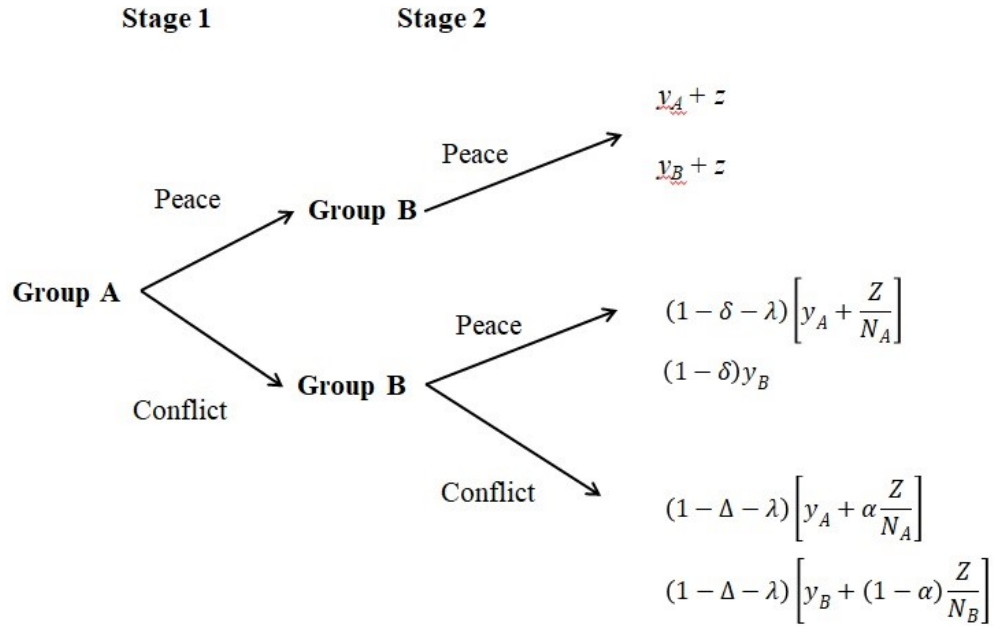


Figure 2.3.B. Natural Resources, Institutions and Political Violence: Modified Game

And value of payoff for Group B will remain unchanged i.e. (2.3.v.). If the group B decides to retaliate the payoffs will be different. In this scenario Group A's payoff will be:

$$V'(C_A)_{(C,C)} = (1 - \Delta - \lambda) \left[y_A + \alpha \frac{z}{N_A} \right] \quad (2.3.xviii.)$$

And Group B's payoffs will be

$$V'(C_B)_{(C,C)} = (1 - \Delta - \lambda) \left[y_B + (1 - \alpha) \frac{z}{N_B} \right] \quad (2.3.xix.)$$

Figure 2.3.C. represents the modified game with institutional costs: For Group A the expected payoffs from not appropriating remain the same (2.3.viii). If Group A chooses to appropriate, its expected payoffs will be:

$$EV'(C_A) = \pi \left[(1 - \delta - \lambda) \left[y_A + \frac{z}{N_A} \right] \right] + (1 - \pi) \left[(1 - \Delta - \lambda) \left[y_A + \alpha \frac{z}{N_A} \right] \right] \quad (2.3.xx.)$$

For group A to choose Conflict:

$$\overset{\prime}{EV}(C_A) > \overset{\prime}{EV}(P_A)$$

If we solve for π we get:

$$\pi > \frac{(\Delta + \lambda)y_A + z \left[1 - \left((1 - \Delta\lambda)\alpha \frac{N}{N_A} \right) \right]}{y_A(\Delta - \delta) + \frac{zN}{N_A} [(1 - \delta - \lambda) - \alpha(1 - \Delta - \lambda)]} = \hat{\pi} \quad (2.3.xxii.)$$

$\hat{\pi}$ is the reservation value or threshold such that if the perceived probability (π) exceeds $\hat{\pi}$, Group A will initiate conflict.

$$\frac{\partial \hat{\pi}}{\partial \lambda} > 0 \quad (2.3.xxiii.)$$

Improvement in institutional constraints will increase the threshold minimum probability of success that would induce Group A to opt for appropriation.

For group B the expected value of peace or conflict depends on the Group A's strategy. From Group B's point of view if π is high then group A will choose to appropriate and if it is not high enough group A will choose not to appropriate. Therefore:

$$\overset{\prime}{EV}(P_B) = (1 - \pi)(y_B + z) + \pi(1 - \delta)y_B \quad (2.3.xxiiii.)$$

The expected value of conflict is strictly conditional on group A's choice of conflict:

$$\overset{\prime}{EV}(C_B) = (1 - \pi)(1 - \Delta - \lambda) \left(y_B + (1 - \alpha) \frac{zN}{N_B} \right) \quad (2.3.xxv.)$$

For group B the conflict strategy will dominate if $\overset{\prime}{EV}(C_B) > \overset{\prime}{EV}(P_B)$ Solving we get:

$$\pi < 1 - \frac{(1 - \delta)y_B}{(1 - \Delta - \delta - \lambda)y_B - z \left[1 - (1 - \Delta - \lambda)(1 - \alpha) \frac{N}{N_B} \right]} = \overset{\prime}{\pi} \quad (2.3.xxvi.)$$

Group B will not retaliate unless the probability of group A's success in conflict is less than $\hat{\pi}$.

$$\frac{\partial \pi}{\partial \lambda} < 0 \quad (2.3.xxvi.)$$

Improvement in institutional constraints will reduce the threshold probability of success of Group A that would induce Group B to opt for retaliation. Conflict will be the dominant equilibrium strategy if:

$$\hat{\pi} < \pi(\hat{\pi}, \hat{\pi}) < \hat{\pi} \quad (2.3.xxvii.)$$

Increase in institutional cost would make the conflict unlikely by narrowing the range of π within which conflict would become the dominant equilibrium strategy. As presence of strong institutions of accountability would increase the cost of rebelling for group B and at the same time would make a favorable outcome from exploitation less likely for group A.

2.3.1.ii. Adding Outsider Influence

In this section we incorporate external influence in the model. As explained before external influence incorporates outsider's greed mechanism, in which foreign vested interests (at times implicitly) arm and support rebels' groups for continued instability. This (partially) compensates the rebels for costs potential incurred during conflict. For this purpose, we incorporate the term ε in the previous setup. ε is a positive parameter that adds to the resources available to rebel group in case of violent conflict, hereby, compensating for costs of conflict ($\Delta - \lambda$). This will change the Group B's payoffs for conflict to:

$$V(C_B)_{(c,e)} = (1 - \Delta - \lambda) \left[y_B(1 + \varepsilon) + (1 - \alpha) \frac{z}{N_B} \right] \quad (2.3.xxviii.)$$

Where, $\varepsilon > 0$ The analysis of Group A remains that same. The analysis for Group

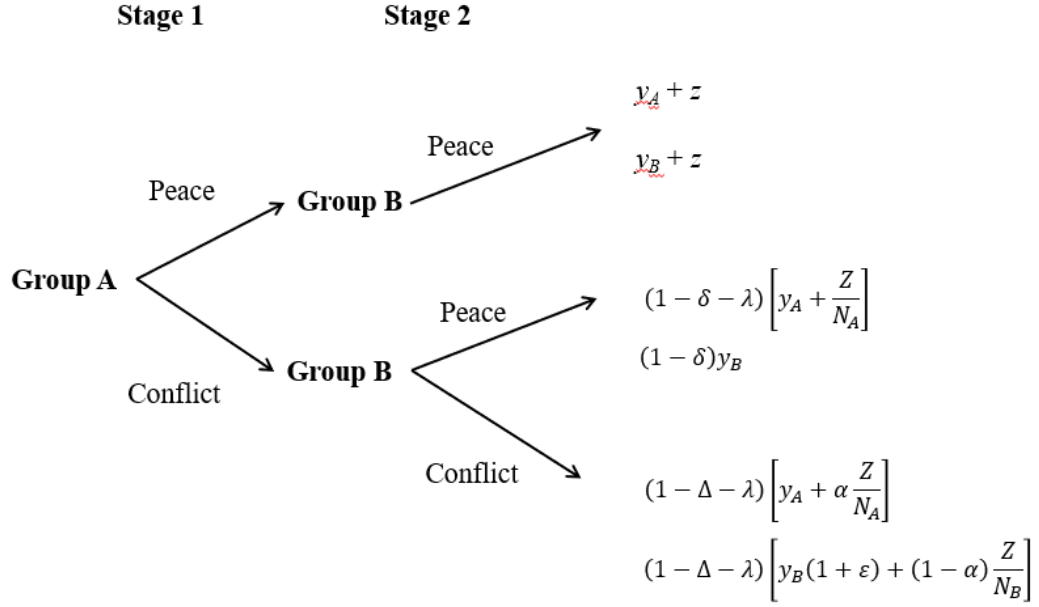


Figure 2.3.C. Natural Resources, Institutions and Political Violence: Third Party Interference

B changes in this case, in which expected return in case for peace would be:

$$\overset{\prime}{EV}(P_B) = (1 - \pi)(y_B + z) + \pi(1 - \delta)y_B \quad (2.3.xxix)$$

The expected value of conflict is strictly conditional on group A's choice of conflict:

$$\overset{\prime}{EV}(C_B) = (1 - \pi)(1 - \Delta - \lambda) \left(y_B(1 + \varepsilon) + (1 - \alpha) \frac{zN}{N_B} \right) \quad (2.3.xxx.)$$

For group B the conflict strategy will dominate if $\overset{\prime}{EV}(C_B) > \overset{\prime}{EV}(P_B)$ Solving we get:

$$\pi < 1 - \frac{(1 - \delta)y_B}{(1 - \Delta - \lambda)y_B(1 + \varepsilon)z \left[1 - (1 - \delta - \lambda)(1 - \alpha) \frac{N}{N_B} \right]} = \overset{\prime}{\pi} \quad (2.3.xxxi.)$$

Group B will not retaliate unless the probability of group A's success in conflict is less than $\overset{\prime}{\pi}$.

$$\frac{\partial \overset{\prime}{\pi}}{\partial \lambda} < 0 \text{ and } \frac{\partial \overset{\prime}{\pi}}{\partial \varepsilon} > 0$$

An increase in external influence will raise the lower threshold for sustained conflict scenario, thereby making conflict more likely. Further, we have also established that

$$\frac{\partial^2 \pi'}{\partial \varepsilon \partial \lambda} > 0$$

Hence proving that in the presence of external interference the violence inhibiting impact of institutional accountability will be reduced. If we revisit the condition for conflict equilibrium $\hat{\pi} < \pi(\hat{\pi}, \pi') < \pi'$

We can see the third-party interference increases the threshold value π' expanding the range of π within which conflict would become the dominant equilibrium strategy.

The game explains not only that the existence of natural resources creates motivation for exploitation by the dominant coalition but also that institutional accountability can be instrumental in all parties opting for peaceful resolution of distributional concerns giving credence to both weak states and grievance hypotheses. Strong and indiscriminate institutional accountability would penalize the incumbent group (Group A) for renegeing and exploiting group B. At the same time group B would also have to face accountability for rebelling and violence. This would discount the expected benefits accrued from a violent conflict and would reduce the motivation for violence.

Further, we demonstrated that external interference that may exploit the existing grievances by reducing cost for rebelling would undermine institutional effectiveness in preventing violence. This shows an interplay between outsider's greed and rebels' greed mechanisms in perpetuation of political violence. The two dynamics are mutually reinforcing and can effectively neutralize the impact of institutional accountability in preventing violence. This posits a serious issue for countries with existing cross-border conflicts, where the internal cleavages can be manipulated and exacerbated by the external antagonists. Therefore, the work presents a case for actively

seeking regional peacekeeping along with strengthening of domestic institutions for accountability for violence and exploitation. Hence domestic institutional reforms should work in stride with a peacekeeping foreign policy. Further, the interests of multinational organizations have to be factored into any attempts at peacekeeping in the country. The most effective design would be having an institutional framework that would penalize not only acts of aggression but also exploitation by the dominant coalition, hereby eliminating the core cause for conflict.

Chapter 2.4.

Methodology

This chapter presents the methodology for our empirical analysis. Section 2.4.1. presents the conceptual framework and the section 2.4.2. discusses the econometrics model. The final two sections discuss data and estimation techniques respectively.

2.4.1. Conceptual Framework

There is a plethora of motivations for engaging in violence and appropriation for natural resources, ranging from relative deprivation, greed and the primordial nature of groups. According to Collier and Hoeffler (1998) distribution of natural resources can be one of the primary factors instigating internal political conflict in the resource-rich nations. There are multiple mechanisms through which the presence of natural resources can affect nature and the onset of violence. For example, rebels' greed mechanism signifies that ethnic, racial, or religious groups may engage in violence to benefit from the rents of resources independent from the state, through appropriation of extraction points or by disruption of supply channels (Collier and Hoeffler, 2004). For a large enough group civil war or revolution can be instrumental in regime change, which would then allow the new incumbent government to appropriate rents from natural resources (Fearon and Laitin, 2003). If the natural resources are concentrated

in a particular region of the country, this may even lead to the relatively deprived regional group considering seceding as a viable or advantageous option.

Another perspective about the relationship between natural resources and political violence is termed outsider's greed mechanism. The existence of natural resources may present incentive for international corporations and even foreign states to interfere. It might be in the interest of the outside actor that the country remains unstable; therefore, it may be induced to interfere by arming or financing the rebels. Natural resources also present a feasible source of finance for rebellions that may have started due to unrelated reasons. This can be done through either controlling supply of natural resource during the conflict or by sales of "booty future", sometimes to Multinational Enterprises (MNEs). Natural resource dependence in this scenario is the "permissive" not the "root" cause of conflict. The grievance mechanism posits that countries experiencing middling levels of development may experience transitory inequality. The longer the country remains in transition and the greater the difference between groups the more likely more violent would be the conflict. Natural resource wealth is generally unequally distributed, giving rise to grievances among the marginalized populace which then leads to violent political activism (Dyrstad & Hillesund, 2020). Weak states have also have been associated with violence and security threats owing to stagnant economic growth and weak governing institutions. They are incapable of maintaining autonomy from third-party entities, implementing policies or make credible commitments vital for peaceful resolution of conflicts, rendering them more vulnerable to criminal activity, violence by private entities, and civil war (Tyagi, 2012). Resource-rich weak states tend to be less reliant on taxation. Such a state would not be inclined to engage the masses in policymaking or resolve the grievances of and/or among groups, leading to less reliance of groups on state structures, like the judiciary, for conflict resolution (Fearon and Laitin, 2003).

Distributive justice and institutions that ensure that represent another facet of in-

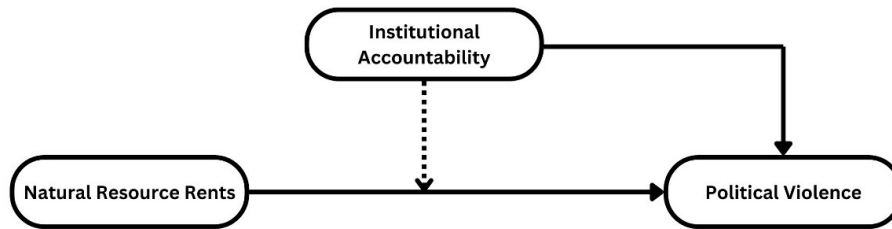


Figure 2.4.A. Conceptual Framework

stitutional significance in the prevention of violence in resource-rich countries. Azam (2001) suggests that assurance of redistributive justice and mechanisms that hold states accountable to that are instrumental in the peaceful resolution of conflicts. Fearon and Laitin (2003) point towards the inability of rentier states to manage and diffuse conflictual situations as a potential reason for violence. These states do not build adequate institutional infrastructure that could potentially place necessary limits to the state’s power to appropriate natural resources, providing nonviolent means for addressing grievances and penalizing acts of aggression. These states find themselves susceptible to challenges and thus any opposition may take the form of violent rebellion. This signifies the role independent institutions can play in preventing violent conflict. Besley & Persson (2009) and Elbadawi & Soto (2015) elaborate on the violence-inhibiting role of economic and political institutions. If the institutions castigate aggression indiscriminately by either increasing the economic cost, legal accountability or loss of goodwill of the violent actors, they can effectively reduce the likelihood of violence. This points the moderating role of institutional accountability as these institutions make both appropriation of natural resources as well as aggressive response costly.

Building on this framework my work examines the relationship between natural resource rents and political violence, with a focus on the moderating role of institutional quality. While prior literature highlights how natural resource wealth can fuel political conflict the outcomes of such resource abundance are often contingent on the strength and effectiveness of domestic institutions. A strong institutional setup can offset these effects by ensuring safety from appropriation, providing legal channels for dispute resolution, and increasing the cost of violent action. This framework contributes to the literature by explicitly theorizing and empirically testing the conditional impact of institutional accountability in shaping political outcomes in resource-rich settings.

2.4.2. Econometric Model

The existence of violent conflict is incorporated as a binary variable while intensity is modeled as a categorical variable. We start with the benchmark regression models:

$$V_{it}(1 = yes, 0 = no) = f(\beta, \mu_i | x_{it})$$

x_{it} is the set of control variables and μ_{it} represents country specific effects. We can then extend the benchmark to include natural resource rents and institutions.

$$V_{it}(1 = yes, 0 = no) = f(\beta, \mu_i | x_{it}, rents_{it}, institutions_{it})$$

The extended model will also incorporate interaction terms between rents and institutions. More specifically,

$$V_{it} = \beta_0 + \beta_1 NRR_{jit} + \beta_2 I_{it} + \beta_3 (NRR_{jit} * I_{it}) + \sum_{k=4}^n \beta_k x_{kit} + \mu_{it}$$

Where, NRR_{jit} presents natural resource rents of the j^{th} kind, I_{it} stands for political institutions and x_{kit} is the k^{th} control variable. Similar model is adopted for onset of

violent conflict i.e.

$$Onset_{it} = \alpha_0 + \alpha_1 NRR_{jit} + \alpha_2 I_{it} + \alpha_3 (NRR_{jit} * I_{it}) + \sum_{k=4}^n \alpha_k x_{kit} + \varepsilon_{it}$$

In order to determine the impact of natural resource rents and institutions on the severity of violence, we have used battle deaths as the indicator of violence severity; following the work of Heger (2007) and Rigterink (2020). Further, we used total resource rents computed by the World Bank as the total revenue generated from the extraction of the natural resource minus the cost of extracting the resource. We are considering five types of natural resources namely, oil, coal, mineral, forest and natural gas rents.

The model takes the form:

$$BD_{it} = \gamma_0 + \gamma_1 NRR_{jit} + \gamma_2 I_{it} + \gamma_3 (NRR_{jit} * I_{it}) + \sum_{k=4}^n \gamma_k x_{kit} + \epsilon_{it}$$

Where, BD_{it} represents battle deaths, NRR_{jit} represents natural resource rents of j^{th} natural resource, I_{kit} represents k^{th} institutional indicator and x_{kit} represents a vector of control variables.

2.4.2.i. Dependent Variable

In the first instance the dichotomous variable of whether violence (V_{it}) took place in the country for a given will be used as the dependent variable.

$$V_{it} = \begin{pmatrix} 0, & \text{if no violence took place in country } i \text{ in year } t \\ 1, & \text{if there was a violent event in country } i \text{ in year } t \end{pmatrix}$$

Here violence refers to all incidences of armed conflict involving the state. The second dependent variable is onset of violent conflict. This is different from likelihood of violence because it marks the beginning of a violent conflict, which may or may not continue over the following years. This variable will enable to analyze the role

natural resource rents would play in starting violent conflict. This variable is also having dichotomous values.

$$Onset_{it} = \begin{pmatrix} 0, & \text{if no onset of violent conflict in country } i \text{ in year } t \\ 1, & \text{if there was onset of violent conflict in country } i \text{ in year } t \end{pmatrix}$$

The last dependent variable is intensity of violent conflict. The intensity variable is measured as number of battle related deaths per capita in year t .

$$intensity_{it} = battledeaths_{it}$$

2.4.2.ii. Explanatory Variables

We are considering five type of natural resources namely, oil, coal, minerals, forests and natural gas rents. We will also use total natural resource rents that includes oil, coal, natural gas, forest and mineral rents. Natural resource rents are expected to be violence causing i.e. higher rents can result in greater probability of violence as well as onset of violence conflict. Major factor behind this relationship are the distributional concerns where the dominant coalition finds it profitable to appropriate a lion's share of natural resource rents leaving little for minority groups, creating deep rooted grievances which can translate into rebellion and even civil war (Collier and Hoeffler, 1998; Collier and Hoeffler, 2004; Arezki and Gylfason, 2013; Ajide et al., 2020).

Natural resource rents are expected to be violence intensifying i.e. higher rents can result in a greater intensity of violence. A major factor behind this relationship is the distributional concerns where the dominant coalition finds it profitable to appropriate a lion's share of natural resource rents leaving little for minority groups and creating deep-rooted grievances which can translate into violent rebellion. Further, the work of Lujala (2009) also points out that different types of natural resources tend to exert

differing impacts on the severity of violence. This is attributed to the prospective returns associated with control over natural resources that induce the rebel groups as well as the incumbent government to fight more aggressively.

We incorporate two distinct but interrelated aspects of institutions namely, participation and accountability. To capture the phenomenon of political participation we have used the Polity2 measure. It captures the institutional frameworks ranging from strong institutionalized autocracy to strong institutionalized democracy. For capturing accountability, we would incorporate three indicators. First one being Political Constraints Index developed by Henisz and Zelner (2010). A higher value of the index provides protection against manipulation and appropriation. To further extend the measure of accountability, we will incorporate freedom of media and judicial independence. Judicial independence refers to the extent of freedom of courts from the undue influence of the executive and other branches of government. Media integrity represents the degree to which the media provides realistic and critical coverage of political matters. Both these institutions are expected to exert an inhibiting effect on the intensity of violence; by increasing accountability for acts of aggression. Media through real-time and critical coverage of the extent of atrocities committed during a violent event would both work towards mitigating the intensity of violence (Collier and Hoeffler, 2004; Ajide et al., 2020x; Bjorvatn and Farzanegan, 2015). It is expected that judiciary would hold the perpetrators of violence accountable to law without discrimination while the media will critically cover the occurrence of violence and expose the perpetrators.

Staton & Reenock (2010) argued that credible commitment institutions have important implications for social order. Commitment institutions can comprise an independent judiciary ensuring the enforcement of social contracts between diverse groups (North et al, 2000; Stasavage, 2002). Credible commitment institutions may also include free and fair media. A free and fair media exposes acts of appropriation by state

actors, exposing vested interests hindering distributive justice especially, in resource-rich countries. This results in a potential loss of goodwill and support nationally and condemnation or sanctions by international actors. This way media integrity can effectively make appropriation costly and be instrumental in ensuring distributive justice (Pal, 2011). Bodea & Elbadawi (2007) find democracy to be more effective than autocracies in reducing the risk of civil war. Humphreys (2005) found strong support for weak state mechanism¹ instead of rebel greed mechanism in the context of onset of conflict. Arezki & Gylfason (2013) are of the view that political institutions affect the way resource rents can affect internal conflict. Elbadawi & Soto (2015) confirm that resource-dependent societies are more vulnerable to violent conflicts but both the institutions of economic openness and democratic rule are instrumental in reducing the probability of civil war. This underscores that democratic institutions can serve as credible commitment mechanisms, effectively ensuring distributive justice and mitigating the impact of natural resource rents on political violence in resource-rich countries.

The moderating impact of political institutions has been assessed through the interaction term. The expected direction of this relationship remains ambiguous. Democracy, political constraints, media integrity and judicial independence can neutralize the violence-enabling impact of natural resource rents. However, it is also possible that rents themselves neutralize the peacemaking capability of institutions (Arezki and Gylfason, 2013; Elbadawi and Soto, 2015; Ajide et al., 2020).

GDP per capita is likely to have a negative effect on violence as higher level of production leads to increase in opportunity cost of violence for state as well as non-state actors. A higher GDP also reflects better set of economic opportunities providing relief from grievances related with economic deprivations (Krain, 1998; Collier and

¹The weak state mechanism posits that a weak state structure is more likely in a resource dependent economy because reliance on natural resources may result in reduction of taxation, making states less accountable to the society and this reliance may also inhibit the need for strong formal institutions. The power gap created can then be exploited by the rebels in garnering resources and support for mass rebellion.

Hoeffler, 1998; Farzanegan et al., 2018). GDP represents economic development and improvement in national income, which may or may not be increasing the intensity of violence. This may be due to a number of factors. A rise in the level of economic development may increase the opportunity cost of violence; inducing the dissident groups into reducing the extent of violence. On the other hand it may increase the extent of violence by incentivizing the use of violence to gain control of productive resources. Political globalization is expected to contribute to the reduction of political violence through membership of international organizations and agreements. These entities can serve as mediators, arbitrators, or facilitators in conflicts, providing a platform for diplomatic solutions rather than resorting to violence. Enhanced diplomatic ties and global communication channels can foster dialogue between nations, offering alternative avenues for resolving disputes. International pressure and scrutiny can be leveraged to discourage governments from engaging in violence against their own citizens, fostering a global norm against political violence. Military expenditure can have mixed effects on violence. Collier & Hoeffler (2006) are of the view that military spending may deter conflict by reducing likelihood of success of rebellion. On the other hand, it may act as a signal to the dissenting group of a possibility of aggression by the state, instigating preemptive acts of violence. The relationship between unemployment among youth and violence is well documented (Urdal, 2006; Caruso and Gavrilova, 2012; Mude, 2014). According to Karl Marx mass unemployment leads to the formation of the industrial reserve army of the unemployed that becomes one of the major instruments for revolution. In modern time similar dynamic enables rebel groups to recruit young individuals by exploiting their existing grievances i.e. lack of economic opportunities. The work by Caruso and Gavrilova (2012) particularly points out that an average member of any rebel group is most likely going to be male hence unemployment among male youth is expected to have higher impact on violence. Population is expected to stimulate onset of violent conflict as increase in population can lead to rise in competition over scarce resources.

Population density is expected to have a positive effect on the intensity of violence as it would make it easy for violent groups to maximize casualties from violent activities due to likely proximity to violence.

2.4.2.iii. Data

Considering the diverse and multidisciplinary nature of the work multiple data sources are used. The data on political violence, its onset, and intensity is accessed from the UCDP/PRIO Armed Conflict Dataset, Version 19.1. We have incorporated two distinct but interrelated aspects of institutions namely, participation and accountability. To capture the phenomenon of political participation, we have used the Polity2 measure. For capturing accountability, we have incorporated Political Constraints Index developed by Henisz and Zelner (2010). A higher value of the index depicts effective protection against manipulation and appropriation. Further, we have also incorporated two additional indicators of institutional accountability i.e. media freedom and judicial independence. Data on these variables was accessed from The Global State of Democracy Indices (GSoDI) 2020. Judicial independence refers to the extent of freedom of courts from the undue influence of the executive and other branches of government. Media integrity represents the degree to which the media provides realistic and critical coverage of political matters. While most of the data of control variables can be accessed from WDI, the data for globalization can be obtained from KOF Swiss Economic Institute's disaggregated KOF Globalization Index.

The sample includes 86 countries for which consistent data was available from 1990 to 2020 on key variables, namely, natural resource rents, institutional accountability indicators, and political violence. The selection criterion also required that each country experienced at least one episode of political violence during the period.

Table 2.4.i. Explanation of Variables

Sr. No.	Variable	Explanation	Data Source
1	Incidence of Violence	Incidence of a internal violence with as well as without involvement of foreign states	UCDP/PRIO
2	Onset of violence	Whether a violent conflict started in the year t for country i (1) or not (0)	UCDP/PRIO
3	Intensity of Violence	Number of battle deaths	UCDP/PRIO
4	Coal rents (% of GDP)	Coal rents are the difference between the value of both hard and soft coal production at world prices and their total costs of production.	WDI 2022
5	Forest rents (% of GDP)	Forest rents are roundwood harvest times the product of regional prices and a regional rental rate.	WDI 2022
6	Oil rents (% of GDP)	Oil rents are the difference between the value of crude oil production at regional prices and the total costs of production.	WDI 2022
7	Natural gas rents (% of GDP)	Natural gas rents are the difference between the value of natural gas production at regional prices and the total costs of production.	WDI 2022
8	Total natural resources rents (% of GDP)	Total natural resources rents are the sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents.	WDI 2022
9	Media integrity	The extent to which the media landscape offers diverse and critical coverage of political issues.	GSoDI
10	Judicial Independence	The extent to which the courts are not subject to undue influence from the other branches of government, especially the executive.	GSoDI
11	Polity2	Combined Polity Score (-10 to +10)	Polity5, 2020
12	Political Constraints Index	The extent to which a change in the preferences of any one actor may lead to a change in government policy	Henisz and Zelner (2010)
13	Gross Domestic Product (GDP)/ GDP per Capita	Natural log of GDP (constant 2015 US\$)/ Natural log of GDP Per Capita (constant 2015 US \$)	WDI 2022
14	Population density	People per sq. km of land area	WDI 2022
15	Population	Population in Millions	WDI 2022
16	Military Expenditures	Military expenditure as a percentage of gross domestic product	SIPRI 2021
17	Youth Unemployment	Unemployment, youth male (% of male labor force ages 15-24)	WDI 2022
18	Political Globalization	Political Globalization	KOFF Globalization Index 2022

2.4.4. Estimation Techniques

The data spans multiple countries from period 1990-2019. The reason for selection of this time period was that major institutional changes occurred in Eastern European and Central Asian countries after the end of Cold War in 1989, making 1990 as a more suitable starting time period for our research. Further, data on natural resource rents (which is our focus in this essay) is not available from before 1990s.

2.2.4.i. Dynamic Panel Probit Estimation

In the context of incidence of political violence, the variable has to be modeled as a dynamic variable i.e. $y_{it} = f(y_{it-1}, X_{it})$. A dynamic probit/logit model is needed. In such a model y_{i0} is likely to be correlated with μ_i also known as unobserved heterogeneity. This would affect y_{it} . That is called initial condition problem. The econometrics literature identifies three different techniques for dealing with the issue (Miranda, 2007), namely, Heckman (1981), Orme (1996) and Wooldridge (2005). Wooldridge (2005) suggests a dynamic model conditional on the first observation and to specify a distribution for the unobserved individual heterogeneity term (μ_i) conditional on the initial state and any other exogenous explanatory variables. In the context of our model is updated based on changes suggested by Rabe-Hesketh and Skrondal (2013):

$$V_{it} = \beta_0 + \beta_1 NRR_{jit} + \beta_2 I_{it} + \beta_3 (NRR_{jit} * I_{it}) + \sum_{k=4}^n \beta_k x_{kit} + \vartheta_i + \varepsilon_{it}$$

$$V_{it} = \beta_0 + \beta_1 NRR_{jit} + \beta_2 I_{it} + \beta_3 (NRR_{jit} * I_{it}) + \sum_{k=4}^n \beta_k x_{kit} + \theta_0 V_{i0} + \sum_{l=1}^q \theta_l z_{l0} + \sum_{s=1}^q \theta_s z_{sm} + \vartheta_i + \varepsilon_{it}$$

Where, z_{i0} represent initial value of exogenous variables that may explain unobserved heterogeneity, while z_{im} represents their respective mean values. $\vartheta_i \sim \tilde{N}(0, \sigma_{\vartheta}^2)$ and is independent of y_{i0} and z_1 . The resulting equation can then be estimated by using standard Random Effects (RE) probit technique.

2.4.4.ii. Random Effects Probit

The equation for violence onsets is estimated by using Random Effects Probit model. While the variable $Onset_{it}$ is not dynamic, it is dichotomous i.e. $Onset_{it} = 1$ if the country i in time period t has experienced onset of a violent conflict. Let the probability of $Onset_{it} = 1$ be p and the probability of $Onset_{it} = 0$ be $(1-p)$. Then $E(Onset_{it}) = p$. This probability is a function of a vector of explanatory variable (X_{it}) and that of a vector of coefficients (β_i) i.e. $p = f(\beta X_{it})$. The probit model corresponds to $f(\beta X_{it}) = \phi(\beta X_{it}) = \int_{-\infty}^{\beta X_{it}} \frac{1}{\sqrt{2\pi}} e^{-\frac{u^2}{2}} du$.

As these are nonlinear models therefore the marginal effects are reported alongside the standard regression output (Bland & Cook, 2019). This changes equation 4 and subsequent equations to the following form:

$$Onset_{it} = \beta_0 + \beta_1 NRR_{ijt} + \beta_2 I_{it} + \beta_3 NRR_{ijt} * I_{it} + \sum_{m=4}^k \beta_m X_{imt} + \mu_i + \epsilon_{it}$$

Here, $\mu_i \sim iidN(0, \sigma_u^2)$ and ϵ_{it} follows standard normal distribution. $\mu_{it} = \alpha_i + \epsilon_{it}$ where, α_i are treated as random in the random effects model. The coefficients and standard errors are estimated using maximum likelihood estimation technique.

2.4.4.iii. Negative Binomial Panel Regression

The equation for intensity of violence conflict has been regressed using negative binomial regression technique. This technique is used for model over-dispersed count variables. This means that conditional variance exceeds the conditional mean². As we are measuring intensity of violence through the number of battle deaths the model qualifies as negative binomial regression. In random-effects overdispersion mode the dispersion varies randomly from one cross-sectional unit to another.

²<https://stats.oarc.ucla.edu/stata/dae/negative-binomial-regression/#:~:text=Negative%20binomial%20regression%20is%20for,research>

Chapter 2.4.

Results & Discussion

We are aiming to determine the impact of natural resource rents and institutions on political violence. Additionally, we also intend to ascertain the extend to which institutions would moderate the impact of natural resource rents on political violence. In this chapter estimation results have been presented and analyzed.

2.5.1. Natural Resource Rents, Institutions and Incidence of Political Violence

The results for incidences of political violence are presented in Appendix tables 2.5.i.a. to 2.5.i.h. The first model (1) incorporates overall natural resources while the subsequent models estimate the effect of coal rents, forest rents, mineral rents, natural gas rents and oil rents respectively. Two variants of each model are estimated in which the first variant is treated as baseline model, while the next one is incorporating interaction term between institutions and natural resource rents. Further, marginal effects are also presented along with the estimation results for each variant of the model.

The coefficients of overall natural resources are found to be consistently positive

and mostly statistically significance across all models (1). This shows that increase in natural resource rents leads to increase in the likelihood of occurrence of violent incidence. The marginal effects depict that an increase in natural resource rents leads to increase in the probability of internal violence. This is exactly as our theory and literature has predicted. Collier and Hoeffler (1998) used natural resources as a ready and convenient proxy for taxable capacity and hence natural resources were expected to enhance motivation for engaging in violent conflict. Later natural resource rents were presented as an opportunity for the rebel group for generating resources for consolidating power and mounting violent insurrection (Collier and Hoeffler, 2004). It is also possible that natural resource rents incentivize appropriation by the state resulting in unequal distribution of benefits accrued from the natural resources. This appropriation and the opportunity that natural resource wealth presents may induce the rebel groups, generally representing less politically powered minorities, to retaliate by perpetrating violent rebellion (Elbadawi and Soto, 2015). The disaggregated analysis shows that the coefficients for oil, coal, natural gas, forest and mineral rents are for the most part positive. Confirming the assertion that natural resource rents tend to increase the likelihood of incidence of political violence. Oil rents and coals rents are found to be more incendiary than other forms of natural resources. Oil rents lead to increased corruption and deterioration of civil rights causing instability and unrest (Arezki & Bruckner, 2011). Okpaleke & Abraham-Dukuma (2020) also singled out oil rents as an important cause of internal strife due to distributive issues. Roberts (2021) linked coal production with violence in Myanmar. A key factor contributing to this connection is the distributional disparity, where the dominant coalition sees it as advantageous to claim the majority of natural resource rents, leaving minimal benefits for minority groups. This imbalance fosters enduring grievances that may manifest in acts of violent rebellion. Mignamissi & Kuete (2021) found that oil and natural gas rents tend to reduce happiness, causing recruitment in the rebel groups. Kai-tian (2012) discussed that the management of coal production leads increase in

inequality instigating frustration led violence over distributional issues.

The coefficients for media integrity are found to be negative and significant. Enhancing media integrity corresponds to reduced likelihood of instigating political violence. A high integrity media allows for better coverage for all contending views, providing non-violent platforms for arguments and shaping public opinion against miscarriage of justice and appropriation by state and acts of violence by dissident groups. Held (1997) points to the role of media in encouraging nonviolent means of influencing political processes. Hassan, et al. (2022) discusses that media leads to more participation in peaceful political processes like voting leading to reduction in political violence.

Judicial independence was found to have a negative but statistically insignificant coefficient. This means that judicial independence is ineffective in reducing the likelihood for incidence of political violence. Gibler & Randazzo (2011) found that independent judiciary may in short run at least leads to reduction in regime stability compromising its effectiveness in inhibiting incidences of political violence.

The coefficient for polity is found to be consistently significant and negative, depicting violence inhibiting role of democratic political regimes. Democratic regimes allow for nonviolent redressal of grievances and penalize renegeing through democratic processes. Democratically elected executives are subject to greater checks and balances resulting in increased penalty for violating commitments in the form of democratic accountability. Further, rebel groups are less likely to resort violence as they operate through reputation mechanisms especially in their respective groups or communities. Availability of democratic means makes violent retaliation an excessive response to any form of grievance. The group would risk losing community support by non-violent sympathizers and hence may be inclined to avoid violent recourse (Collier and Hoeffler, 2004; Elbadawi and Soto, 2015).

In case of political constraints, the impact on violence remains consistently negative but statistically insignificant. Marginal effects depict that enhancement in political constraints is going to reduce the likelihood of occurrence of violent conflict. This outcome highlights that institutional factors that limit the discretion of the executive to formulate policy and enhance the capability of individuals or interest groups to influence and negotiate policy change in accordance with their interests, allows for peaceful resolution of conflicts and prevents incidences of violence (Elbadawi and Sotto, 2015). The coefficient and marginal effects of political constraints are statistically insignificant which may be attributed to insufficient level of political constraints. The indicator's value ranges between zero and one, with the value one indicating high levels of political constraints. However, the average value for political constraints for our sample remains quite low at 0.2524, which may explain the statistically insignificant results despite the expected impact.

Depending on the type of natural resource rents, the interaction between institutions and rents portrays a variety of outcomes. This result emphasizes how the breakdown of natural resource rents may enable us to identify the shortcomings of the different institutional attributes that are currently in place in terms of reducing the violence-instigating effect of natural resource rents.

The coefficient of interaction between media integrity and overall natural resource rents is negative and statistically significant. This means that media integrity neutralizes the incendiary effect of natural resource rents effectively by exposing and criticizing appropriation of natural resources by the government (incumbent). This would increase the cost of appropriation due to loss of goodwill and popular support, discouraging the incumbent from misappropriation of natural resources and instigating rebellion. The coefficient of this interaction term is negative and statistically significant for oil and coal rents, while for natural gas, forest and mineral rents the coefficient was insignificant.

The coefficient of interaction between judicial independence and overall natural resource rents is negative and statistically insignificant. This might be attributed to the ineffectiveness of judicial independence in preventing incidences of political violence. It is however, found to be significant in moderating the impact of oil rents on likelihood of political violence. This means that oil rich nations can benefit from an independent judiciary for conflict resolution of distribution of oil rents. For other forms of natural resource rents the interaction term was found to insignificant.

For overall natural resource rents democratic institutions are effective in moderating the incendiary stimulus exerted. The coefficient of polity and natural resource rent is estimated to be negative and statistically significant, highlighting the importance democratic institutions in fostering peace. Polity is found to be significantly moderating the impact of oil rents, natural gas rents and mineral rents. For coal rents and forest rents the coefficient of interaction with polity is statistically insignificant. Democratic institutions induce the incumbent to seek popular support in order to maintain power, making renegeing on social contract regarding just distribution of natural resource rents and misappropriation natural resources politically inviable. That would induce democratic government to opt for more just distribution of natural resources eradicating the primary motivation for political violence. Further, democratic institutions also provide peaceful alternatives to rebellion for control over natural resources, allowing dissident groups to engage in mainstream politics instead of instigating violence. Democratic accountability also makes violence inviable as maintenance of rebel activity requires support by masses. Violence in the presence more peaceful options provided by democratic institutions would not find the requisite support, hence inducing even the rebel groups to avoid indulging in acts of political violence.

The coefficient of interaction term between political constraints and natural resource rents remains for the most part negative but statistically insignificant for over-

all natural resources. In case of oil, coal and forest rents political constraints are also found to be statistically significant in offsetting the violence inducing effect of natural resource rents. The marginal effects indicate offset of the violence-inducing impact of natural resource rents, which means that enhanced political constraints can be highly effective in limiting the dominant coalition's ability to appropriate a high share of natural resource rents, thereby mitigating the motivation for rebellion by prospective dissident groups. This result also indicates the need of increased checks and balances on the power of the executive for protection of the interests of minority groups and thus mitigating emergence of grievances and violence.

The control variables include natural log of Gross Domestic Product (GDP) per capita, political globalization, military expenditure and unemployment among male youth. GDP per capita is has a negative effect on violence as higher level of production leads to increase in opportunity cost of violence for state as well as non-state actors. A higher GDP per capita also reflects better set of economic opportunities providing relief from grievances related with economic deprivation (Krain, 1998; Collier and Hoeffler, 1998; Farzanegan et al., 2018). Military expenditures were found to be violence instigating as depicted by the its consistently positive and significant coefficient. This outcome is in accordance with our expectations. Increase in military expenditures leads signals to rebel groups of the intention towards violent suppression of dissent. This would encourage them to engage in preemptive acts of aggression as a response, making incidents of violence more likely (Collier & Hoeffler, 2006). The coefficients of political globalization and unemployed youth is found to be statistically insignificant. Showing that while increase in male youth unemployment does lead to rise in the likelihood of occurrence of violence this effect remains statistically insignificant. Similarly, the insignificance of political globalization highlights the limitations of global connectivity in overcoming internal issues.

2.5.2. Natural Resource Rents, Institutions and Onset of Violent Conflict

The results for onset of violent conflict are presented in Appendix tables 2.5.ii.a. to 2.5.ii.h. The first model (1) incorporates overall natural resources while the subsequent models estimate the effect of coal rents, forest rents, mineral rents, natural gas rents and oil rents respectively. Two variants of each model are estimated in which the first variant is treated as baseline model, while the next one is incorporating interaction term between institutions and natural resource rents. Further, marginal effects are also presented along with the estimation results for each variant of the model.

The results for the impact of natural resource rents on onset of violent conflict are ambiguous as the coefficients for overall natural resource rents, coal rents, natural gas rents and forest rents are statistically insignificant. This signifies that for the most part natural resource rents in themselves are not particularly responsible for the onset of conflicts, but they are responsible for a conflict becoming violent as is evident from the positive and significant coefficients of natural resource rents for incidence of political violence. However, for oil and mineral rents natural resource rents are exerting an incendiary effect. The coefficients for oil and mineral rents are positive and significant. The marginal effects clearly depict that increase in oil and mineral rents lead to increase in likelihood of onset of violent conflict. Basedau & Lay (2009) established that dependence on oil revenues leads to increase in probability of onset of civil war. Ojakorotu (2011) assert that nations with abundant mineral resources are more likely to experience contention over resource rents, leading to policies stimulating regional and ethnic factionalism, and eventually violent conflict.

Institutions of accountability namely, media integrity, judicial independence, democracy and political constraints are ineffective in preventing onset of violent conflict as

the coefficients of these institutions are statistically insignificant. This depicts that onset of violent conflict cannot be prevented by institutions of accountability but these institutions especially, media integrity and democracy are effective in mitigating the likelihood of a conflict becoming violent.

The results for interaction between natural resource rents and institutions are varying based on the institution and the type of natural resource rents. For overall natural resource rents only, polity is found to be playing a moderating role. Polity is also effective in moderating the violence-causing impact of oil rents as well as natural gas rents. By providing nonviolent venues for redressal of issues pertaining to the distribution of oil and natural gas rents democracy tends to reduce the likelihood of onset of violent conflict that may have been motivated by appropriation of natural resource rents. Media integrity and judicial independence are on moderating the effect of oil rents on onset of conflict. Free and fair media as well as independent judiciary in oil rich nations can ensure more equitable distribution of oil revenues by increasingly accountability for unjust distribution and appropriation by state. Thus, preventing onset of violent conflicts as we recall the oil rents are highly likely to instigate a violent conflict. Political constraints play a moderating role for oil rents, forest rents as well as mineral rents. In fact, for forest and mineral rents only political constraints are effective in moderating the role of rents on onset of conflict. The results signify that while none of the institutions are effective in preventing onset of conflict they do moderate the onset reducing impact of natural resource rents, making institutional reforms vital for inhibiting conflicts over distribution of natural resource rents.

GDP per capita has a negative and significant coefficient i.e. increase in per capita GDP leads to reduction in the likelihood of onset of violent conflict. A high GDP per capita leads to enhancement of economic opportunities leading to reduction in grievances and mitigating motivation for instigating a violent conflict (Soysa, 2015). The coefficient of population is both positive and highly significant in stimulating

the onset of violent conflict. The marginal effects depict that increase in population raises the likelihood of the onset of violent conflict. Ajide et al. (2020) are of the view that in a country with higher population it would be difficult for the state to provide security. Further, increase in population enhances the demographic burden on the resources of the nation leading to generation of grievances as well as facilitation of recruitment for the dissident groups, hence increasing probability of mounting a violent conflict (Bjorvatn and Farzanegan, 2015). The relationship between unemployment among youth and violence is well documented (Urdal, 2006; Caruso and Gavrilova, 2012; Mude, 2014). According to Karl Marx mass unemployment leads to the formation of the industrial reserve army of the unemployed that becomes one of the major instruments for revolution. In modern time similar dynamic enables rebel groups to recruit young individuals by exploiting their existing grievances i.e. lack of economic opportunities, improving feasibility for mounting a violent conflict. Political globalization is found to be insignificant in inciting the onset of violent internal conflict.

2.5.3. Natural Resource Rents, Institutions and Intensity of Violent Conflict

2.5.3. Natural Resource Rents, Institutions and Intensity of Violent Conflict Tables 2.5.iii.a. to 2.5.iii.d. represent the results of negative binomial regression results for impact of natural resource rents and institutions on political violence. Natural resources rents are found to be having positive influence on battle deaths. The existence of natural resource rents increases the prospective rewards of rebellion and impels the incumbents to try to assure victory by whatever means necessary; resulting in both sides adopting violent means to win. This would lead to increase in the severity of the conflict. Further, we also find that the impact of natural resources varies with the types of natural resources (Lujala, 2009; Addison et. al, 2002). In the case of coal,

forest, minerals, and natural gas the impact is found to be positive i.e. these natural resource rents result in an increase in the intensity of violence. However, the impact of oil rents on battle intensity is negative and significant. It means that oil rents can potentially decrease the intensity of violence. This result while counterintuitive is explainable. Oil rents tend to be higher than that of other natural resources, which increases the opportunity cost of violence as high-intensity violent activity may result in the destruction of oil reserves leading to an increase in oil rents and causing decline in the intensity of violence.

Table 2.5.iii.a. depicts the results for the institutional variable Media Integrity. The table displays the results for estimations featuring media integrity as an indicator for institutions of accountability. Media integrity represents free and fair media coverage of major political events. It is supposed to affect the intensity of violence negatively through exposure and criticism of atrocities committed during the conflict. This indiscriminate and fair portrayal of events can result in a loss of goodwill for the perpetrator of violent conflict leading to a decline in the intensity of violence. The coefficient of media integrity while insignificant remains negative for all the twelve estimations, showing that our hypothesis stands true for media integrity. Table 2.5.iii.b. depicts the results for judicial independence. An independent judiciary is expected to hold perpetrators of intensely violent conflict accountable by penalizing state actors as well as dissidents for civilian deaths. This would induce both state actors as well as dissident groups to avoid the intensification of conflict and opt for a peaceful resolution. Our results for judicial independence depict the expected negative coefficient of the indicator., However, like media integrity the coefficient is statistically insignificant. Table 2.5.iii.c. presents the results of the political regime. Democracies tend to experience less intense conflict when compared with autocracies. Hence, higher values of the polity indicator are expected to have a negative effect on the severity of violence. This is so as democracies provide for peaceful means for consensus building

and redressal for grievances. However, at the same time groups involved in high casualty acts of violence during a conflict generally, lose public support as well as political powers in democracies. This increases the opportunity cost for high-intensity violence in democracies. Our results depict the negative effects of democracy on the severity of the conflict, which confirms our assertions (Ajide et. al, 2020). Table 2.5.iii.d. gives the outcomes for the impact of political constraints on battle intensity. The coefficient of political constraint is consistently negative, albeit statistically insignificant. Political constraints represent the restrictions on the incumbent in devising policies. This restricts the incumbent's ability to perpetrate high casualty attacks on dissidents or practice oppressive measures to suppress opposition. This may not eliminate violent conflict but it would reduce the intensity of violence. The impact of political constraints on the intensity of violence is negative but statistically insignificant. This portrays that institutions of indiscriminate accountability namely, media integrity, judicial independence, democracy and political constraints are exerting negative influence on intensity of violence but this effect is not significant (Benson and Kugler, 1998; Valentino et. al, 2004). While this suggests that institutions do not exert direct effect on intensity of violence but it does not mean that institutions would not bring moderation in the effect of natural resource rents on intensity of violence.

The coefficient of the interaction term between natural resource rents and institutions is where the difference between various types of rents and institutions becomes more significant. The interaction term between coal rents and media integrity is negative and statistically significant (Table 2). This depicts that while coal rents have a significant positive effect on the severity of violence, in the case of high media integrity the impact of coal rents is mitigated. A free and fair media can be instrumental in better distribution of gains from coal resources, further it would increase the cost of violence by deteriorating goodwill for both state as well as rebel groups. Hence both state and rebels would try to avoid incidences of high casualty violence over natural

resources in the presence of media integrity. For natural gas, however, media integrity fails to mitigate the violence-causing impact of rents. The interaction term's positive coefficient is also statistically significant, indicating that natural gas rents tend to offset the impact of media integrity.

The interaction between judicial independence and natural resource rents also shows varying results depending on the type of natural resource rents. Judicial independence is effective in mitigating violence in the case of coal rents as presented by the negative and statistically significant coefficient of the interaction term. In the case of mineral and oil rents the coefficient of the interaction remains negative but statistically insignificant. For forest, natural gas and overall natural resource rents the coefficient of interaction term is positive and statistically insignificant. This result does not imply that judicial independence is not important but what it shows is that it may not be very effective in reducing cost of violence once a conflict is initiated.

Polity happens to be the most effective institutional arrangement in mitigating the severity of violence. The interaction between polity and overall natural resource rents has a positive and statistically significant coefficient, signifying that while democracies tend to reduce the intensity of political violence in the presence of natural resources this impact of democracies is hampered. This points to the gravity of the threat posed by natural resources rents vis a vis the possibility of high-casualty violence. The presence of natural resource rents increases the prospective benefits of engaging in high-intensity violence for dissidents. For a more democratic state, the capability to suppress rent-motivated dissidence using violence is limited, encouraging rebel groups in becoming more forceful and, consequently, intensity of violence higher (Arezki and Gylfason, 2011). This result is consistent for forest rents, mineral rents, natural gas rents, and oil rents. However, for coal rents polity is found to be mitigating the violence intensity. This may be attributed to the fact that coal rents are not as high as other forms of natural resource rents. Thus, the incentive for high-intensity violence

created by coal rents is mitigated under democratic institutions (Lacina, 2006).

Political constraints were also found to be ineffectual in mitigating the impact of natural resource rents. For forest rents and natural gas rents, the impact of political constraints is mitigated and the violence-intensifying impact of natural resources dominates. Again, the political constraints also limit the government's ability to decisively respond to rebellion. Further encouraging the dissidents to resort to violence for political gain leads to high-intensity violence. Coal rents are one exception, where political constraints are effective in mitigating the violence-enhancing effect of natural resource rents.

We see that the impact of institutions of accountability varies with the type of institution. One consistent trend is that independently all institutions have a negative impact on the intensity of violence. However, in terms of statistical significance polity (democratic institutions) is the most effective. Natural resource rents consistently have a positive effect on violence intensity, except oil rents. They seem to reduce the intensity of violence. The interaction between natural resource rents and institutions is also very insightful. We see that for the most part institutions fail to mitigate the impact of natural resource rents on violence with the exception of coal and oil rents for which the impact of institutions seems to be moderating the violence enhancing effect of natural resource rents.

Both GDP and military expenditure have positive and significant impact on intensity of violence. This shows that economic growth tends to increase the potential returns of violence for both incumbent as well as the rebel; resulting in the intensification of violent activity. Military expenditures tend to increase the state's capacity for violence as well as enhance the ability of the state to commit atrocities against dissident elements. This in turn leads to an increase in the severity of violence. The coefficient of population density is also positive but statistically insignificant.

Chapter 2.6.

Conclusion

The loss of human life during conflict is a great tragedy. It has significant long-term effects on the economic and political life in any society. It induces fear and suffering in the short run and deflects crucial investment and deteriorates social cohesion in the long run. The continued prevalence of civil wars and political violence in natural resource rich developing nations has been the subject of a number of researches. From a theoretical perspective it is the distribution of natural resource rents in the presence of power asymmetries that instigates conflict. Natural resource rents tend to increase the intensity for violence by enhancing prospective benefits for rebel activity, inducing rebel groups to engage in high-intensity violence.

We have elaborated upon the existing theories by using game theoretic framework adapted from Elbadawi and Soto (2015) incorporating institutional cost of violence. We established that indiscriminate institutional accountability for violence would reduce the chances of conflict. Institutions that penalize acts of political violence regardless of who is committing them makes exploitation and rebellion costly, resulting in decline in motivation for perpetration of violent acts. Therefore, the first case we make is for establishment of institutions that penalize violence and exploitation. Checks on executive powers primarily inhibit the higher offices in government from

exploitation of minority groups through appropriation of natural resources, unequal distribution of rents and oppressive aggression. These checks and balances can be enshrined in the national constitution or legislation enforced through an independent judicial system or through an effective democratic system of governance with oversight of a free and fair media. Therefore, a set of complimentary institutional reforms ensuring accountability for exploitation and violence would not only deter acts of aggression by rebel groups but also keep the state (Group A) from appropriating excessive shares of natural resource rents. Institutional accountability may reduce both state's and rebel group's' ability to inflict violence by deteriorating good will and public support, prosecuting acts of aggression, ensuring distributional justice and preventing government's ability to act with impunity.

Our work aimed to assess the efficacy of natural resource rents in determining the incidence, onset and intensity of violence as well as the role play by institutional accountability in moderating this effect. We have use four different institutional of institutional accountability media integrity, judicial independence, polity and political constraints for 85 countries for the time period 1989-2021. The empirical analysis demonstrates the importance of institutional accountability in mitigation of political violence, while acknowledging that the current state of political constraints is insufficient. Further, we have also established that natural resource rents tend to have a positive effect on incidence of violence while not being a significant factor in the onset of violent conflict. We found that polity is the most consequential institutional indicator for explaining both incidence and intensity of violence. Further, type of natural resource matters for determining its impact on intensity of violence. Oil rents have negative impact on intensity of violence while for coal rents all institutions are effective in moderating the violence enhancing impact. Our results while counter intuitive do generate some thought-provoking insights. Impact on natural resources on intensity of violence depends on the type of natural resources. For example, oil rents

tend to have negative impact on violence intensity. It doesn't mean that oil rich nations experience less violence but that existence of oil rents discourages high-intensity violence. Coal, forest and natural gas rents are found to be more violence enhancing as compared to mineral rents. Further, effectiveness of polity in reducing intensity of violence points to need for democratic reforms but the interaction between polity and natural resources mostly depicts that democratic institutions may be overpowered by the greed mechanism emanating from natural resource rents. We also see that while the coefficients of all institutional indicators are having the expected impact the coefficients remain statistically insignificant. This does not diminish the importance of media integrity, judicial independence, democracy, and political constraints for ensuring peace and penalizing atrocities but reflects the insufficiency of the existing institutional arrangements. It is apparent from the analysis that there is a need to carry out significant democratic and legislative reforms in order to reap the peacekeeping benefits from democratic institutions of accountability. This makes the case for strengthening institutional accountability to make these institutions more effective in reducing violence intensity and moderating violence enhancing impact of natural resource rents. The results also depict that while only media integrity and democracy exert significant direct influence on violence, all institutions including political constraints and judicial independence moderate the violence enabling impact of one or more types of natural resource rents. Further, underscoring the importance of ensuring media freedom, judicial independence, democracy and check & balances.

Essay 3

Institutions and Political Violence in Pakistan

Chapter 3.1.

Introduction

Political violence is defined as acts of disturbance, destruction and injury that are aimed at achieving political goals and tend to alter strategic behaviors with overarching implications for social systems (Neiburg, 1969). Violence is undesirable in all its forms but the potential scope and scale of political violence can be especially detrimental to national prosperity and development. Political conflict is a kind of bargaining process, in which all parties involved can achieve a pareto superior outcome by cooperating with each other, given that violence results in destruction of resources leading to a pareto inferior or inefficient outcome. Yet, violence is a regular occurrence meaning that political actors repeatedly fail to reach the pareto superior resolution. This leads to inefficient allocation of resources, ingrained grievances and a positive opportunity set for violence specialists. Fearon (1995) presented three broad rationalist approaches to explain this situation, namely, information asymmetries, resource indivisibility and commitment problems.

We need to understand that political violence takes place in an environment of relative deprivation (Walker & Pettigrew, 1984) and mistrust (Murer, 2018). However, most modern nations have worked towards developing a social contract for power and resource sharing. One way they went about it is to get to a consensus regarding terms

for cooperation and maintaining peace, which can be achieved through making and documenting a constitution. It can play the role of a peace accord (Saad & Jacob, 2012) and also be instrumental in replacing violent means of resolving conflict with political ones, which would be possible if the constitution includes provisions to regulate access to power and resources (Samuels, 2006). Yet the prevalence of political violence demonstrates that there exists a commitment problem (Fearon, 1995). This means that despite cooperation being a pareto superior strategy, parties involved are unlikely to opt for it, without some way of making the commitments credible.

The design and process of constitution building create a vision for the nations and a guideline for how to achieve it. Von Bogdandy, et, al. (2005) defines constitutions as the means for nation-building that would document shared political values of different groups in the country. That is why the authors suggest that constitution should incorporate “*traditional elements of collective identity*” and direct the nation-building process towards establishing rule of law and representative democracy.

We posit that in the presence of power asymmetries, the dominant coalition will have an incentive to renege from the social contract by appropriating more than agreed-upon share of resources (Acemoglu, 2003). We also acknowledge that this breach of contract can potentially be violence inducing. In a diverse society constitution building can take the form of consociational model. Consociational model provides an explanation for existence of stable and peaceful democracy in diverse societies. Lijphart (1969) posited that consociationalism incorporates inclusion of ethnicities in legislations, civil service and allocation of funds etc. This model can be instrumental in preventing political violence in countries like Pakistan.

In this essay we argue that violating the terms of constitution by the group in power comes at a cost in the form of loss of goodwill and political support, emergence of opportunist opposition parties, judicial accountability and need for redirecting

resources towards damage control and image building. This cost would occur even if violence does not take place and its magnitude determines whether the majority or incumbent group will honor its commitment or not. A high enough cost of renegeing can be violence inhibiting.

From the perspective of the group outside of the dominant coalition, the choice remains to decide on the effort exerted towards production and whether to engage in rebellion. A high effort implies higher levels of investment and labor force participation, this higher effort also comes at a cost which determines that choice of effort. The choice of rebellion however, depends on the level of exploitation or appropriation. Considering the fact that rebellion itself is costly in terms of actual resources exerted as well as possibility of a loss, we hypothesize that at lower levels of exploitation the minority group will choose not to rebel but there is a critical level of exploitation at (or above) which the group will opt for the gamble of rebellion.

As a demonstration of this dynamic we consider the case of Pakistan. Its inception in 1947 has been an outcome of unification of a number of very different ethnicities under the banner of the common religion i.e. Islam and the understanding that the exploitation faced under the British rule as well as prospects of exploitation under a Hindu majority in the subcontinent after the British would leave could be prevented in a Muslim majority state. This signifies an implicit social contract between the powerful Punjabi ethnicity and the rest. As Fearon (1995) explains this contract entails a commitment by the elite offering empowerment and protection from exploitation to the minority group. Therefore, an effective strategy in Pakistan could have been an institutional setup that gave bargaining power to the minority groups and holds the powerful elite to their commitments effectively. However, the early institutional arrangements gave the center immense powers over both tangible and intangible resources inducing the powerful Punjabi elite to become unwilling to cede and devolve the political power structure. This real relative deprivation has been,

at times, exploited by domestic regional political leadership and external vested interests, to mount rebellion and secession movements. In case of Pakistan the costs of violence have been significant for all parties involved. We intend to explore the factors behind occurrence of political violence in Pakistan and try to understand the nature of grievances creating ethnic cleavages and political unrest in the country.

3.1.1. Hypotheses

Our main hypotheses are:

- a. “Political violence in Pakistan has been an outcome of commitment failure”
- b. “Constitutions of Pakistan have not been able to provide credibility to state’s commitments”
- c. “Commitment failure has been responsible for decreased effort on the part of non-state actors resulting in lower levels of economic development”

3.1.2. Objectives

The main objectives of this work are:

- a. To analyze the need for the constitution in the presence of diversity.
- b. To study the constitutional history of Pakistan and its link to relative deprivation in the regions and aggression.
- c. To explain ethnic and political violence in Pakistan as issue of credible commitment institutions.

We assert that political violence in Pakistan is not an outcome of primordial animosity among the various ethnic groups but a case of failed bargaining. The group outside of state is generally responsible for providing necessary innovations, invest-

ments and manpower to ensure economic growth. The state is responsible for providing security to the group from physical harm and exploitation in return of a decided amount of taxation and control. A more consociational state would be less inclined to renege on the agreed upon arrangement and consort to exploitation. However, a less representative state would have the incentive to go back on its commitment. The nonstate group then has a choice of resisting or complying with the exploitation. However, if the group expects the state to renege, then it would divest resources from production and allocate them towards building its own violence capacity, resulting in low levels of development and higher incidences of violence. Our work aspires to study the state of political strife in Pakistan in a game theoretic perspective and will use post-constitutional game theory to explain the incidences of political violence and lower levels of economic development in the country. This will enable us to make a case for consociational democracy for the country.

Diversity in Pakistan necessitated a consociational democracy in which all the diverse social groups are represented and empowered. This power sharing institutional framework was not effectively established in the country. This real relative deprivation has been, at times, exploited by domestic regional political leadership and external vested interests, to mount rebellion and secession movements. In this essay we are trying to analyze the adoption and development of the constitution of Pakistan and its effectiveness in limiting ethnic and political violence. We trace the path to the 1973 constitution in the country and how the power dynamics between the military, the executives and the political leadership affected the development and evolution of the constitution. From a theoretical standpoint this dynamic explains both inconsistent growth and ethnic strife in the country. The consecutive governments failed to make credible commitments despite the constitutional provisions, leading to mistrust between the executives and the regional interest groups. This translated into diversion of resources from investment to rebellion (Appendix 3.1). The analysis of GDP

growth rate, private investment and credit dispersion trends signify the cost of conflict that has been accrued to the country. We intend to trace the constitutional history of Pakistan vis a vis its link to regional disparities and conflicts. In this regard, popular regional movements will be placed in their institutional context to evaluate the way the process of institution building in Pakistan has created conflict among ethnicities. We have used post-constitutional game proposed by Kirstein and Voigt (1999) as our take-off point. We have made changes in the parameters of that proposed game in order to make it in line with the situation on ground.

Chapter 3.2.

Literature Review

In this essay we are trying to ascertain and analyze violence as an outcome of commitment problem, emerging from the incumbent reneging from social contract. In this chapter we have elaborated on the existing the existing literature on the issue focusing on alternative perspectives on institutions and political violence. Powell (2004) show that violence emerging from commitment issues can take following forms; preventive conflict, preemptive attacks and conflicts over power-sharing. Large and hasty shifts in the distribution of power can potentially lead to war.

Lehmbruch (1975) asserted that consociationalism is an effective strategy for the conservation of national integrity in a case of international conflict. Reynal-Querol (2002) show that consociational democracy is highly effective in reducing the incidence of ethnic war. Saideman, et, al. (2002) elaborates the issue through the theory of ethnic security dilemma to explain the role of democratization and political institutions in controlling ethnic violence. The authors then test their hypotheses on the data from 1985 to 1998 covering all ethnic groups in the Minorities at Risk dataset. The authors find that proportional representation can play a significant role in reducing incidences of violence. They also established that the electoral system is more significant than the type of government. On the other hand, Brancati (2006) explores

the role of decentralization in reducing ethnic conflict and secession movements and tries to explore the reasons for inconsistent impact of decentralization on conflict. Upon carrying out the empirical analysis of 30 democracies from 1985 to 2000, the author found that while decentralization can increase opportunities for political participation of the minorities, it can also result in emergence of regional political parties, that may reinforce the “us-versus-them” ethnic mindset and produce legislations that favor certain ethnic groups over others. The emergence of regional parties may explain the inconsistent effects of decentralization on ethnic conflict. Widner (2005) discussed that between 1975 to 2003 about 200 new constitutions were drafted as part of peace process in countries prone to violent conflicts. The author used regression analysis to assess the impact of constitution writing processes on violence. They found that while participation in formulation of constitutions does not have any effect on violence in Europe, it is effective in mitigating violence in Africa, Americas and the Pacific.

O’Flynn (2010) assert that consociational democracies provide effective mechanism for conflict management but they fail to ensure the longer-term conflict resolution. The author argues that deliberative democracy determines the design of consociational institutions, encouraging political leadership to focus on the interests of everyone, instead of just on the interests of their own ethnic group. This would reduce the emergence and extent of grievances reducing likelihood of internal conflict.

Dixon (1997) discusses that consociationalism is a ‘top-down’ elite-driven approach to power-sharing. It does however, allow for ethnic autonomy as a way for producing a more enabling atmosphere for conflict resolution. Considered against the ‘peace processes’ in 1973-74 and 1994-96 in Northern Ireland. The author argued that the consociational model has failed as the Northern Irish political elites could not bring their supporters towards a political settlement. Malova (2001) explains that the constitution making process in Slovakia was unable to provide guidance to political leaders and to promote the establishment of democratic institutions. The author

asserts that cultural norms in the country have impeded the institutionalization of formal rules and weakened the constitutional government.

In Africa ethnic and cultural diversity is the key to understanding the causes of civil war and political strife. As a case the political elite in Sudan in an attempt to undermine the cultural diversity used the “Arab-Islamic” model for instituting national unity. This negation of cultural identity led to frustration among the rural Sudanese populace which translated into violent conflict against the ruling elite. The second Sudanese civil war ended with the Naivasha agreement (Comprehensive Peace Agreement- CPA). The CPA provided accommodation for cultural differences and incorporated provisions for Southern independence through referendum in 2011 (Deng, 2005). Considering the central and authoritarian nature of state institutions Sudan still faces repeated bouts to ethnic conflict.

In Asia, Wilkinson (2000) study the case of India to assess the role of consociational power sharing in reducing incidences of ethnic violence. The author argues that during the 1950s and 1960s India was a non-consociational state especially from the perspective of the important Muslim minority. The author posits that since the mid-1960s India has become more consociational yet ethnic violence has risen. However, the author acknowledges that that consociational power sharing can be instrumental during the transition from more centralized or authoritarian rule, especially when dominated ethnic groups would demand guarantees to secure themselves against potential losses in the new regime. Chandhoke (2005) argue that the primary factor behind political unrest and violence in Kashmir is attributed to repeated breaches of social contract by the government of India. This has reduced the democratic space in the (occupied) state of Kashmir, enhancing discontent and political violence.

Saad and Jacob (2012) analyze and compare the management of ethnic conflicts in Malaysia and Nigeria in terms of their respective constitutions. In Malaysia, the

constitution guarantees freedom to citizens in democracy and protects the rights of the ethnic groups. However, the state of minority rights in the country is questionable given certain restrictions on assembly. In contrast in Nigeria the constitution is subject to manipulation by the ruling elite, leading to ethnic tensions, signifying that unless constitutions are adhered to by all parties including military and civilian bureaucracy, the prospect of violence remains likely.

The case study of constitution-making in Libya and Yemen during time of conflict signifies the excessive involvement of military in constitution making is facilitated in a conflict. This transform a constitution from an instrument for conciliation to a source of conflict. Unless a credible arrangement can be ensured that commits the armed forces to a more consensus-based process. This can be done by mobilizing public support for the constitution. In case of Libya the third-party intervention in the form United Nations (UN) ensured the creation unified state under the new constitution, while Yemen failed to achieve political consensus. Yemen is a case where the strong-armed approach of the incumbent and foreign vested interests made consensus building for a unified single state impossible (Johnson, 2017).

Stirton & Lodge (2020) explored the constitutional conflict between the principles of responsible and representative government in Jamaica during colonial era and immediately at the end of colonial period. The colonial legacy of ‘mutually suspicious bargain’ between political leadership and civil servants is creating conflict over constitutional principles of responsibility and contributing to political instability in the country.

Adeney (2009) contends that the absence of consociational institutions in Pakistan has been the primary cause of political conflict in Pakistan. The authors use the case of Pashtun nationalism as an example that co-option into core state institutions has resulted in accommodation of the ethnic group to the extent that no secession move-

ment has emerged in the province. The author also points out the stark alienation of Sindhi and Balochi ethnic groups in both democratic and non-democratic regimes has led to severe inequities in representation and resource allocation between ethnic groups. The allocation of resources between and within provinces signifies that the ethnically dominated center has priorities other than welfare of rural Sindhis and Balochis. This has led to repeated and continued violent secession and ethno-nationalist movements in Balochistan. Sindhi ethnic group however, has been different despite economic inequality the group has been presented by a major political party in the center (Pakistan People's Party- PPP), which might signify the absence of secession movements in Sindh. The paper posits the need for radical change in the political institutions along consociational lines, while acknowledging that to be tough ask.

Continuing in the similar vein, Majeed (2010) holds the view that without giving proportional representation to the diverse groups in the national policy making, national integration cannot be secured. This involves not only power-sharing institutions but also distribution of economic resources. The authors allude to inter-tribal conflict in KPK and Balochistan, the Sindhi and Mohajir conflict and the regressive sectarian violence as outcomes of policy failure. Gazdar & Mallah (2013) analyzed the state of political violence in Karachi, Pakistan the authors discussed that in case of Karachi the informal institutions led by non-state actor for dispute settlement as well as contract enforcement lead realignment of property rights. This has been enabled due to insufficiency of formal institutions in ensuring contract enforcement and protection of property rights leading to discontent as emergence of militancy.

Rehman (2015) argue that the institutional framework in Pakistan has vacillated between basic and fragile limited access orders in which ability of perpetrating violence has been the critical aspect. However, no political groups have been able to maintain their hold over power for the any significant period, unable to progress towards a

mature limited access order as the excluded groups managed to organize dissention. The inability or unwillingness of political leadership to depersonalize the political system meant the a highly personalized form of political organization has emerged leading to dynastical politics. This means the even election have failed to produce open access order leading to perpetuation of limited access. This has translated into grievances and deprivation triggering episodic political violence throughout the country's history.

Kuszevska (2019) has endeavored to ascertain the role of media and academia in rebuilding the social contract regarding fundamental laws in the Constitution of the country. The author highlights the need for re-negotiation of the social contract based on the voice of the public in order to improve state-society relationship. The media and academia can be instrumental in playing a conducive role for a rule-based society through providing platforms for debate, discussion and information dissemination.

Ishaque, et al. (2022) posit that Pakistani society has been divided along religious, ethnic, linguistic, political and provincial. Since 2008 violent behavior has become a part of the country's political culture and the political divide in the country is deepening due to violent political rhetoric adopted by political leadership against the opponents. There is a need to find common grounds for national integration. The authors highlighted the role of 18th Constitutional amendment in facilitating national integration by protecting provincial autonomy and devolution of power, providing relief from some of the group specific grievance.

Siddiqui (2023) tried to assess the reasons for political parties engaging in violent activities using both qualitative and survey data collected from the party leaders as well as voters. The researcher focused on two parties active in Karachi, Pakistan i.e. Muttahida Qaumi Movement (MQM) and Pakistan People's Party (PPP). The two parties have very different strategies and reasons for the adoption of violence. The

work finds that the economic and political gains from violence are significant, making building up violence capacity and engaging in violent conflict more likely.

The literature from around the world and from Pakistan indicate not only the need for establishment of a mutually beneficial social contract between the powerful majority group and the minorities but also for the existence of checks and balances on the power executive (who generally belongs to the powerful ethnic majority) to ensure adherence to the contract. In the next section we will make the case for institutional constraints that would increase the cost of renegeing from the social contract for the elite ethnic group using post-constitutional game.

Chapter 3.3.

Political Conflict as Commitment Problem: A Theoretical Perspective

This chapter presents a game theoretic framework for explaining the strategic behavior of groups with diverse representations and specialization. The first section follows Fearon (1994) work to explain the need for a documented commitment in ensuring co-operation, signifying the need for consensus and constitution building. In the second section constitution game is used to depict that actions of the violence specialists and their decision to exploit instead of cooperating can lead to rebellion.

3.3.1. Need for Constitution

3.3.1.i. Basic Model: Incumbent Rules (No Institutional Constraints and Power Imbalance)

We first explain why peace is difficult to maintain without institutional constraints and power imbalance, hereby, highlighting the need for consensus building and establishing a contract. For simplicity we assume the existence of two groups. The incumbent (majority) group is labeled M . The minority or potentially dissident group is labeled m . The size of the group is not under consideration here in determining majority, it is the capacity to exercise authority.

In the first period, the minority decides whether to join the new state or to rebel. If the minority chooses to join the new state in period one then the game proceeds to the second stage. In the second stage the incumbent chooses a set of policies comprising of political and economic demands on the minority group. The set of demands is given by $x \in [0, 1]$. The closer x is to 1 the larger would be the demands and the more unfavorable the outcome would be for the minority. In the last stage considering the demand given the minority chooses whether to rebel or to comply.

We are assuming the utility of winning the fight for both sides are 1 and that for losing is zero. The cost of fighting for the incumbent is c_M and that for dissident is c_m . In period 1 let $p_1 > 0$ be the probability of the dissident winning the war in the first period. Therefore, we can say that pay-offs for opting for conflict in period 1 would be $(p_1 - c_m, 1 - p_1 - c_M)$ where the first component is payoff of the minority group and second that of the incumbent group.

We start with the assertion that $p_1 > p_2$, with p_2 being the probability of the minority group winning in the second time period. Rebellion in the second period would yield the payoffs $(p_2 - c_m, p_2 - c_M)$. If the minority chooses to join in the first period and chooses not to fight in the second then peace would prevail. We can let the pay-offs for this scenario be $(1-x, x)$. Let's first consider that the second period is reached. In this stage minority would reject any demand such that: $1 - x < p_2 - c_m$

i.e. the demand is so large that accepting will generate worse payoffs than that for fighting leading to resistance. Therefore, if the incumbent desires peace, it will have to choose the largest demand against which the minority would not rebel i.e. $x^* = 1 - p_2 + c_m$

The incumbent group would choose peace if $x^* > 1 - p_2 - c_M$ i.e. if the demand that would keep minority from rebelling is greater than its payoffs from the gamble of conflict. In this case if the period 2 is reached there is not likely to be a commitment

problem. However, in period 1 the minority would anticipate such an offer and foresee that under the new regime its payoff would be: $1 - x^* = p_2 - c_m < p_1 - c_m$

This would induce the minority to fight in period one instead of entering the new regime. This outcome is unfavorable for both the groups since better outcome exist such that $1 - x > p_1 - c_m$ and $x > 1 - p_1 - c_M$.

These outcomes cannot be reached as the incumbent group cannot credibly commit to not exploit minority's reduced bargaining power after the state has been formed, signifying the need to devise some way to for making commitments credible.

3.3.1.ii. Giving minority some bargaining power: Case for institutionalized consensus building

We have established that under incumbent rule the minority would opt for rebellion. This issue can be rectified if institutional arrangements are there that would give minority group some leverage while bargaining i.e. a social contract for maintaining peace. Under such a setup government policies (x) is determined by a Nash bargaining solution.

In period 2 minorities would opt to fight if: $x > 1 - p_2 + c_m$

And the incumbent would prefer war if: $x < 1 - p_2 - c_M$

The more bargaining power minority has the closer x would be to $1 - p_2 - c_M$. The lower is the bargaining power the closer x would be to $1 - p_2 + c_m$. In order to avoid fight

$$1 - p_2 - c_M \leq x \leq 1 - p_2 - c_m$$

Now let $\alpha \in [0, 1]$ be the extent of bargaining power of the minority, where $\alpha \rightarrow 1$ would indicate higher bargaining power. The expected political outcome incorporating α would be $x^*(\alpha) = \alpha(1 - p_2 - c_M) + (1 - \alpha)(1 - p_2 + c_m)$

In case of incumbent rule $\alpha = 0$. If minority expects the policy $x^*(\alpha)$ in the new state in period 1 it would join if: $1 - x^*(\alpha) > p_1 - c_m$

Putting value of $x^*(\alpha)$ we get $p_1 - p_2 < \alpha(c_m + c_M)$

It can be interpreted as political violence would occur if the fall in violence capacity of the minority is less than combined costs of conflict scaled by the political leverage of the minority. Further the greater is the political bargaining power of the minority the less likely would be political violence. This give credence to the need for consensus building and drawing up a mutually beneficial social contract.

3.3.2. Institutional Failure: Post Constitutional Game

We understand the need for consensus building and establishment of social contact in co-existence among diverse groups. In this section we will analyze whether the groups involved would have the incentive to comply with the terms of constitutional agreement using the work of Kirstein and Voigt (1999) as baseline. For simplicity we assume the existence of two groups. Like the previous section the incumbent group is labeled M. The minority group is labeled m. The size of the group is not the only thing under consideration here in determining incumbent, it is the capacity to exercise authority. The minority groups invest their resources in to production, which Kirstein and Voigt (1999) call effort. The minority group commits to invest its resources in production i.e. make high levels of effort. The majority group commits to provision of protection and security as well as avoidance of exploitation.

The total output depends on the effort by the minority groups, of which an agreed

upon share (x_0) goes to the incumbent group while the rest ($1 - x_0$) goes to the minorities, if the contract is adhered to. The social contract between the two groups is that the minority group m will put in high effort in production and the incumbent group will cooperate by not asking for more than the agreed upon share (x_0) of total production. Complete compliance with the social contract means ($e = h, x_h = x_0$). In this section we will derive conditions for compliance with the social contract.

We consider a one-shot multistage game. The game takes place in three stages. *Stage 1:* Minority group (m) decides the level of effort which would determine the level of production. *Stage 2:* Given the level of effort and production, incumbent group (M) would decide whether to comply with the terms of social contract or to exploit. *Stage 3:* Given the choice made by the incumbent group the minority group makes a choice to either mount a rebellion or not.

We start with the sequential game where m moves first decides on its level of effort (e). For the sake of simplicity e can only exist in two states low effort (l) and high effort (h) i.e. $e \in \{l; h\}$ ¹. Production (Y) is a function of the level of effort $Y = Y_e$ with $Y_l < Y_h$, however, higher effort would cost m an incremental cost E .

After m makes the move we enter stage 2. Here the group M decides whether to demand the agreed upon share of private good ($x_e = x_0$) or to ask for a higher share ($x_e > x_0$). At the same time if group M chooses to exploit it would have to bear the cost $k > 0$. k is the cost of producing violence for appropriation and oppression. If $x_e = x_0$ then the payoffs of minority and incumbent groups would be $(1 - x_0)Y_e - E, x_0Y_e$, where, $E = 0$ if $e = 1$. If M chooses to exploit and renege then group m decides whether to attempt a revolution or not. If the group m decides not to revolt the payoff would be $((1 - x_e)Y_e - E, x_eY_e - k)$.

If group m chooses to revolt, it would have to incur the cost ($c_m > 0$), in this

¹See, Kirstein and Voigt (1999)

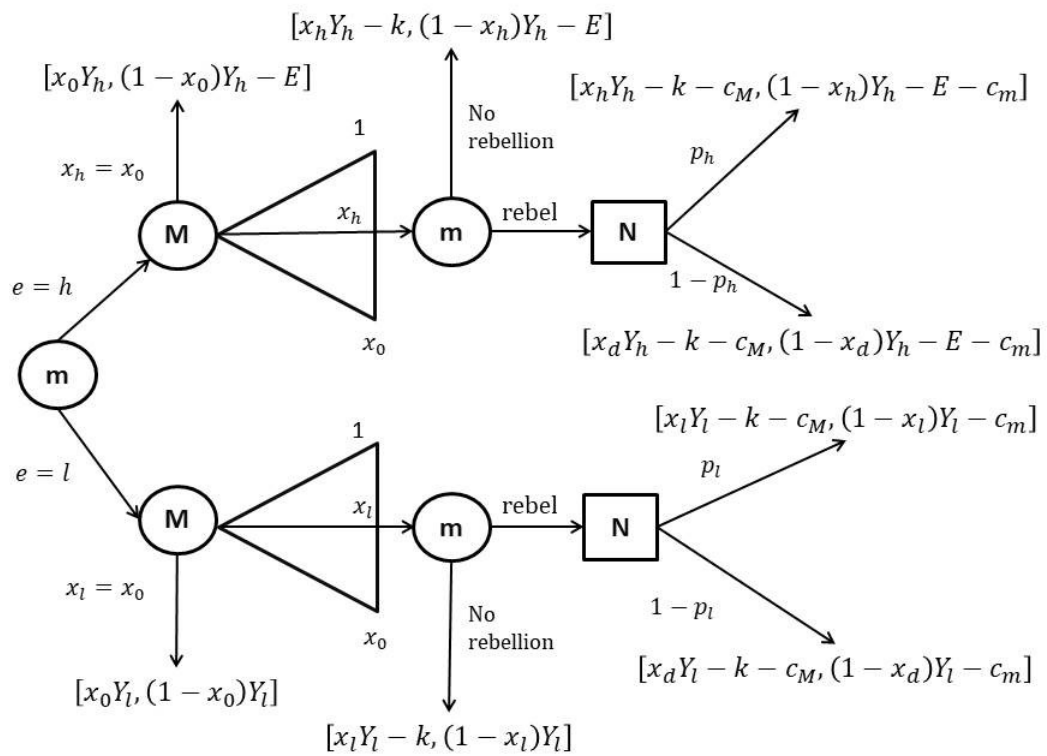


Figure 3.3.A. Post-Constitutional Game

case group M would have no choice but to fight back and incur the cost c_M . There is a probability (p_e) that the rebellion is successful. The payoffs in case of successful rebellion would be $(1 - x_d)Y_e - E - c_m, x_dY_e - k - c_M$ and in case of failure the payoffs would be $((1 - x_e)Y_e - E - c_m, x_eY_e - k - c_M)$, where x_d is the share of total output received by the incumbent group M in case it loses the rebellion which means that $x_d \in [0, x_0[$. This factors in the possibility that even in case of a loss the incumbent group may suffer lesser loses. Additionally, we are also acknowledging that M is not likely to lose all the output.

Expected outcome from revolting for m is

$$p_e((1 - x_d)Y_e - E - c_m) + (1 - p_e)[(1 - x_e)Y_e - E - c_m] = (1 - x_e)Y_e + p_eY_e(x_e - x_d) - E - c_m$$

The minority group m will choose not to revolt if

$$(1 - x_e)Y_e + p_eY_e(x_e - x_d) - E - c_m \leq (1 - x_e)Y_e - E$$

This can be simplified as

$$p_eY_e(x_e - x_d) \leq c_m$$

On the other hand if $p_eY_e(x_e - x_d) \leq c_m$ rebellion will take place. Kirstein and Voigt (1999) call this “revolution condition”. It simply states that if the additional expected share of output of the minority group if it revolts is higher than the cost of rebelling, then it would choose to rebel.

This also specifies the threshold level of x_e as $\hat{x}_e = \frac{c_m}{p_eY_e} + x_d$.

If $x_e < \hat{x}_e$ revolution condition would not hold.

We have determined that rebellion depends on the value x_e . We will proceed by explaining how the decision to exploit is made i.e. what are the factors that would

prevent the onset of rebellion. This brings us to the behavior of M . If the group M chooses $x_e > \hat{x}_e$ group M faces the gamble of rebellion with the expected payoffs:

$$p_e(x_d Y_e - k - c_M) + (1 - p_e)(x_e Y_e - k - c_M) = p_e x_d Y_e + (1 - p_e)x_e Y_e - k - c_M$$

There are three distinct scenarios available to the incumbent group are:

Scenario 1: No exploitation i.e. $x_e = x_0$ in which case its payoff would be $x_0 Y_e$

Scenario 2: Low levels of exploitation so as to avoid rebellion i.e. $x_e \in]x_0, \hat{x}_e]$ in which case the payoff would be $x_e Y_e - k$

Scenario 3: High levels of exploitation i.e. $x_e \in]\hat{x}_e, 1]$ in which the group M would face the gamble of rebellion with expected payoffs $p_e x_d Y_e + (1 - p_e)x_e Y_e - k - c_M$.

The choices available to M can be seen on spectrum represented by Figure 2. In all these scenarios payoffs for M are monotonically increasing in x_e , essentially rendering only three courses of actions relevant i.e. $x_e = x_0$ to cooperate and not exploit m , $x_e = \hat{x}_e$ moderate levels of exploitation that prevents rebellion and $x_e = 1$ to risk the gamble of rebellion.

The optimal actions for M are:

Option 1 i.e. $x_e = x_0$ if and only if $k > (\hat{x}_e - x_0)Y_e$ and $k > (x_d p_e + (1 - p_e)x_e - x_0)Y_e - c_M$

In this case k has to be greater than the additional advantage M would get if it opts for appropriation, regardless to the level of exploitation. In Figure 3.3.A. it is represented as the area above the horizontal dotted line and the positively slopping diagonal line.

Option 2 i.e. $x_e = \hat{x}_e$ if and only if $k < (\hat{x}_e - x_0)Y_e$ and $\hat{x}_e > p_e x_d + (1 - p_e) - \frac{c_M}{Y_e}$

M will choose option 2 if k is less than the additional advantage derived through lower level of exploitation (\hat{x}_e) without the added risk of rebellion and the violence inhibiting maximum level of exploitation (\hat{x}_e) is greater than the return M will get if the group decides to face the gamble of rebellion per unit output i.e. if the group M chooses $x_e \in]\hat{x}_e, 1]$. In figure 3.3.B this is that are below the diagonal line and to the right of the vertical dotted line.

Option 3 i.e. $x_e = 1$ if and only if $k < (p_e x_d + (1 - p_e) - x_0)Y_e - c_M$ and $\hat{x}_e < p_e x_d + (1 - p_e) - \frac{c_M}{Y_e}$

M will opt for higher levels of exploitation risking the gamble of revolt if k is less than the difference between expected returns from the gamble and the returns from honoring the social contract, and \hat{x}_e is less the expected returns from rebellion per unit output. In Figure 3.3.B. this is the area below the horizontal dotted line and on the left of the vertical dotted line.

The analysis posits that high values of cost of exploitation (k) would make cooperation by the incumbent group M more beneficial than exploitation. If the cost of exploitation is low due to lack of institutional oversight and accountability the group in power is more likely to renege of the agreement and choose exploitation, potentially instigating violence. Considering there are three distinct options available to M with differing outcome depending on levels of k and \hat{x}_e .

From the perspective of the minority group we will consider the choice of effort. In this context the cost (E) of high effort becomes relevant for the decision making. One scenario is that higher effort will lead to higher output and therefore $x_0 Y_h > x_0 Y_l$ then it makes sense that if $e = l$ than M is more likely to exploit. However, if the conditions for $x_e = x_0$ hold regardless to the level of effort then the minority group

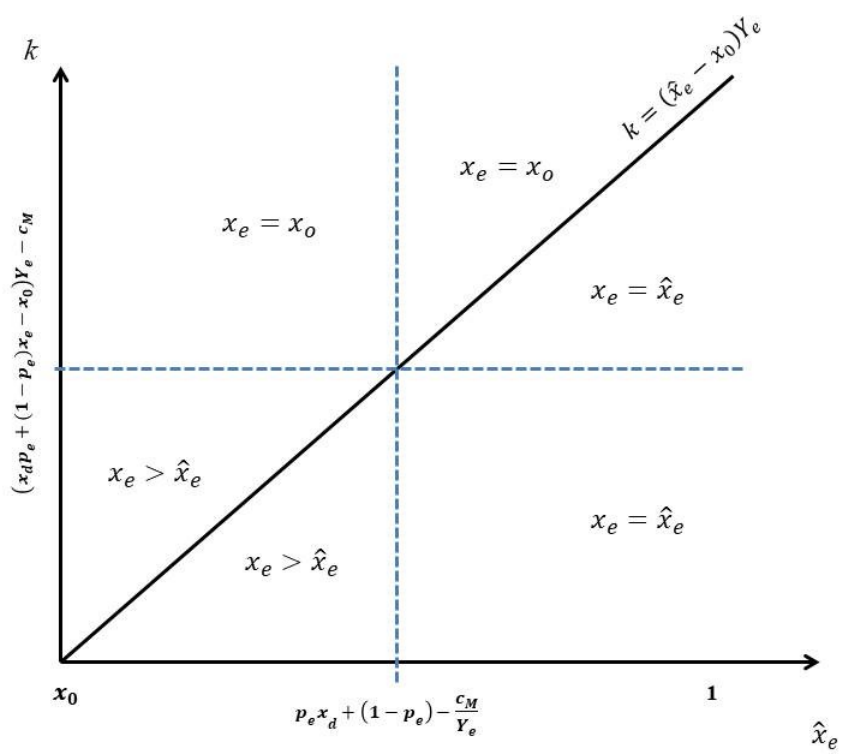


Figure 3.3.B. Post-Constitutional Game

would choose to exert higher effort if:

$$E < (1 - x_0)(Y_h - Y_l)$$

The analysis signifies that higher effort and consequently higher levels of production without risk of violence and resource wastage is possible if the cost of appropriation (k) which is also the cost of reneging on the social contract incurred by the group in power (M) is high enough to eradicate any advantages derived from exploitation with and without the risk of rebellion. k represents the loss of goodwill and support, institutional cost through independent judiciary, negative media coverage and also the cost of bribing local leaders into siding with center. In case of highly autocratic governments k tend to be very low or negligible. While in our analysis k remains constant however, in repeated games k can be revised every time a new regime negotiates with the minority group. The most desirable outcome for any nation would be no exploitation accompanied by high levels of effort. This can be done through increasing k and reducing E .

Chapter 3.4.

Political Violence as Commitment Problem: The Case of Pakistan

Pakistan is a diverse country. Its inception in 1947 has been an outcome of unification of a number of very different ethnicities under the banner of the common religion i.e. Islam and the understanding that the exploitation faced under the British rule as well as prospects of exploitation under a Hindu majority in the subcontinent after the British would leave could be prevented in a Muslim majority state. This signifies an implicit social contract between the powerful Punjabi ethnicity and the rest. However, since its inception Pakistan has experienced an institutional crisis. The transfer of power from the colonial elites to local populace has been at best tumultuous and at its worst violent. In this chapter we will discuss the history of political violence in Pakistan and contextualize it as an issue of failed bargaining.

While political violence in Pakistan has been widely studied, applying a game-theoretic framework centered on commitment failure offers a distinctive theoretical approach. This bridges political science, economics, and constitutional analysis. I have used the Constitution of Pakistan as a formalized social contract, analysing its evolution and breaches. This adds a unique institutional and legal dimension to the study of political violence.

Drawing on the concept of commitment failure in asymmetric power contexts, this chapter examines how dominant actors have unilaterally altered or violated formalized social contract, namely, the Constitution, leading to long running grievances and violent conflict. The Constitution of Pakistan is treated as a formalized social contract, and its evolution, contestation, and partial implementation are analyzed through historical episodes of conflict in East Pakistan, Sindh, and Balochistan. These within-country cases provide a comparative basis to assess how institutional commitments were undermined, and how the failure to honor or enforce these commitments stimulates political violence and, in some cases, secession. This approach situates Pakistan's political violence within a strategic framework and foregrounds the institutional dimensions of trust, bargaining, and credibility in a postcolonial state.

3.4.1. Early Years (1947-1956)

In 1947, there was a need to decide the basic legislative framework of the nascent state. In this regard the country adopted the Government of India Act of 1935 on ad hoc basis. The Act remained enforced till 1956.

3.4.1.i. Government of India Act 1935

The Government of India Act 1935 was in response to the failure of diarchy¹ legislated in Government of India Act 1919. This law afforded significant power to the executive (Governor General). While provisions were made for some level of provincial autonomy, the British Governors retained the power to dismiss the elected provincial governments. The Act's original purpose has been to consolidate Imperial rule by appeasing the masses through local representation in policymaking. However, it also carried provisions for imposing the imperial writ. By adopting this as the baseline legislative framework, the authorities in Pakistan sowed the seed for civil strife in the

¹A diarchy is a form of government or leadership structure in which power is shared between two individuals or authorities. It typically involves dual leadership or a system where two individuals hold equal and significant positions of authority or influence

country (Muldoon, 2016). This centralization of power led to a series of events that laid the foundation of ethnic conflict in Pakistan. This is in contrast to the situation in neighboring India, where the constitution was introduced in 1949 and general election were in 1951, establishing democratic institutions at the nascent stage.

3.4.1.ii. Language Riots of 1947 and 1952

Language is one of the key aspects that forms the bases of National or ethnic identity. Language is adopted not imposed and once a society adopts a language it is not easy to eliminate it from the society (Jabeen et al. 2010). In the movement against colonialism the upper-class Muslims in Bengal (*Ashraf*) identified with Urdu² and looked down on the regional cultural and linguistic identity (Rehman, 1997). Increasing competition for influence in the higher echelons of power by the Hindus, led to the need for creation of a unified Muslim pressure group. As per the assertion of the group's elite, this Muslim pressure group identified with Urdu, instead of regional languages.

In the 1937 Lucknow session of the All Indian Muslim League, the Bengali members of the party formally, protested against Urdu being the common language of the Muslim League. Perhaps the 1947 response by the Bengali linguist Dr. Shahidullah sums up the sentiments of Bengali Muslims regarding accepting Urdu as the sole national language by declaring that to be "*tantamount to political slavery*". Therefore, when using the authority of the Governor General in Pakistan, the central government superseded the wishes of the Bengali-speaking majority of East Bengal and declared Urdu as the only national language of the country in 1948, it resulted the extensive protests across East Bengal. These culminated into ban by the government against public rallies. On 21 February 1952, students and political activists in Dhaka defied the law. The authorities responded with violence resulting in a number of deaths (Ziring, 1971).

²Urdu at that time was a dominantly spoken language in Northern India (Rehman, 1997)

This incident reflects the first shortcoming of the Law that was designed and implemented by a colonial power (the British) in order to keep the colonized sub-continent in check. While it provided for representation of provinces, the power remained in the hands of the emissary of the empire i.e. the governor general. In the newly independent state of Pakistan, this central power shifted to West Pakistan. Despite the fact that the second Governor General of Pakistan Khawaja Nazimuddin was himself a Bengali, the power dynamics remained strictly in favor of West Pakistan. The violent response of the authorities in the 1952 riots also created an irreparable breach between the two wings of the new state. The language movement and the response of the incumbent governments formed the basis for ethnic nationalism among the Bengalis. In the Western wing the movement was propagated as a mutiny against Pakistan's national interests, further deepening the ethnic cleavages between East and West Pakistan (Jabeen, et al., 2020).

3.4.1.iii. United Front 1954

In the political arena the previously popular Muslim League lost support in East Bengal. As a result, in 1954 the elections held for the legislative assembly in East Bengal saw victory of the opposition United Front coalition led by A. K. Fazlul Haq. This started movement for greater provincial autonomy. The problem that arose was similar to the issue in 1919. The 21-point coalition manifesto demanded Bangla as one of the state languages in Pakistan and to bring the production of jute under the control of the provincial government among other things (Maron, 1955). The victory of United Front was short lived as after a few months the government of United Front was sacked by Governor-General Ghulam Muhammad. This was done due to the accusation of attempted secession against A. K. Fazlul Haq (Mustafa & Nawaz, 2014).

The Law of the time again gave the Governor-General authority to undermine a

democratically elected government in East Bengal, and this worked to further widen the rift between two wings of the country. From the perspective of the Bengali people, this dismissal was an attempt by West Pakistan to subjugate East Bengal, prompting Maulana Bhashani to openly call for separation in 1957. The failure of the law in this instant can be attributed to a legislative system that was incompatible to the values of democracy. That combined with the insecurity in West Pakistan and the increasing grievances in East Pakistan started a sequence of errors that ultimately culminated into secession. The United Front sans Awami League formed the ministry again on 6 June 1955.

This is not only an evidence of “controlled democracy” by the center but is a depiction of divisions in the united front itself. United front was a coalition of several diverging parties and thus was susceptible to in-fighting and power imbalances from within. In February 1955 Awami League moved for a vote of no-confidence against Mr. Fazlul Haq and upon its failure Awami League separated from the Front.

Restoration of United Front had elements of a “constitutional coup”. It was the result of the deal with the Prime Minister Muhammad Ali and Mr. Fazlul Haq. This was done while the Governor General and the main leadership of Awami League were not in Pakistan. The newly restored legislative assembly now represented an alliance between the United Front and Muslim League (Choudhary, 1957).

3.4.2. Road to the First Martial Law

3.4.2.i. The First Constitution of Pakistan (1956)

On 23 March 1956, the first Constitution of Pakistan was adopted and it was favored by the representatives of both Eastern and Western Wings in Pakistan. The United Front, the Nizam-i-Islam and other political parties in East Pakistan responded favorably to the new constitution as it did have provisions for democracy and fundamental

rights. However, the Awami League in alliance with the minority and leftist groups campaigned against it. They demanded strict adherence to the 21-point agenda of 1954 and complete provincial autonomy other than foreign affairs, defense and currency.

The Constitution of 1956 established a federal system centered on parity between East and West Pakistan. The unicameral legislature was enacted with equal representation from both East and West Pakistan as East Pakistan contained greater population than all regions in West Pakistan combined. Provincial autonomy was increased by expanding the provincial list to encompass additional issues. Urdu and Bengali were designated as the national languages of the country. The decision on joint or separate elections was delegated to the two Provincial Assemblies (Khan, 2005). The anticipation was that the constitution would bring about the much-needed political stability for the country (Mustafa & Nawaz, 2014).

According to the new constitution, West Pakistan was united into One Unit. However, the ethnic antagonism between various ethnic groups in West Pakistan became more pronounced. According to Sayeed (1959) these cleavages were as serious as the East Pakistan Vs West Pakistan conflict. While the new constitution did reduce the powers of the president significantly, to prevent the office holder from exercising arbitrary power, the office of the president retained the discretionary powers to dismiss and appoint the Prime Minister.

In September 1956, the coalition between Awami League and the Republican Party took over central government in the new National Assembly of Pakistan³. The President of Awami League Hussain S. Suhrawardy became the Prime Minister of Pakistan. This was achieved by Republican support for the demand by Awami League to divide One Unit to its previously existing constituencies, creating a coalition of the

³The National Assembly was not directly elected by the people but was elected through a system of electoral colleges based on provincial assemblies which in turn were elected by the people.

two parties. However, situation changed drastically. By early 1957 the movement for division of One Unit started and Prime Minister Suhrawardy faced strong resistance from central bureaucracy. Many West Pakistani elites also lobbied against the PM's decision to distribute a portion of American Aid to East Pakistan. The situation came to head in 1957 when President Sikander Mirza forced PM Suhrawardy to step down (Mustafa & Nawaz, 2014).

3.4.2.ii. The Resignation of Prime Minister Suhrawardy

The resignation of PM Suhrawardy, was another instance of violation of democratic norms in part of the center and protected by the constitution. As despite losing the support of his coalition partners Suhrawardy advised summoning of the National Assembly to establish whether he still enjoyed majority support. This request however, was denied and he was made to step down under threat of dismissal. Sayeed (1959) expresses the view that the President did not want to set a precedence which would enable the National Assembly to determine whether it had confidence in the sitting leadership or not. It may be an attempt to maintain the power of dismissal and appointment of Prime Minister in the office of the President.

3.4.2.iii. First Marshal Law 1958

PM Shrawardy was not the only casualty of this thought process, in quick succession two subsequent prime ministers of the country were also absolved of their offices. This act not only set a dangerous precedence of the executive interfering in the legislature but also destabilized the nascent democracy. The civilian leadership was starting to look weak and indecisive. Further, on the foreign policy front a number of issues remained unresolved, most notably the issue of canal water dispute between Pakistan and India. Gauhar (1985) postulates that this confusion might be attributed to the lack of faith by President Mirza in Western style democracy.

Therefore, on October 1958 President Mirza revoked the constitution and declared

Martial Law under the leadership of General Ayub Khan. Three weeks after this the office of President which was established through the constitution was also dissolved. Sikander Mirza was thus stripped of all legal authority and deported from the country. This takeover was then solidified and legitimized by the Supreme Court under the “*Doctrine of Necessity*”. Additionally, by issuing the Political Parties Elected Bodies Disqualified Ordinance all major political parties were banned. The top leadership and senior politicians including those from Awami League were arrested and many were kept detained till 1963 (Ruppel, 2011).

3.4.3. The Second Constitution 1962

An “Outline of Our Future Constitution” was issued on 15 March 1959. It suggested a system of Basic Democracies through Electoral College based on local constituencies. The office of Prime Minister was to be merged with that of the President in order to setup a strong central government which was not “dependent on the whims of the legislature”. Governors to the provinces were to be appointed by the President. The outline also abolished provincial legislatures to be replaced a system of local advisers to the appointed governors. By October 1959 the Basic Democracies Ordinance 1959 was publicized under which local councils were to be constituted as Basic Democracies. Although not explicitly mentioned, these Basic Democracies were also to function as Electoral College for the election of the President and members of legislature (Mustafa & Nawaz, 2014). After the local council elections in January 1960, 80000 Basic Democracies were formed. The method by which these elections were carried out was highly questionable. The elections were conducted by district officers without supervision and oversight by an independent Election Commission. No political activity was allowed and the political, such as they were, were not allowed to nominate their candidates. The subsequent election for the Presidency is also quite dubious. The “elected” representatives were simply asked, “Have you confidence in the President, Field Marshal Mohammad Ayub Khan, HPk, HJ?”. The response was

a decisive “Yes” and Ayub Khan was sworn in as President three days later (Gauhar, 1985).

The new Constitution followed in 1962. It formally made the President independent of the legislature while giving the office of President almost unrestricted authority over provinces. The martial law remained enforced between the announcement and implementation of the Constitution. No critical discussion or publication was allowed regarding the content and implications of the constitution. Meanwhile in East Pakistan Nine leaders including Sheikh Mujibur Rehman issued a statement criticizing the constitution on grounds that it lacked popular consensus. The weaknesses of the 1962 Constitution became more apparent due to repeated Amendments within first few years of promulgation⁴. This was viewed as a manipulation of Constitution to serve the interest of the ruling party.

3.4.4. Road to Secession of East Pakistan

3.4.4.i. The 1965 Elections: Beginning of the End

The centralization of power and abolishment of electoral democracy meant that provinces were not getting their due say in matters of national as well as provincial importance. Further, with the passing of Suhrawardy in 1963 the leadership of the Awami League went to Sheikh Mujibur Rehman. Further, the economic disparity between East and West Pakistan amplified from 1960 to 1965. Owing to the progressive policies of the Ayub Era per capita Gross Domestic Product (GDP) of West Pakistan grew at the rate of 4.4%, while that of East Pakistan grew at 2.6%. During this time the share of East Pakistan in countries export ranged between 70% and 58% (in 1965) (Rizvi, 1981).

⁴The First Amendment Act of 1963 renamed the country to “Islamic Republic of Pakistan” from “Republic of Pakistan” and also restored all the Islamic features of 1956 Constitution. The Second Amendment Bill of 1964 altered the schedule of Presidential elections to ensure re-election of Gen. Ayub Khan.

The upcoming elections of 1965 presented a chance to General Ayub's government for course correction. The opposition parties rallied behind Fatima Jinnah, the respected sister of Muhammad Ali Jinnah, and she also enjoyed popular support by the masses. However, the vote was restricted to Electoral College and on January 1965 Ayub Khan won by getting 64% votes. The defeat of Fatima Jinnah despite overwhelming public favor, weakened the public's faith in the system. The popular narrative being that if people cannot choose the leader of their choice within the system then the system has to change (Shah, et al., 2021; Ullah, et al., 2022).

The war in 1965 further exacerbated the resentment felt by people in East Pakistan. The leaders in East Pakistan asserted that the government of Gen. Ayub Khan failed to provide adequate security to the country's Eastern Wing. The fact is that India during the 1965 did not target East Pakistan which was defended by 14th Infantry Division, 16 planes and no tanks. Given this situation had India decided to attack East Pakistan, the region would have suffered heavy financial and human losses (Jahan, 1972).

Sheikh Mujibur Rehman launched his six-point programme in 1966, in which essentially complete provincial autonomy was demanded. In West Pakistan Zulfiqar Ali Bhutto resigned from government and setup his own Pakistan People's Party (PPP) drawing widespread support from students and urban middle class.

Widespread protests broke out in reaction to the Agartala Conspiracy Case in 1969⁵. Although the case was withdrawn in February 1969, this created pervasive support for the stance of Shiekh Mujibur Rehman in East Pakistan. In March 1969 all attempts at reconciliation failed when Sheikh Mujibur Rehman walked out of the Round Table Conference. In the same month General Ayub declared Martial Law under the leadership of General Yahya Khan.

⁵A sedition case during the rule of General Ayub Khan against Awami League, brought by the government of Pakistan in 1968 against Sheikh Mujibur Rahman, the then leader of the Awami League and East Pakistan, and 34 other people.

General Ayub's 1962 Constitution never garnered popular support and acceptance. He severely underestimated the influence of the religious elite by renaming the country and leaving out the religious tenets of 1956 Constitution in the new constitution. Since very little public discourse took place before the constitution was promulgated, the response of conservative Muslims remained under-appreciated. Further, General Ayub also underestimated the sentiments in the provinces regarding autonomy. During the Pakistan Movement, provinces were promised full autonomy but the system instituted by General Ayub expected complete subservience of the provinces to the central government. This arrangement was vehemently rejected not only by East Pakistan but also the minority provinces in West Pakistan. Gauhar (1985) is of the view that under the institutional arrangement of Ayub Khan power became concentrated in Punjab. Therefore, the Bengalis, Sindhis, Baluchis and Pathans rightly felt disenfranchised and powerless. After the 1965 war, Ayub Khan lost the support of Pakistan Army as well.

Ayub Khan's autocratic institutions had become entangled in the central bureaucracy in order to maintain control. This led to politicization of judiciary as well as bureaucracy. The Basic Democracies essentially made politics subordinate to bureaucracy. The extended powers of bureaucracy induced apolitical groups to resist administrative interference in their sphere of influence. These groups included not only the Ulema but also journalists and lawyers. The popular agitation of 1969 gave politicians in the sidelines a "street mandate". This resulted in the creation of lobbies or pressure groups led by politicians and further created divides on the basis of ethnic, regional and local interests. In this scenario any kind of consensus between the civilian leadership became impossible and this may have played some part in the failure of the Round Table Conference. The subsequent series of events brought about the greatest loss in the history of the country in form of secession of East Pakistan in 1971.

3.4.4.ii. Secession of East Pakistan 1971

Upon assuming power, General Yahya Khan issued the Legal Framework Order (LFO) in March 1970 mapping the process through which general elections were to take place. It was decided that out of 313 members of national assembly 169 will be elected from East Pakistan following the principle of one-man-one-vote. Also, One Unit was dissolved. However, there were apprehensions among Yahya Khan's cabinet members and West Pakistani politicians, regarding provincial autonomy and a prospective "Bengali majority" rule.

The elections of December 1970 resulted in the victory of Awami League that won 167 seats out of 313, while PPP emerged as the second largest party with 81 seats. The announcement by General Yahya Khan of the postponement of the Constituent Assembly on 1st March, 1971 sparked fresh resentment and open talks of secession in East Pakistan. Despite repeated attempts to resolve the situation irreversible damage has already been done to the integrity of the nation. Mujibur Rehman declared his intention and support for secession. The general strike in East Pakistan became a non-cooperation movement. The final War began on 3rd December 1971 and finally ended in two weeks, with Bangladesh emerging as independent state (Iqbal, 2008).

The situation accelerated to this degree by the civilian violence against non-Bengalis and state's use of excessive violence during Operation Searchlight. The hampering of the democratic due process by the West Pakistani military and political elite, brought the situation to head. With no peaceful recourse to the agenda of provincial autonomy the political leadership in East Pakistan was ineffective or, may be, unwilling to stop mob violence in the region. The disproportionate and brutal response by the Military in form of Operation Searchlight made matters worse. It divided the state infrastructure in East Pakistan on basis of ethnicity. The Bengali armed forces personnel mutinied in response to the operation. Bose (2005) further

elaborates the people who fought for a united Pakistan and those who fought for independence held legitimate political positions. The fact that both chose violence as means to achieve their ends, is evidence of failure of any system of governance that relies on coercion and suppression.

The secession of East Pakistan was the cumulative outcome of decades of institutional confusion. The complete disregard of the principles of Separation of Power in order to further personal interests and agenda, resulted in politicization of military, bureaucracy and judiciary. As a negative externality it created ethnic discontent owing to disproportionate representation of East Pakistanis and other ethnic minorities in the nonpolitical establishment (Shah, et al., 2021). The legal framework from 1947 onwards also excluded masses from meaningful participation into country's polity. The concentration of power unto one individual meant that masses at the fringes lacked political discipline. Prolonged use of undemocratic means for suppressing opposition led to a move towards "street politics" and violence. The ethnic divisions in terms of material well-being, even if created unintentionally, evolved into violent movement for secession because masses were convinced that it was the only way to attain equitable rights. Further, this monumental event in country's history laid the foundation for more ethnic cleavages and resultant violence in the future.

3.4.5. The Road to 1973 Constitution

3.4.5.i. Pakistan in 1972

After the debacle of 1971 Pakistan's military leadership of that time had been discredited in the eyes of the public. President Yahya Khan has no other choice but to cede control to the majority party in West Pakistan i.e. PPP. Zulfikar Ali Bhutto became President of Pakistan in December, 1971 under emergency rule.

Mr. Bhutto had the support of a diverse electoral coalition in West Pakistan at

the times of his elections. This electoral coalition included middle class professionals, landlords, industrial workers, students and even industrialists. To garner such a diverse support, he had made considerable promises during his campaign. His mandate leaned towards a mild form of socialism, which predictably held appeal for students and middle class.

However, the challenges confronting the new government were very similar to the ones faced by the government in 1947: to determine national identity, develop political institutions, development of consensus about the new constitution, the economic and political relationship between the provinces and the center etc (La Porte, 1973).

The year 1972 was generally, spent by Bhutto, in rebuilding trust among the masses and simultaneously consolidating his political power. This involved demotion of military leadership and dismissal 1300 civil servants under the Martial Law Order 114. This move in retrospect may have played a role in Bhutto's downfall (Shafiq & Khan, 2020).

There was a need at the time to urgently establish a legislative framework to replace the Martial Law situation. This required dealing with regional leadership especially, Abdul Wali Khan of the NAP, on the provincial issues vis a vis their relationship with the center, also redefining the sphere of influences of not only the military and civilian bureaucracy but also of special business interests while maintaining popular support of the masses.

Bhutto's early strategy for governing seems like a mix of political repression and freedom. While press and media controls were lifted, several journalists were arrested soon after. While workers were encouraged to demand higher wages, actions were taken against workers on strike in Karachi resulted in many arrests and several deaths.

In terms of center-provincial relations the issues were mainly in the North Western

Frontier Province (NWFP, currently Khyber Pakhtunkhwa) and Baluchistan, where NAP and its allies were ruling. In Sindh and Punjab, PPP controlled the governments. Bhutto's political strategy in these cases mainly, involved restricting NAP's authority to govern. La Porte (19732) identifies political harassment by PPP officials in both provinces and a defamation campaign against NAP and Wali Khan as some of the tactics employed. Through this Bhutto seems to be trying to emulate the strategies of earlier leadership to maintain power and authority squarely in the center while somehow keeping these two provinces within the Pakistani union.

3.4.5.ii. The Language Riots

In July, 1972 Sindh Assembly passed the "Sindh Teaching, Promotion and Use of Sindhi Language Bill, 1972" that declared Sindhi language as the only official language of the province. Mohajirs predominantly in Karachi did not speak Sindhi and were incensed over the attempt of the Government of Sindh. The 1951 Census shows that urban Sindh especially, Karachi, Hyderabad, Sukkur, Mirpurkhas and Larkana had significant Urdu-speaking Mohajir population (Rahman, 1995). Therefore, the Mohajir concern regarding discrimination may not be unfounded. Further, the scale of violence inflicted during this particular language movement was unprecedented. Parts of Karachi and Hyderabad were under curfew.

The violence came to an end when President Bhutto announced a formula for reconciliation, which was instituted through an ordinance by the governor of Sindh on July 16. This conflict left bitterness and animosity among the two ethnic identities coexisting in the province of Sindh. This also gave rise to the Mohajir ethnic identity through rejection of assimilation and permanence of their status as mohajirs (refugees) as an ethnic identification (Haq, 1995).

3.4.6. Ethnic Federalism of 1973 Constitution

On August 14, 1973 the new constitution of Pakistan was introduced. It sought to establish provincial autonomy and self-government in the four provinces of the country, thus instituting constitutional-political recognition of the ethno-linguistic groups with dominated the provinces. It provided these major ethnic groups means for better political bargaining with each other and the center. This particular Constitution had unique strengths that were absent in case of the previous two constitutions.

For starters, this constitution was an outcome of consensus between varying political groups and lobbies in Pakistan, including, religious parties, opposition parties, conservative groups and even socialist parties. Active participation by law experts, analysts and religious scholars was ensured to produce a Constitution that reflects the will and wishes of the people. It covered not only religious fundamentals to be adhered to for running the state of Pakistan and responsibilities of government like the last two constitutions but also spelled out issues pertaining to commerce, finances, federal debt and separation of power. Most importantly it presented an enduring document stating the underlying ideology and guidelines for future legislation (Myerson, 2014).

However, the distribution of legislative power of the center comprised of two lists; a federal list, comprising of 67 items, and the concurrent list of 47 additional items. At the time of passing of the constitution it was promised that the concurrent list would be cancelled in 10 years but it took the 18th constitutional amendment in 2010 to abolish that. This means that the separation of legislative powers of the center and provinces was not completed till then. Additionally, on similar issues federal law takes precedence over provincial law, effectively undermining provincial autonomy. The concurrent list also allowed the center to interfere in the matters of the province. Further, Article 245 expanded the power of the center to use violence against political opponents. Clauses 2, 3, and 4 of the articles also limited the accountability through

judiciary. Khan et. al (2017) are of the view that the opposition parties have shown remarkable accommodation on a number of issues like provincial autonomy especially, pertaining to Articles 232 and 234⁶, despite the fact that earlier the same year the elected government in Balochistan was dismissed and the government of (then) NWFP has resigned due to that. This may be attributed to the fact that the alignment within opposition was quite weak and there was a distinct lack of trust between National Awami Party (NAP), Jamiat-i-Ulema Islam (JUI) and Jamaat-i-Islami (JI). It could also be because of opposition's relative strength, or lack thereof, compared with PPP. Council of Common Interest (CCI) established through Article 153, could have been a very effective tool for ironing out any disputes arising from power sharing between provinces and the center. However, till the end of 1976 only one formal meeting of CCI took place. Instead to deal with routine disputes the Ministry of Provincial Coordination was established and the constitutional concerns were largely ignored (Khan, et al., 2017).

In 1975 a number of amendments to the 1973 constitution namely 3rd, 4th and 5th Amendments, worked towards curtailing the power of High Court. The Fifth Amendment (Article 199, Clauses 3A-3B) especially, restrained the higher judiciary from providing recourse to detained political opponents of the government. This severely hampered the independence of judiciary and its ability to oversee government operations particularly government's treatment of its opponents. Effective democratic institutions require an active and independent opposition. However, by exerting political influence for suppressing the opposition parties through Constitutional amendments resulted in weak democratic civilian institutions.

The institutions of conflict management and resolution like, CCI, were established to resolve conflict between the provinces not between ethnicities. In addition to the concurrent list a regional quota was introduced to ensure population-based share

⁶These two articles of constitution gave emergency rights to federal government for assuming power in the provinces.

in resources, revenues, representation in national legislature and public sector jobs. This arrangement failed to acknowledge or even provide of ethno-political grievances within the constituencies. It did not recognize ethnic diversity within the provinces and the possibility of emergence of grievances accruing due to unequal distribution of power and resources within the province (Ahmed, 1996). Further, the constitution lays out ground work for a local government system through Article 32 and Article 140A. However, little practical work has been carried out to implement such a system in letter and spirit. Any attempt at giving this third tier of government constitutional support through Amendments or extensions is generally met with resistance.

3.4.7. Uprising in Baluchistan (1973-78)

In Pakistan we understand that that social contract ($x_h - x_0$) involved the understanding regarding provincial share of economic output as well as administrative, political and legislative autonomy. The following case study depicts the precarious nature of the contract as well as the impetus for violence due to non-adherence to the contract by the majority group (M). In this case the majority group can be the incumbent government of PPP from the Sindh province. That said tThe Ethnic Power Relations (ERP) defines the power dynamics in ethnic terms explaining the status of Sindhi ethnic group as that of “Junior Partners” to the dominant ethnic group (Punjabis) while categorizing Balochis as “Discriminated”, signifying breach of contract on the part of dominant coalition or the majority (M).

In the 1970-71 general elections NAP and JUI formed government in Baluchistan upon winning 11 out of 20 provincial assembly seats. The new provincial government was accused of pursuing agitation activities by the federal government. These alleged activities included interfering with the operations of the federal coastguard in Lasbaila, smuggling, attacks on settlers in Pat Feeder area and extradition of Baluchistan Reserve Force from the province. The provincial bureaucratic restructuring by the

new government by placing indigenous people in key positions was also opposed by the federal government. The provincial government of Baluchistan was, therefore, dismissed in February 1973. Within weeks of the sacking of provincial government unrest began in the province. Two organizations were in the forefront of this uprising, the Baluch People's Liberation Front and the Baluch Student's Organization (BSO) (Harrison, 1980). This eventual unrest clearly depicts that the people of Baluchistan found the level of control or exploitation by the government excessive ($x_e =]\hat{x}_e, 1]$) enough to engage in rebellion. The government's response was to arrest the political leadership of all major regional parties including NAP and JUI. Instead of defusing the situation this reaction led to exacerbation of the conflict. A full-blown military operation was launched against the guerrilla militants by the Pakistan Army in 1974. While the 1974 White Paper on Baluchistan posited that the military action was conciliatory in nature in order to make the province and its people "equal partner in Pakistan's national enterprise", the on-ground reality is that it was brutal and resulted in a number of civilian casualties.

In 1976 Baluchistan was directly placed under federal rule. Following the ban on NAP, all political activities were suspended in the province, in direct contradiction to the 1973 Constitution. Ninety members of the party were accused of treason and were arrested in Hyderabad Conspiracy Case (Jetly, 2004). It is interesting that the legal basis for this action was incorporated in the Constitution through the 3rd Amendment in the very same year (1975), which depicts manipulation of the Constitution for achieving political goals.

At the other end of the spectrum are some very solid steps taken for the development of the province, which were necessitated by the Constitution. The leaders have successfully negotiated greater share for the province from the royalties and excise duties on Sui gas. Public sector investment in the province also increased significantly in the seventies (Jetly, 2004).

This did little to address the grievances of the Baluch people. Economic concessions were given to make up for political disenfranchisement. Removal of the democratically elected provincial government in times of stability, seem more like power-move than a repercussion for corruption and misuse of power. Any genuine and effective effort for development in the province would have had to involve the people of Baluchistan and their elected representatives. Failing to do so, intensified the feelings of relative deprivation among the populace and created room for militancy and ethnic strife. Further, major tenets of the Constitution dealing with provincial autonomy and regional democratic practices were ignored or manipulated for central government's political expediencies, little effort was made to devolve political power to the regions where opposition parties held popular sway. The cost of renegeing (*k*) from the social contract, at least in the short-term, remained low due to limited judicial oversight and the ability of the majority party to manipulate the constitution. The contradiction in such strong-armed governance tactics is that it fails to understand and plan out effective development policies in regional context. Resultantly, the distance between federal authorities and regional leadership of Baluchistan widened in the 1970s.

The overall economic development in the county also declined. This is generally attributed to aftereffects of 1971 Civil War and nationalization policy. However, the trend of GDP per capita growth tells an interesting story. The GDP per capita growth rate fell abruptly from 4.15% in 1973 to 0.683% in 1974. A similar decline in the country's per capita GDP growth is apparent after the province was placed under federal rule in 1976⁷. This unrest culminated into imposition of martial law by General Zia ul Haq bringing an abrupt end to the first elected government in the country and exile of the sardars of Mengal and Marri tribes.

⁷The GDP per capita growth rate fell again from 2.074% in 1976 to 0.836% in 1977

3.4.8. Rise of Linguistic Ethno-nationalism in Sindh (1970s)

During the decade of 1970s the *mohajir* ethnic group in urban Sindh perceived a decline in their political and economic status. It was for the most part blamed on the complex but varying quota system employed since 1949 for government jobs and admission in educational institutions. Many of Zulfikar Ali Bhutto's policies were considered and propagated as anti-Mohajir and pro-Sindhi (Haq, 1995). Under the democratically elected provincial regime, admissions in higher educational institutions and government employment were based on an intra-provincial urban-rural quota⁸. This urban-rural quota was deemed and projected by the political leadership of the *Mohajirs* as an ethnic quota as a significant proportion of rural population belonged to Sindhi ethnicity while major urban areas were dominated by Urdu-speaking *mohajirs*. The notable fact is that there had not been a significant change in the absolute share of this ethnic group jobs and admissions, their share declined relative to other ethnicities. Further, the quota system affected the lower-middle- and middle-income groups among the nationality adversely, creating a heightened sense of relative deprivation among less well-off individuals in the *mohajir* ethnic group. Further, the issue of granting citizenship to the *Bihari* refugees from Bangladesh and little to no effort by the successive military as well as civilian governments to naturalize them also led to the sentiment of being "relatively deprived" among the *mohajirs*. This sentiment was further exploited by the ethno-political leadership and the opposition. This compelled many mohajirs to join the opposition platform of Pakistan National Alliance (PNA) for the controversial 1977 elections⁹. The fallout of the 1977 elections and the alleged use of unfair means by the PPP government gave rise to a new wave of protests, which were then used as a precursor for the coup in 1977.

The strong-armed measures of a democratically elected leader made his own rule

⁸PNA accused PPP of rigging and demanded re-elections. That combined with continued violent conflict in Balochistan created wide-spread dissatisfaction against the incumbent government of PPP.

⁹60% of these coveted positions were to be allotted to rural youth and 40% were for urban population. This was determined through the Domicile.

unstable and provided for emergence of insurgency and revolt. Had Zulfikar Ali Bhutto adhere to the democratic tenets of the Constitution and allowed the provinces to govern themselves in the domain prescribed by the Constitution, had CCI been made more active and had the judiciary not been sidelined by subsequent amendments, the opposition would neither have had grounds nor opportunity for mobilizing resources for violent confrontation. This gives credence to the point of view of DeNardo (1985) and Muller and Weede (1990) that institutional ambivalence occurs when a democratically elected leader behaves like an autocrat or when an autocrat tries to be political, it provides space for dissidence to develop and mobilize resources for violent protest and political movement. This created an opportunity for Zia ul Haq to usurp power and suspend the constitutions.

3.4.9. The Zia Era

3.4.9.i. The Emergence of MQM

Initially, Zia ul Haq's rule enjoyed support from the *mohajir* group. However, as time passed the share of mohajir community in civil bureaucracy was further reduced, though some critics argue that *mohajirs* were still over-represented in bureaucracy and the private sector. The major discrepancy was between what they got and what they felt they were entitled to. This sort of perceived "relative deprivation" became the basis for mobilization of ethnic loyalties and formation of ethnic identity (Haq, 1995).

While the undercurrents of *mohajir* ethno-nationalism prevailed during the Zia ul Haq era, outright violence was more or less curtailed. This was largely due to the purely autocratic nature of the Zia regime. The dictatorial policies legitimized by a distinctly religious narrative made blatant opposition extremely costly and mobilization of resources for launching a violent movement infeasible. Further, the suspension of the constitution in 1977 took away any legal option to oppose the government

policies.

That said a personality cult surrounding the figure of Altaf Hussain was emerging among the *mohajirs* in Karachi. The transformation of All Pakistan Mohajir Students Organization (APMSO) into Mohajir Qaumi Movement (MQM) with Altaf Hussain in 1984 as a response to PNA's detachment to the *mohajir* cause, extension of quota system by Zia ul Haq Regime and student violence in campuses, led to establishment of a powerful political entity on the basis ethnic identity. With the creation of MQM the young educated individuals prescribing to the *mohajir* ethnicity and feeling deprived of their "rightful" opportunities found a platform to unite and mobilize for their ethno-political interests. The party manipulated and organized into a rigid hierarchical structure, with the leaders in the supreme position.

Shah & Sareen (2019) present another perspective on increased militancy in Karachi. The Soviet invasion of Afghanistan in late 1970s and Pakistan's involvement in the war may have played a role in inciting and encouraging militant tendencies in Pakistan as a whole and Karachi especially. The idea that it is justified to take up arms for a "just" cause led to Pakistan's disproportionate involvement in the Russo-Afghan war. The influx of weapons from United States, made at least a proportion of them available in the underground market for arms, making it easier for local militant groups like MQM to arm themselves.

Further, the unregulated and, more or less, undocumented arrival of Afghan refugees in Karachi, owing to it being the commercial hub of the country, meant more competition for jobs and residence. MQM started its approach towards violence by initially targeting Pashtuns. This was done a careful manipulation of facts and propagation of mostly (false) narrative that Afghan refugees were introducing drugs and weapons in the city.

3.4.9.ii. Balochistan in Zia Era

In his attempt to legitimize his rule, the martial law administrator General Zia ul Haq adopted much softer and reconciliatory approach, quelling the stimulants for violence for the time being¹⁰. Within the alliance the separatism of Mengal came in direct conflict with the more conciliatory approach of Bizenjo. This led to weakening of the warring factions in Balochistan resulting in a period of relative peace. Zia's era also represented a period in time when the autocratic government made any favorable outcomes from violent revolt highly unlikely. This may have also led to a split between rationalists and idealists within the movement, giving credence to the rational approach of Muller and Weede (1990). The split reduced the amount of resources at the disposal of the regional leadership at both end of the spectrum, making another civil war quite infeasible. While the civil war had ended, the long-standing Baloch grievances about being marginalized in power-sharing and decision-making in their own province persisted. The softer approach of Zia was intermixed with elements of autocratic means. Attaullah Mengal claimed that many members of the Marri tribe who had returned after announcement of amnesty were interred and arrest warrants were not withdrawn. Islamization of Zia regime created political space for religious parties especially, in (then) North Western Frontier Province and Balochistan. The purpose for that was facilitating civilian militia for "*Jihad*" in Afghanistan and creating a popular narrative for Pakistan's involvement in the Afghan War.

The autocratic nature of Zia regime and internal conflicts ended any concentric effort of mass violence in the province but the persistence of old grievances and denial of self-rule by central government even after democratic rule was restore in the country managed to keep the militant elements alive (Ali, 2005).

¹⁰Zia released 6000 Baluch prisoners held in Kohlu and Loralai prisons. Prominent Baluch leaders Mengal, Marri and Bizenjo were also released. Hyderabad tribunal was also disbanded and amnesty was announced in 1978.

3.4.10. Ethno-political Violence in the 1990s

The case of the emergence of MQM and resulting violence finds its basis in relative deprivation. However, the institutional ambivalence of 1970s laid the groundwork for its eventual rise. The *mohajir identity* is also unique in its origins as unlike other ethnic identities like Punjabi, Pashtoon, Sindhi or Baloch, it has emerged only after the Partition and its very existence is owed to this event. The mohajir groups organized themselves in the 1980s, when Pakistan did not enjoy a strong constitution and an autocratic military leadership provided no levy for peaceful political opposition. The legitimacy of cause or validity of demands becomes secondary when peaceful expression and recourse is blocked by the state. Therefore, in mid-1980s *Mohajir Qaumi Movement* (MQM) was formed to provide a political platform for *mohajir* grievances through violent means. The situation remained relatively small scaled and regionally contained during Zia regime. Owing to the autocratic nature of the regime mobilization at a larger scale and scope was infeasible giving credence to Muller and Weede (1990) view on political violence as a *rational* choice. The first major episode of political violence took place in 1988 between *Sindhi* and *Mohajir* ethnic groups in Hyderabad after the vicious end of Zia's regime.

In Karachi violent clashes between *sindhi* and *mohajir* ethnic groups became common from 1985 onwards. However, the emergence of organized violence in Sindh happened after the abrupt end of the Zia regime and resulting political chaos¹¹. The party emerged as the third largest party in Pakistan in the 1988 elections. However, its support and influence remained strictly regional, having little sway in National Assembly. Fortunately for MQM, the marginal victory of PPP, now under the leadership of Z. A. Bhutto's daughter Benazir Bhutto, meant they were in need of coalition partners. With 13 seats in the National Assembly, MQM enabled the PPP government in maintaining parliamentary majority. In October 1989 the coalition ended and MQM

¹¹Most notable episodes being the 1988 Hyderabad Massacre and 1990 Pakka Qila Massacre

announced support for no confidence movement against the Bhutto government.

Haleem (2003) reports more than 3000 casualties of ethnic violence in Sindh between the years 1985 and 1992. The June 1992 “Operation Clean-up” by the military, targeting leaders and operatives of MQM, further exacerbated the feelings of alienation and animosity by the Urdu-speaking youth. The militant approach to politics of the Party made it convenient for the violence specialists to mobilize young men by exploiting these sentiments. Altaf Hussain’s charisma mixed with the fear of retribution by the militant wing of the Party helped organize for an attempt at insurgency in 1994. From 29 April to 5th May, 1994 masked snipers attacked law enforcement agencies and the resulting chaos led to 32 deaths, prompting renewed efforts by the military and government to thwart the militancy by MQM in 1995. The method of this operation involved a number of illegal and unconstitutional actions, like fake police encounters and torture, sanctioned by the state. This resulted in further alienation of the mohajir youth driving them towards acts of violence. However, the brutality and extreme use of force led to weakening of the MQM militancy, leading to a decline in violence in late 1990s and early 2000 (Shah and Sareen, 2019). The continued violence had severe costs in form of destruction of physical assets, loss of businesses and, more importantly, loss of human life. This bigger problem gave rise to an entire culture of criminal activity in the city. Being mugged and robbed became part of everyday experience for most citizens. However, it also meant that the catalyst for this deterioration in law and order, MQM lost significant support from a substantial proportion of the very masses it represented. Ultimately, it became difficult to legitimately maintain the political identity of the party in association with its ethnic basis. In 1997 the party was renamed as *Muttahida Quami Movement (MQM)* without introducing any substantive change in its internal politics.

3.4.11. Military Coup of 1999

3.4.11.i. Resurgence of Baloch Separatism

The central power struggle during the 1990s, relegated regional issues to the back burner doing little to assuage regional frustrations. Meanwhile, the militant elements in the region were not completely eradicated. Policies of Islamization created enough ambivalence among the rural population, to generate support for insurgency that emerged in response to Pakistan's alliance with USA in the aftermath of 9/11. However, this time the issue of royalties on natural resources was the main cause of the conflict. Lack of representative participatory institutions denied any peaceful recourse to resolution of the issue intensifying the feelings of alienation and animosity towards military and other ethnicities.

The simmering resentment from the last two decades placated by Zia's conciliatory approach and some level of political representation in the decade of 1990s became a violent conflict during the Musharraf Regime. Despite the regional political parties striving for attaining political and economic rights within the parliamentary framework, such as it was, militants became active again. The military leadership responded by increasing military presence in the province. The military's retaliatory response, made any efforts for peaceful reconciliation ineffective (Mushtaq, 2009). In 2000 Nawab Khair Bukhsh Marri was arrested on account of the assassination of a provincial high court judge. Shortly after that Baloch Liberation Army (BLA) emerged which claimed responsibility for a number of terrorist attacks. In 2002 with the support of Musharraf-led central government far right alliance of religious political parties Mutahida Majlis-e-Amal (MMA) came in power in Balochistan. MMA was dominated by Jamiat-i-Ulma-i-Islam, Fazl-ul-Reham group (JUI-F), which was allegedly a staunch supporter of Taliban. Khan (2014) attributes the emerging spats of sectarian violence in the province to the ascendance of Sunni dominated MMA to

the power. The main targets of these incidences of violence are members of Hazara community which predominantly belongs to the Shia sect.

A main stimulant in this case may be the discovery of gold and copper mines in Reko Diq, and the licenses of extraction were given to foreign companies. The Baloch Sardars accused the government for not accounting for the needs and demands of the Baloch people. The government of General Musharraf asserted that the Baloch elite are unwilling to share royalty and revenue from natural resources with anyone even the common Balochi people. Therefore, even if royalty is increased or more autonomy is given it is not going to benefit the masses in any way. Musharraf further, angered the local populace by announcing mega-development projects in Balochistan which included construction of Gwadar Port and army cantonments, with little participation of and benefits to the local populace. Especially, when the project agreement for Gwadar Port was signed in 2002, no representative of provincial government was present, further cementing the disinterest of the federal government in local participation. The locals see the government projects as a plan to “colonize” them. Till now the old Gwadar city lack basic amenities like health, education and sanitation. The influx of massive numbers of workers from KPK, Punjab and Sindh to fill in positions for these projects had also led a sense of insecurity among Baloch people (Khan, 2014). The state was made worse by the heavy-handed approach of Musharraf government and its refusal to even negotiate demands for political and economic autonomy.

The situation came to head in 2005, when in response to militants trying to take out the gas supply the military carried out operation that reportedly caused 400 to 500 deaths and 85% of the population of Dera Bugti had to be displaced. In 2006 Sardar Akbar Bugti was killed in Bhambore Hills, which escalated the situation in the province. Aslam (2011) is of the view that the military operations often targeted political leaders and activists suppressing any alternative narrative. In August 2007,

opposition leaders in the provincial assembly moved three motions asking the government to take notice of the “violation of the constitution by intelligence agencies and arrest of political activists” without due process.

The situation in Balochistan became worse in the 2000s because of two main reasons. On one hand was continued refusal by the center in allocating reasonable share of resources to the province and transferring the power of self-government to the provincial government. Further, the entrenchment of military presence by building the cantonment made it seem eerily like colonization. The deprivation of the masses from the fruits of newer development also played a significant role in the emergence of militancy. The government tactics in appealing to religious sentiments by supporting religious political parties in the province also backfired due to emergence of sectarian violence.

At the other end the foreign intrusion owing to September 11, 2001 terrorist attacks in USA and the resulting involvement of Pakistan in the Afghan-US war made the situation unstable. The increased terrorist activities in Pakistan had two-fold narratives. Firstly, the political narrative in Balochistan which was contained within the regional boundaries of the province for the most part and religious narrative which affected even the most secured and central areas of the country. While the violence in the decade was motivated by regional and/ or religious sentiments, the conflict took a more severe turn owing to the refusal of the central government from negotiating with the political representatives of the masses. The people were not taken into confidence while making important policy decisions, whether it was Pakistan’s involvement in war against terror or building of Gwadar Port. In case of Balochistan the decisions of regional importance with significant implications for local population were made without consultation with local representatives, leading to emergence and festering of unresolved grievances among the local populace. This eventually, led to the sentiment that the center is developing at the cost of the province. This sentiment was

exploited by violence specialists to mobilize resources and enhance support for violent conflict. The constitutional provisions for participation of provincial authorities were generally ignored in the name of national interest. The protests of the local leaders were labeled as rebellious and treacherous. Any opposition by the masses was either ignored or suppressed through militaristic and (at times) excessive means, making the situation worse.

3.4.11.ii. Legal Framework and the 17th Amendment

The military coup of 1999 resulted in end of the tumultuous democratic decade of 1990s and brought about the military rule of General Pervez Musharraf. This coup was given partial legal cover by the Supreme Court of Pakistan, on the basis of “doctrine of necessity”. That said this military takeover was never declared as a martial law. The Provisional Constitutional Order (PCO) 1999 effectively suspended the constitution temporarily, a move that was opposed by most of the civilian leadership and later the Supreme Court of Pakistan as well, especially when the Supreme Court judges were told to take new oaths under the PCO¹². The most controversial aspect of the PCO was that it restricted the judiciary from challenging any actions by military. It not only legitimized the takeover but also prevented the courts from taking any legal action against Pervaiz Musharraf and others responsible for the military coup, directly violating the principles of Checks & Balances and Separation of Powers.

Upon taking power General Pervez Musharraf issued the Legal Framework Order (LFO) in 2002. It provided for the reinstatement of the 1973 constitution albeit with certain amendments (29 to be exact) and general elections in the same year. However, it also revived the 8th Amendment, again expanding the power and authority of the president. More specifically it endowed the President with the powers to dissolve the Assembly, appoint Chairman Joint Chief of Staff Committee, service chiefs and provincial governors. Further, it also allowed General Pervaiz Musharraf to hold the

¹²Nine out of 13 judges resigned in protest including the Chief Justice Saeeduzzaman Siddiqui.

office of the President of the country and that of Chief of Army Staff (COAS) and provided legal and constitutional cover to the orders and ordinances of the Military Chief prior to announcement of LFO. The sole purpose of LFO seems to validate the actions of one man instead of the parliament. Among the opposition parties only MMA managed to come to an agreement with the Musharraf government. Both sides agreed on a number of issues like the President will continue holding the office of COAS simultaneously, his discretionary powers over National Assembly, and legitimacy of the Presidential Referendum 2002. The element of coercion in this regard cannot be ignored. As Jamaat-i-Islami (JI) was accused of having ties with Al-Qaeda and Supreme Court was petitioned for disqualification of 65 legislators of the MMA, all from the biggest party in the alliance JUI-F¹³.

LFO was incorporated in the 17th Constitutional Amendment introduced in the newly elected Parliament 31st December, 2003. It meant that the most powerful office in the country i.e. the office of the President would be ascribed by distinctly undemocratic means through a vote of confidence in the parliament instead of general elections. This process of election also involved the Supreme Court in the procedure further muddying the legal relationship between the legislature, executive and judiciary (Kennedy, 2006).

In pursuit of dominance individuals in the executive branch government periodically rendered parliament and the courts devoid of authority resulting in resistance and unrest. This has led to imposition of martial law in order to maintain executive control (Brasted, Ahmed and Orakzai, 2018).

¹³This was done by asserting that their Madrassa Degrees are not equivalent to bachelors' degree of formal universities.

3.4.12. Post-Musharraf Reconciliation and the Way Forward

End of Musharraf regime and reinstatement of elected parliamentary system created a possibility of reconciliation and peace. Although low level insurgency and frequent terrorist activity is still taking place, infighting and danger posed to the common public has made the separatist groups unpopular. Reestablishment of electoral system and focus on coalition building between central parties and regional political elite has created opportunities for regional representation in national legislative bodies providing a somewhat better alternative to direct conflict. Further, initiation of China Pakistan Economic Corridor (CPEC) has created a unique opportunity to address the issue of economic deprivation of the region. The government of Pakistan People's Party (PPP) announced Aghaz-e-Haqoq-e Baluchistan in November 24, 2008, a package of reforms aimed at creation of new social contract. It involved reforms ranging from ending of military operations (other than anti-terrorism activities), investigation into the killing of Baluch leaders, job creation and deployment of Frontier Constabulary (FC) at Sui. The package also announced payments for outstanding gas royalties and share in the Saindak project for Baluchistan (Mujahid, 2012; Rizwan, et al., 2014).

Tariq (2013) posits that the 7th National Finance Commission (NFC) Award signed on 2009, was a pivotal in conceding more financial autonomy to the provinces and was instrumental in addressing historic Baluch grievances. The NFC award stipulates the criteria for the annual allocation of financial resources among the four provincial governments. The NFC award broadens the criteria by including poverty, revenue generation and area in addition to population for distribution of resources among provinces. This increased the share of Baluchistan in financial allocation from 5.3% to 9.09% (Tariq, 2013). However, the provincial government's lack of capacity and the federal government's persistent renegeing on the issues of royalties has led to

the consistent rise in grievances and feeling of betrayal by the Baluchs (Tariq, 2013).

Rizwan et, al. (2014) are of the view that the militant elements in Baluchistan do not trust the federal government and even their elected representatives in the provincial government, translating into unreliability of these steps. The authors also attribute the killing of major nationalist leaders as the primary factor exacerbating the situation¹⁴.

3.4.13. 18th Amendment and Provincial Rights

The 18th constitutional amendment has been a major step towards redefining the social contract. It not only abolished the concurrent list but also promulgated the management of education, health and local government to the provinces. It added three fundamental rights i.e. rights to a fair trial (Article 10A), rights to education (Article 25A) and the right to information (19A), spanning major concerns of people of Balochistan and KPK (Iqbal, et al., 2021). The 18th amendment also ensured that the revenue share of provinces would be determined based on NFC awards raising the share of Balochistan. Further, it also afforded equal rights to center and provinces over natural resources (Khan, 2017). While complete provincial autonomy remains elusive it has proven to be an important first step. The political leadership for the most part also responded positively to the amendment and called it a step in the right direction (Mujahid, 2012).

At the same time since many Baloch nationalist parties had no representation in the Parliamentary Committee on Constitutional Reforms¹⁵, major nationalist leaders have rejected the amendment. This led to political disenfranchisement and exploitation continued to be the focal point of the relationship between the central government

¹⁴These leaders were named as Lala Munir Baloch of Balochi National Front (BNF), Ghulam Mohammad Baloch of Balochi National Movement (BNM) and Sher Muhammad Bugti of Baloch Republican Party (BRP)

¹⁵At the time of drafting the 18th Amendment many Baloch nationalist parties were not part of the parliamentary committee because they boycotted the 2008 elections.

and Balochistan (Iqbal, et al., 2021). Therefore, small scale agitation persisted in the region. The intra-provincial heterogeneities still persisted due to ineffective system of local governments. Iqbal, et al. (2021) found a disconnect between the provisions under the 18th amendment to the Constitutions of Pakistan and the on-ground reality. More than 48% of the population of Balochistan still lives below the poverty line (Kagabo et al., 2023). Balochistan has the lowest literacy rate of 46% as compared to Punjab's 64% and Sindh's 58% (Pakistan Social and Living Standards Measurement, 2019-20). Unemployment in Balochistan has also been much higher than the national average (Khosa, 2015). Ethnic Power Relations Core Dataset (2022) shows no change in the power status of the Balochis after the 18th Amendment.

From 2010 to 2015 ACLED reports a rise in political violence in Balochistan. In 2015 383 casualties were reported in 96 events. However, after 2015 violent events decreased up until 2020. That may be attributed to the Peaceful (Pur-Aman) Balochistan Programme launched in April, 2015 with the intension to bring the disenfranchised Balochis in the mainstream. This entailed among other steps offer of amnesty to insurgents who lay down arms. According to reports, over 1000 Baloch militants surrendered just in August, 2016 . However, the process was not extended further, making it ineffective in ensuring lasting peace. Further, upon the death of Nawab Khair Bakhsh Marri in 2014 and the resulting breakdown of BLA into two different armed groups, namely, BLA and United Baloch Army (UBA) led to weakening of armed Baloch resistance, which may partially have contributed to the downward trend (Nabeel, 2017) Another point of contention may have been the 21st (2015) and 23rd (2017) Constitutional Amendments that established military courts for prosecution of terrorists. However, its scope is focused on religiously motivated terrorism and ethnic and regional organizations are out of the purview of these amendments.

With the lack of follow up on Peaceful Balochistan Programme, persistence of economic and social grievances and formulation of coalition between the militant

groups the Baloch People Liberation Coalition or Baloch Raaji Ajoji Sangar (BRAS), the decade of 2020 has seen a rise in armed conflict in Balochistan with the trend somewhat waning in late 2023, with declining trend in explosions and remote violence, but little change in the number of battles (Raleigh, et al., 2023).

In Sindh the opposition represented primarily by MQM is of the view that the agenda of the 18th Amendment is incomplete. The Article 140A does provide for establishment of local governments and devolution of “political, administrative and financial responsibility and authority”. An agenda that MQM claims has not been fully realized (Khan & Mushtaq, 2017). The primary matter of contention is the local government in Karachi. Mohajirs constitute the largest ethnic group in the Metropolitan while the rest of province is dominated by Sindhi ethnicity. A local government in Karachi would lead to the government of the largest Metropolitan in Pakistan in the hands of a provincial ethnic minority. Further, devolution of political power beyond provincial would reduce the authority and privilege exercised by Chief Minister (generally, belonging to Sindhi majority Pakistan People’s Party (PPP)). The socioeconomic conditions in the city has deteriorated but other parts of the province have not shown significant improvement either. The situation, if it persists, would devolve into ethnic conflict as both MQM and PPP have capacity for violence. Already the incidences of riots have been increasing since 2020, while violence against civilians has started rising in 2023 (Raleigh, et al., 2023).

The constitution of Pakistan represents an unprecedented formalization of social contract for Pakistan. It has addressed a number of issues like protection of fundamental rights, defining the political framework etc. Following Saad & Jacob (2012) the constitution of Pakistan could have played a more peacekeeping role by addressing grievances of minority groups and checking greed by the incumbent. Unfortunately, the constitutional history of Pakistan depicts insufficient protection afforded to the social contract. The constitution has been amended more than 20 times to date and

has been swept aside twice during the military rules of General Zia-ul-Haq (1977-1988) and General Pervez Musharraf (1999-2008), representing breach of Article 244 of the province. Further, repeated invocations of Article 58(2b) rendered the political environment¹⁶ unstable (Waseem, 2002). Article 58(2b)¹⁷ was not part of the original Constitution but was added through the 8th Amendment and later through 17th Amendment.

The 18th Amendment also afforded much needed protection to the constitution by inhibiting courts from endorsing suspension of the constitution. The 21st Amendment (2015) and the 23rd Amendment (2017), which established temporary military courts to deal with cases of terrorism, challenged the separation of powers between the three branches of government by establishing a parallel judicial system (Brasted, et al., 2019). This led to creation of institutional ambiguity as well as undermined the key principle of “due process”.

¹⁶**Removed through the 18th Amendment.**

¹⁷Article 58(2b) enabled the latter to dissolve the National and Provincial Assemblies in 1988, 1990, 1993, and 1996 and suspend parliamentary government

Chapter 3.5.

Conclusion

Violence, in all its forms, is undesirable. However, the potential intensity and magnitude of political violence can be particularly harmful to a nation's prosperity and development. It is crucial to recognize that political violence often arises in an atmosphere characterized by relative deprivation (Walker & Pettigrew, 1984) and mistrust (Murer, 2018). Despite these challenges, many modern nations have endeavored to establish a social contract for the equitable distribution of power and resources. This is typically achieved through consensus-building and documenting terms of cooperation, often in the form of a constitution. A constitution of this nature has the potential to function as a peace agreement (Saad & Jacob, 2012) and facilitates the transition of the process for resolving conflicts through violence to adopting (relatively) peaceful political methods. This transition is dependent on the incorporation of provisions that regulate and limit the access to power and resources (Samuels, 2006).

However, the persistence of political violence points to a commitment problem (Fearon, 1995). Despite cooperation being a mutually beneficial strategy, parties involved are often reluctant to adopt it without mechanisms to make commitments credible. We propose that in the presence of power imbalances, the dominant coalition may be incentivized to violate the social contract by appropriating more resources

than agreed upon. Such a breach of contract can potentially lead to violence. Our argument is centered on the idea that breaching the terms of the constitution by the ruling group incurs costs such as the loss of goodwill, diminished political support, the emergence of opportunistic opposition parties, judicial accountability, and the need to redirect resources for damage control and image building. This cost, even if violence does not occur, determines whether the majority or incumbent group will uphold its commitment. A sufficiently high cost of renegeing can serve as a deterrent to violence.

From the standpoint of the group outside the dominant coalition, the decision to rebel or to be productive hinges on determining the level of effort dedicated to production. More substantial effort suggests heightened investment and greater labor force involvement, yet it also incurs a cost that shapes this decision. The choice of rebellion, on the other hand, hinges on the level of exploitation or appropriation. Recognizing the costs associated with rebellion, we hypothesize that at lower levels of exploitation, the minority group is likely to refrain from rebellion. However, there exists a critical level of exploitation at or above which the group will opt for the risk of rebellion. Our study adopts the post-constitutional game proposed by Kirstein and Voigt (1999) as a starting point, with modifications to align it with the real-world context.

The theoretical analysis establishes that higher effort and consequently higher levels of production without risk of violence and resource wastage is possible if the cost of appropriation (k) by the group in power (M) is high enough to eliminate any benefits derived from exploitation with and without the risk of rebellion. The most desirable outcome for any nation would be no exploitation accompanied by high levels of effort. This can be done through increasing the cost of renegeing on the social contract and reducing the cost of effort (E).

Further, we have placed the history of the political violence in Pakistan particularly in East Pakistan, Balochistan and Sindh, in its Constitutional context. The case of East Pakistan, depicts that in the absence of bargaining power afforded to outside groups (in this case, Bengalis) the incumbent may be inclined to renege from its commitments and in anticipation of this breach of contract the outside group may choose to secede. Which makes the case for formalization of social contract in the form of Constitution that would assign some bargaining power to the minority groups.

However, the cases of Balochistan and Sindh depict that without due protection (increasing k) the social contract can be manipulated and/or neglected by the dominant coalition. This has led to persistence of grievances and relative deprivation leaving room of violence and political unrest. The recent uptake in political violence in Balochistan, is a wakeup call for the leadership of the country. The opportunities to avoid outright civil war are there. Firstly, the 18th Amendment need to be implemented in true letter and spirit with devolution of power to local governments and indiscriminate provision of fundamental rights enshrined in the Constitution. Secondly, engagement of Baloch labor force in mega projects under CPEC can be achieved through investment in technical education and skill-enhancement. Thirdly, there is the need to fight the narrative of nepotism and discrimination that is used for recruitment in the militant organizations through actively prioritizing key concerns of minorities ethnicities in policymaking. Finally, no matter how sparsely the region is populated and how small the group size is they are for all intent and purposes Pakistanis. The history of political violence in Pakistan is a testament to the ineffectuality of heavy-handed approach to conflict resolution and solution lies in following through with the commitments made to all Pakistani citizens in the Constitution of the country.

CONCLUSION

Political violence remains a significant challenge for many nations, often rooted in institutional insufficiencies, economic disparities, and social mobilization processes. Institutions play a crucial role in mitigating or exacerbating political violence through mechanisms of accountability, governance, and resource distribution. My work explores three interconnected perspectives on the relationship between institutions and political violence; the role of social mobilization, the impact of natural resource rents, and political violence as commitment problem. By analysing these aspects, I have tried to provide a nuanced understanding of how institutional structures influence the likelihood, intensity, and onset of political violence. Social mobilization, as conceptualized by Deutsch (1961) and Mannheim (2013), transforms societal structures by altering economic and political expectations. This shift fosters aspirations for better living standards and political rights, but when institutions fail to meet these expectations, frustration may translate into violence. The mismatch between aspirations and institutional capacity generates discontent, particularly in developing nations where economic and political opportunities lag behind social change. This phenomenon aligns with Gurr's (1970) relative deprivation theory, which posits that perceived inequalities and unmet expectations fuel conflict. Using the data from 68 countries from 1990-2020 I have carried out the empirical analysis. The findings suggest that social mobilization reduces the likelihood of political violence by enhancing education,

broadening perspectives, and fostering peaceful conflict resolution. Increased urbanization and internet access further mitigate violence by exposing political atrocities and making indiscriminate violence costlier. However, in cases where institutions are weak, the inability to absorb and accommodate new social expectations can lead to outbreaks of political violence. This highlights the necessity of institutional reforms that can channel social mobilization into constructive political engagement rather than conflict. The second essay deals with the distribution of natural resource rents in politically unstable regions. This often exacerbates violence by incentivizing rebellion and exploitation. The presence of valuable natural resources can intensify conflicts, as groups seek control over lucrative rents, making political violence a strategic choice. Institutional accountability mechanisms, such as judicial independence and political constraints, play a vital role in mitigating this effect by reducing the incentives for both state and non-state actors to engage in violence. Our analysis comprising of data from 86 countries demonstrates that natural resource rents influence the intensity of violence differently based on resource type. While oil rents tend to decrease high-intensity violence by creating incentives for stability, coal and forest rents are more likely to amplify violence due to their accessibility and ease of exploitation. This underscores the importance of strong institutions in managing resource wealth to prevent it from becoming a catalyst for political conflict. Effective governance, transparency in resource allocation, and stringent accountability measures can significantly reduce the likelihood of resource-driven political violence. Finally, my third essay discusses political violence as a commitment problem faced by developing nations like Pakistan and need for enforcement of social contract for peacekeeping. A well-structured constitution functions as a social contract, regulating power distribution and ensuring resource allocation fairness. Political violence often emerges when the ruling coalition reneges on its commitments, leading to perceptions of exploitation and exclusion among marginalized groups. The failure to uphold constitutional guarantees can erode trust, triggering rebellion or secessionist movements, as evidenced in

East Pakistan's secession in 1971. In regions like Balochistan and Sindh, weak constitutional enforcement has allowed grievances to persist, fostering conditions conducive to violence. Strengthening constitutional provisions through mechanisms like local governance devolution, protection of fundamental rights, and inclusive policymaking is essential to addressing these issues. The implementation of the 18th Amendment in Pakistan, which grants greater provincial autonomy, represents a crucial step toward mitigating these tensions. However, effective enforcement remains a challenge, necessitating further reforms to ensure long-term stability and peace. In conclusion institutions play a decisive role in shaping the trajectory of political violence. Social mobilization, when supported by strong institutions, fosters peaceful political engagement, whereas weak institutions may exacerbate frustrations, leading to violence. The management of natural resource rents further highlights the importance of institutional accountability in preventing economic disparities from fueling conflicts. Lastly, constitutional frameworks must be upheld and effectively implemented to prevent political grievances from escalating into violence. Strengthening institutions across these domains is essential for mitigating political violence and fostering long-term economic and political stability.

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Appendix

Appendix 1.A. List of Countries

SrNo	Country	SrNo	Country	SrNo	Country
1	Afghanistan	24	Indonesia	47	Panama
2	Algeria	25	Iran	48	Papua New Guinea
3	Angola	26	Iraq	49	Peru
4	Azerbaijan	27	Israel	50	Philippines
5	Bangladesh	28	Ivory Coast	51	Russia (Soviet Union)
6	Burkina Faso	29	Jordan	52	Rwanda
7	Burundi	30	Kenya	53	Senegal
8	Cambodia (Kampuchea)	31	Laos	54	Serbia (Yugoslavia)
9	Cameroon	32	Lesotho	55	Sierra Leone
10	Central African Republic	33	Libya	56	South Africa
11	China	34	Malaysia	57	Spain
12	Colombia	35	Mali	58	Sri Lanka
13	Congo	36	Mauritania	59	Sudan
14	Ecuador	37	Mexico	60	Syria
15	Egypt	38	Moldova	61	Thailand
16	El Salvador	39	Morocco	62	Uganda
17	Eritrea	40	Mozambique	63	Ukraine
18	Ethiopia	41	Myanmar	64	United Kingdom
19	Georgia	42	Nepal	65	United States of America
20	Guatemala	43	Nicaragua	66	Uzbekistan
21	Guinea	44	Niger	67	Venezuela
22	Guinea-Bissau	45	Nigeria	68	Yemen (North Yemen)
23	India	46	Pakistan		

Appendix 1.B. Probit Estimates for Impact Social Mobilization, Political Institutionalization, Technological Change and Mobilization Gap on Onset of Conflict

	(4)						(5)					
	Full Sample			Lower Middle Income & Low Income Countries								
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Social Mobilization	-0.0317 (0.0489)	-0.0018 (0.0028)					0.0075 (0.0473)	0.0005 (0.0033)				
Political Institutionalization	0.0554 (0.0374)	0.0032 (0.0022)					0.0610 (0.0503)	0.0042 (0.0035)				
Technological Change	0.0558 (0.0891)	0.0032 (0.0051)					0.0925 (0.0861)	0.0064 (0.0058)				
Mobilization Gap			-0.0151 (0.0639)	-0.0009 (0.0037)	-0.0148 (0.0690)	-0.0009 (0.0040)	0.0215 (0.0716)	0.0015 (0.0050)	0.0279 (0.0901)	0.0019 (0.0062)		
Youth Unemployment	0.0105** (0.0050)	0.0006** (0.0003)	0.0094* (0.0050)	0.0005* (0.0003)	0.0095* (0.0050)	0.0006* (0.0003)	0.0095 (0.0075)	0.0007 (0.0005)	0.0082 (0.0077)	0.0006 (0.0005)		
Official Development Aid	0.1932** (0.0774)	0.0112** (0.0047)	0.1944** (0.0771)	0.0133** (0.0044)	0.1939** (0.0771)	0.0113** (0.0047)	0.1151 (0.0920)	0.0079 (0.0063)	0.1298 (0.0885)	0.0090 (0.0061)	0.1304 (0.0876)	0.0091 (0.0060)
Globalization	-0.0136** (0.0061)	-0.0009*** (0.0003)	-0.0102* (0.0064)	-0.0006 (0.0004)	-0.0104 (0.0066)	-0.0006 (0.0004)	-0.0123* (0.0070)	-0.0008* (0.0005)	-0.0060 (0.0079)	-0.0004 (0.0006)	-0.0065 (0.0084)	-0.0005 (0.0006)
Military Expenditures	0.0151 (0.0184)	0.0009 (0.0011)	0.0114 (0.0181)	0.0007 (0.0010)	0.0110 (0.0184)	0.0006 (0.0011)	0.0139 (0.0185)	0.0010 (0.0012)	0.0115 (0.0185)	-0.0008 (0.0012)	0.0108 (0.0189)	0.0008 (0.0013)
Intercept	-5.3901*** (1.7736)		-5.5569*** (1.7503)		-5.5354*** (1.7582)		-3.7920* (2.0418)		-4.3638** (1.9758)		-4.3498** (1.9644)	
Wald Chi2 (Prob.)	10.75 (0.150)		9.16* (0.1029)		9.20 (0.1625)		4.29 (0.7464)		2.64 (0.7550)		2.73 (0.8422)	
N	1402		1402		1402		933		933		933	
Groups	60		60		60		37		37		37	

Appendix 1.B. Probit Estimates for Impact Social Mobilization, Political Institutionalization, Technological Change and Mobilization Gap on Onset of Conflict (Contd.)

	(6)					
	High-Income & Upper Middle Income Countries					
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Social Mobilization	-0.1948** (0.0832)	-0.0061 (0.0045)				
Political Institutionalization	0.0323 (0.0643)	0.0010 (0.0022)				
Technological Change	-0.3196 (0.3338)	-0.0101 (0.0105)				
Mobilization Gap			-0.3031 (0.3061)	-0.0102 (0.0653)	-0.3330** (0.1663)	-0.0112* (0.0069)
Gap ²					-0.0140 (0.0451)	-0.0005 (0.0015)
Youth Unemployment	0.0173 (0.0148)	0.0005 (0.0005)	0.0188 (0.0430)	0.0006 (0.0021)	0.0191** (0.0087)	0.0006** (0.0003)
Official Development Aid	0.5361** (0.2565)	0.0169 (0.0133)	0.4110 (0.6726)	0.0138 (0.0543)	0.4081** (0.1800)	0.0137* (0.0074)
Globalization	0.0196 (0.0206)	0.0006 (0.0009)	0.0017 (0.1090)	0.0001 (0.0040)	0.0020 (0.0146)	0.0001 (0.0005)
Military Expenditures	-0.0585 (0.1903)	-0.0018 (0.0048)	-0.0253 (0.3982)	-0.0008 (0.0088)	-0.0290 (0.0760)	-0.0010 (0.0026)
Intercept	-14.7217*** (5.9473)		-10.9632*** (10.928)		-10.9087*** (4.0371)	
Wald Chi2 (Prob.)	9.17 (0.2404)		7.44 (0.1898)		7.50 (0.2769)	
N	469		469		469	
Groups	23		23		23	

Appendix 2.A. List of Countries

SrNo	Country	SrNo	Country	SrNo	Country	SrNo	Country
1	Afghanistan	26	Georgia	51	Myanmar	76	Thailand
2	Algeria	27	Guatemala	52	Nepal	77	Trinidad and Tobago
3	Angola	28	Guinea	53	Nicaragua	78	Tunisia
4	Australia	29	Guinea-Bissau	54	Niger	79	Turkey
5	Azerbaijan	30	Haiti	55	Nigeria	80	Uganda
6	Bangladesh	31	India	56	North Macedonia	81	Ukraine
7	Bosnia-Herzegovina	32	Indonesia	57	Pakistan	82	United Kingdom
8	Burkina Faso	33	Iran	58	Panama	83	United States of America
9	Burundi	34	Iraq	59	Papua New Guinea	84	Uzbekistan
10	Cambodia (Kampuchea)	35	Israel	60	Paraguay	85	Venezuela
11	Cameroon	36	Ivory Coast	61	Peru	86	Yemen (North Yemen)
12	Central African Republic	37	Jordan	62	Philippines		
13	Chad	38	Kenya	63	Romania		
14	China	39	Laos	64	Russia (Soviet Union)		
15	Colombia	40	Lebanon	65	Rwanda		
16	Comoros	41	Lesotho	66	Senegal		
17	Congo	42	Liberia	67	Serbia (Yugoslavia)		
18	Croatia	43	Libya	68	Sierra Leone		
19	DR Congo (Zaire)	44	Malaysia	69	Somalia		
20	Djibouti	45	Mali	70	South Sudan		
21	Ecuador	46	Mauritania	71	Spain		
22	Egypt	47	Mexico	72	Sri Lanka		
23	El Salvador	48	Moldova	73	Sudan		
24	Eritrea	49	Morocco	74	Syria		
25	Ethiopia	50	Mozambique	75	Tajikistan		

Appendix 2B
 Dynamic Probit Estimates
 Table 2.5.i.a. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Media Integrity

	(1)						(2)						(3)					
	Natural Resource Rents						Oil Rents						Coal Rents					
	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.		
Lag of Internal Violence	1.6929*** (0.1477)		1.6870*** (0.1455)		1.6901*** (0.1483)		1.6870*** (0.1454)		1.6720*** (0.1440)		1.6660*** (0.1439)		1.6720*** (0.1440)		1.6660*** (0.1439)			
Media Integrity	-1.2810* (0.7187)	-0.2496* (0.1399)	-1.1808 (0.7505)	-0.2390* (0.1426)	-1.2016* (0.7127)	-0.2355* (0.1399)	-1.1808* (0.7505)	-0.2275 (0.1455)	-1.2723* (0.7353)	-0.2512* (0.1453)	-1.2905* (0.7450)	-0.2512* (0.1453)	-1.2723* (0.7353)	-0.2512* (0.1453)	-1.2905* (0.7450)	-0.2512* (0.1453)		
Natural Resource Rents	0.0101 (0.0070)	0.0020 (0.0013)	0.0268*** (0.0077)	0.0037*** (0.0015)	0.0068 (0.0079)	0.0013 (0.0015)	0.0268*** (0.0077)	0.0052*** (0.0014)	0.1656 (0.1487)	0.0327 (0.0295)	1.1228*** (0.3353)	0.0327 (0.0295)	0.1656 (0.1487)	0.0327 (0.0295)	1.1228*** (0.3353)	0.0327 (0.0295)		
Media Integrity * Natural Resource Rents			-0.0916*** (0.0225)	-0.0079* (0.0047)			-0.0916*** (0.0225)	-0.0176* (0.0042)										
GDP per capita	-0.2190** (0.0925)	-0.0427** (0.0176)	-0.2583*** (0.0985)	-0.0420** (0.0174)	-0.2282** (0.0960)	-0.0447** (0.0183)	-0.2583*** (0.0985)	-0.0498*** (0.0184)	-0.2049** (0.0945)	-0.0405** (0.0182)	-0.2076** (0.0967)	-0.0405** (0.0182)	-0.2049** (0.0945)	-0.0405** (0.0182)	-0.2076** (0.0967)	-0.0405** (0.0182)		
Political Globalization	0.0092* (0.0055)	0.0018* (0.0011)	0.0098* (0.0054)	0.0019* (0.0010)	0.0085* (0.0055)	0.0017* (0.0011)	0.0098* (0.0054)	0.0019* (0.0010)	0.0070 (0.0056)	0.0014* (0.0011)	0.0065 (0.0057)	0.0014* (0.0011)	0.0070 (0.0056)	0.0014* (0.0011)	0.0065 (0.0057)	0.0013 (0.0011)		
Military Expenditure	0.0786* (0.0412)	0.0153** (0.0078)	0.0825** (0.0412)	0.0157** (0.0078)	0.0778* (0.0421)	0.0153** (0.0081)	0.0825** (0.0412)	0.0159** (0.0078)	0.0793* (0.0445)	0.0157** (0.0086)	0.0804* (0.0451)	0.0157** (0.0086)	0.0793* (0.0445)	0.0157** (0.0086)	0.0804* (0.0451)	0.0158* (0.0087)		
Youth Unemployment	0.0004 (0.0064)	0.0001 (0.0012)	-0.0033 (0.0063)	-0.0001 (0.0012)	-0.0002 (0.0065)	-0.0003 (0.0013)	-0.0033 (0.0063)	-0.0006 (0.0012)	0.0006 (0.0068)	0.0001 (0.0013)	0.0011 (0.0069)	0.0001 (0.0013)	0.0006 (0.0068)	0.0001 (0.0013)	0.0011 (0.0069)	0.0002 (0.0014)		
Intercept	-1.0503 (0.6729)		-0.9494 (0.6496)		-0.8403 (0.6514)		-0.9494 (0.6496)		-0.8576 (0.6648)		-0.8789 (0.6792)		-0.8576 (0.6648)		-0.8789 (0.6792)			
Wald Chi2 (Prob.)	347.45*** (0.000)		346.32*** (0.00)		358.37*** (0.000)		346.32*** (0.00)		354.19*** (0.000)		363.15*** (0.00)		354.19*** (0.000)		363.15*** (0.00)			
N	81		81		81		81		81		81		81		81			
Groups	2056		2056		2056		2056		2057		2057		2057		2057			

Table 2-5.i.b. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Media Integrity

	(4)						(5)						(6)					
	Natural Gas Rents			Forest Rents			Mineral Rents			Natural Gas Rents			Forest Rents			Mineral Rents		
	Coeff.	M.E.		Coeff.	M.E.		Coeff.	M.E.		Coeff.	M.E.		Coeff.	M.E.		Coeff.	M.E.	
Lag of Internal Violence	1.6675*** (0.1467)			1.6701*** (0.1452)			1.6680*** (0.1450)			1.6801*** (0.1446)			1.6805*** (0.1445)					
Media Integrity	-1.1195 (0.7019)	-0.2137 (0.1397)	-0.2293* (0.1365)	-1.0967 (0.7146)	-0.2137 (0.1397)	-0.2137 (0.1397)	-1.1466 (0.7212)	-0.2137 (0.1397)	-0.2229 (0.1414)	-1.2702* (0.7618)	-0.2503* (0.1500)	-0.2503* (0.1500)	-1.2922* (0.7693)	-0.2503* (0.1500)	-0.2546* (0.1515)			
Natural Resource Rents	0.0496 (0.0622)	0.0096 (0.0120)	-0.0023 (0.0119)	0.0104 (0.0167)	0.0020 (0.0033)	0.0020 (0.0033)	0.0681 (0.1085)	0.0020 (0.0033)	0.0133 (0.0212)	0.0335 (0.0206)	0.0066 (0.0041)	0.0066 (0.0041)	0.0008 (0.0803)	0.0066 (0.0041)	0.0002 (0.0158)			
* Natural Resource Rents																		
GDP per capita	-0.2679*** (0.0966)	-0.0519*** (0.0186)	-0.0525*** (0.0187)	-0.2472*** (0.0952)	-0.0482*** (0.0182)	-0.0482*** (0.0182)	-0.2470*** (0.0953)	-0.0482*** (0.0182)	-0.0482*** (0.0183)	-0.2053*** (0.0953)	-0.0404** (0.0184)	-0.0404** (0.0184)	-0.2043*** (0.0953)	-0.0404** (0.0184)	-0.0402*** (0.0184)			
Political Globalization	0.0024 (0.0068)	0.0005 (0.0013)	0.0001 (0.0013)	0.0035 (0.0069)	0.0007 (0.0013)	0.0007 (0.0013)	0.0036 (0.0070)	0.0007 (0.0013)	0.0007 (0.0014)	0.0071 (0.0055)	0.0014 (0.0011)	0.0014 (0.0011)	0.0071 (0.0055)	0.0014 (0.0011)	0.0014 (0.0011)			
Military Expenditure	0.0788** (0.0395)	0.0153** (0.0075)	0.0149** (0.0075)	0.0760* (0.0391)	0.0148** (0.0075)	0.0148** (0.0075)	0.0752* (0.0390)	0.0148** (0.0075)	0.0147** (0.0075)	0.0791* (0.0444)	0.0156* (0.0085)	0.0156* (0.0085)	0.0786* (0.0445)	0.0156* (0.0085)	0.0155* (0.0086)			
Youth Unemployment	0.0016 (0.0064)	0.0003 (0.0012)	0.0004 (0.0013)	0.0008 (0.0065)	0.0001 (0.0013)	0.0001 (0.0013)	0.0008 (0.0066)	0.0001 (0.0013)	0.0002 (0.0013)	0.0010 (0.0069)	0.0002 (0.0014)	0.0002 (0.0014)	0.0009 (0.0069)	0.0002 (0.0014)	0.0002 (0.0014)			
Intercept	-0.6042 (0.6781)			-0.6131 (0.6837)			-0.6161 (0.6851)			-0.8749 (0.6646)			-0.8749 (0.6646)					
Wald Chi2 (Prob.)	380.29*** (0.000)			390.48*** (0.000)			390.79*** (0.000)			352.19*** (0.000)			353.73*** (0.000)					
N	81			81			81			81			81					
Groups	2054			2057			2057			2057			2057					

Table 2.5.i.c. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Judicial Independence

	(1)						(2)						(3)					
	Natural Resource Rents						Oil Rents						Coal Rents					
	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.		
Lag of Internal Violence	1.7011*** (0.1492)	-0.0613 (0.1405)	1.7045*** (0.1474)	-0.0660 (0.1362)	1.6982*** (0.1497)	-0.0565 (0.1393)	1.7011*** (0.1460)	-0.0678 (0.1347)	1.6682*** (0.1454)	-0.0878 (0.1081)	1.6685*** (0.1456)	-0.0937 (0.1090)	1.6682*** (0.1454)	-0.0678 (0.1347)	1.6685*** (0.1456)	-0.0937 (0.1090)		
Judicial Independence	-0.3132 (0.7201)	0.0013 (0.0013)	-0.3392 (0.7020)	0.0028* (0.0015)	-0.2874 (0.7104)	0.0007 (0.0015)	-0.3510 (0.6990)	0.0047*** (0.0015)	-0.4483 (0.5499)	0.0339 (0.0289)	-0.4790 (0.5553)	0.0829 (0.0730)	-0.4483 (0.5499)	0.0339 (0.0289)	-0.4790 (0.5553)	0.0829 (0.0730)		
Natural Resource Rents	0.0068 (0.0067)	0.0013 (0.0013)	0.0143* (0.0080)	0.0028* (0.0015)	0.0038 (0.0077)	0.0007 (0.0015)	0.0244*** (0.0081)	0.0047*** (0.0015)	0.1730 (0.1473)	0.0339 (0.0289)	0.4236 (0.3754)	0.0829 (0.0730)	0.1730 (0.1473)	0.0339 (0.0289)	0.4236 (0.3754)	0.0829 (0.0730)		
Judicial Independence * Natural Resource Rents			-0.0422 (0.0359)	-0.0082 (0.0070)			-0.1196*** (0.0324)	-0.0231*** (0.0060)			-0.5994 (0.8089)	-0.1173 (0.1573)			-0.5994 (0.8089)	-0.1173 (0.1573)		
GDP per capita	-0.1742* (0.0970)	-0.0341* (0.0186)	-0.1799*** (0.0979)	-0.0350*** (0.0187)	-0.1778* (0.1009)	-0.0349* (0.0193)	-0.2330** (0.1038)	-0.0450** (0.0195)	-0.1992* (0.1022)	-0.0390** (0.0198)	-0.1984* (0.1027)	-0.0388** (0.0198)	-0.1992* (0.1022)	-0.0390** (0.0198)	-0.1984* (0.1027)	-0.0388** (0.0198)		
Political Globalization	0.0080 (0.0058)	0.0016 (0.0011)	0.0085 (0.0058)	0.0016 (0.0011)	0.0075 (0.0057)	0.0015 (0.0011)	0.0089 (0.0056)	0.0017 (0.0011)	-0.0007 (0.0069)	-0.0001 (0.0014)	-0.0007 (0.0069)	-0.0001 (0.0014)	-0.0007 (0.0069)	-0.0001 (0.0014)	-0.0007 (0.0069)	-0.0001 (0.0014)		
Military Expenditure	0.0732* (0.0420)	0.0143* (0.0081)	0.0754* (0.0417)	0.0147* (0.0079)	0.0726* (0.0428)	0.0143* (0.0082)	0.0770* (0.0412)	0.0149* (0.0078)	0.0764* (0.0407)	0.0150* (0.0078)	0.0764* (0.0407)	0.0149* (0.0078)	0.0764* (0.0407)	0.0150* (0.0078)	0.0764* (0.0407)	0.0149* (0.0078)		
Youth Unemployment	-0.0015 (0.0064)	-0.0003 (0.0013)	-0.0018 (0.0063)	-0.0004 (0.0012)	-0.0018 (0.0065)	-0.0003 (0.0013)	-0.0043 (0.0061)	-0.0008 (0.0012)	0.0019 (0.0116)	0.0004 (0.0023)	0.0016 (0.0116)	0.0003 (0.0023)	0.0019 (0.0116)	0.0004 (0.0023)	0.0016 (0.0116)	0.0003 (0.0023)		
Intercept	-1.0418* (0.6084)		-1.1633* (0.5970)		-0.9084 (0.5978)		-0.8239 (0.6012)		-0.7810 (0.6212)		-0.7775 (0.6239)		-0.7810 (0.6212)		-0.7775 (0.6239)			
Wald Chi2 (Prob.)	328.28*** (0.00)		337.36*** (0.00)		343.16*** (0.00)		329.89*** (0.00)		406.09*** (0.00)		407.83*** (0.00)		406.09*** (0.00)		407.83*** (0.00)			
N	81		81		81		81		81		81		81		81			
Groups	2056		2056		2056		2056		2057		2057		2057		2057			

Table 2.5.i.d. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Judicial Independent

	(4)						(5)						(6)						
	Natural Gas Rents			Forest Rents			Mineral Rents			Natural Gas Rents			Forest Rents			Mineral Rents			
	Coef.	M.E.		Coef.	M.E.		Coef.	M.E.		Coef.	M.E.		Coef.	M.E.		Coef.	M.E.		
Lag of Internal Violence	1.6758*** (0.1478)			1.6761*** (0.1464)			1.6737*** (0.1459)			1.6791*** (0.1477)			1.6791*** (0.1476)			1.6791*** (0.1476)			
Judicial Independence	-0.2828 (0.6727)	-0.0548 (0.1302)		-0.2103 (0.6771)	-0.0410 (0.1317)		-0.2479 (0.6723)	-0.0483 (0.1307)		-0.3217 (0.7300)	-0.0625 (0.1417)		-0.3286 (0.7245)	-0.0625 (0.1417)		-0.3286 (0.7245)	-0.0625 (0.1417)		
Natural Resource Rents	0.0370 (0.0567)	0.0072 (0.0109)		0.0088 (0.0170)	0.0017 (0.0033)		0.0523 (0.0783)	0.0102 (0.0212)		0.0489 (0.0206)	0.0095 (0.0040)		0.0451 (0.0382)	0.0095 (0.0040)		0.0451 (0.0382)	0.0095 (0.0040)		
Judicial Independence * Natural Resource Rents																			
GDP per capita	-0.2183** (0.0985)	-0.0423** (0.0187)		-0.2025** (0.0962)	-0.0394** (0.0184)		-0.2049** (0.0974)	-0.0482*** (0.0183)		-0.2062** (0.0959)	-0.0401** (0.0183)		-0.2063** (0.0961)	-0.0401** (0.0183)		-0.2063** (0.0961)	-0.0401** (0.0183)		
Political Globalization	-0.0006 (0.0069)	-0.0001 (0.0013)		0.0003 (0.0070)	0.0001 (0.0014)		0.0004 (0.0070)	0.0007 (0.0014)		-0.0014 (0.0069)	-0.0003 (0.0013)		-0.0014 (0.0069)	-0.0003 (0.0013)		-0.0014 (0.0069)	-0.0003 (0.0013)		
Military Expenditure	0.0733** (0.0380)	0.0142** (0.0072)		0.0717* (0.0379)	0.0140* (0.0072)		0.0716* (0.0380)	0.0147** (0.0075)		0.0733* (0.0378)	0.0142** (0.0072)		0.0734* (0.0381)	0.0142** (0.0072)		0.0734* (0.0381)	0.0142** (0.0072)		
Youth Unemployment	-0.0006 (0.0063)	-0.0001 (0.0012)		-0.0013 (0.0063)	-0.0003 (0.0012)		-0.0012 (0.0064)	-0.0002 (0.0013)		-0.0013 (0.0063)	-0.0003 (0.0012)		-0.0012 (0.0064)	-0.0003 (0.0012)		-0.0012 (0.0064)	-0.0003 (0.0012)		
Intercept	-0.8409 (0.6134)			-0.8741 (0.6179)			-0.8631 (0.6226)			-0.8275 (0.6160)			-0.8350 (0.6121)			-0.8350 (0.6121)			
Wald Chi2	370.93***			383.63**			384.80***			379.11***			387.61***			387.61***			
(Prob.)	(0.000)			(0.000)			(0.00)			(0.000)			(0.00)			(0.00)			
N	81			81			81			81			81			81			
Groups	2054			2057			2057			2057			2057			2057			

Table 2.5.i.e. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Polity

	(1)						(2)						(3)						
	Natural Resource Rents						Oil Rents						Coal Rents						
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	
Lag of Internal Violence Polity	1.6907*** (0.1481)	-0.0055* (0.0032)	1.6745*** (0.1468)	-0.0102*** (0.0040)	1.6858*** (0.1467)	-0.0055* (0.0032)	-0.0282* (0.0163)	1.6855*** (0.1482)	-0.0278* (0.0164)	1.6855*** (0.1482)	-0.0278* (0.0164)	-0.0055* (0.0032)	-0.0299* (0.0167)	1.6775*** (0.1452)	-0.0299* (0.0167)	-0.0055* (0.0032)	-0.0299* (0.0167)	1.6775*** (0.1452)	-0.0299* (0.0167)
Natural Resource Rents	0.0053 (0.0069)	0.0010 (0.0013)	0.0376*** (0.0135)	0.0074*** (0.0027)	0.0001 (0.0075)	0.0002 (0.0015)	0.0210*** (0.0084)	0.0001 (0.0075)	0.0001 (0.0075)	0.0001 (0.0075)	0.0001 (0.0075)	0.0002 (0.0015)	0.2177* (0.1321)	0.2177* (0.1321)	0.0002 (0.0015)	0.0002 (0.0015)	0.2177* (0.1321)	0.2177* (0.1321)	0.0431* (0.0262)
Polity * Natural Resource Rents	-0.1996** (0.0975)	0.0394** (0.0188)	-0.0589** (0.0233)	-0.0116** (0.0047)	-0.1939* (0.1020)	-0.0385* (0.0197)	-0.0652*** (0.0178)	-0.1939* (0.1020)	-0.1939* (0.1020)	-0.1939* (0.1020)	-0.1939* (0.1020)	-0.0385* (0.0197)	-0.1976** (0.0991)	-0.1976** (0.0991)	-0.0385* (0.0197)	-0.0385* (0.0197)	-0.1976** (0.0991)	-0.1976** (0.0991)	-0.0385* (0.0197)
GDP per capita	0.0095* (0.0052)	0.0019* (0.0010)	0.0095* (0.0051)	0.0019* (0.0010)	0.0087* (0.0052)	0.0017* (0.0010)	0.0104** (0.0052)	0.0087* (0.0052)	0.0087* (0.0052)	0.0087* (0.0052)	0.0087* (0.0052)	0.0017* (0.0010)	0.0082 (0.0053)	0.0082 (0.0053)	0.0017* (0.0010)	0.0017* (0.0010)	0.0082 (0.0053)	0.0082 (0.0053)	0.0017* (0.0010)
Political Globalization	0.0697* (0.0413)	0.0138* (0.0080)	0.0681* (0.0407)	0.0134* (0.0078)	0.0686* (0.0424)	0.0136* (0.0083)	0.0738* (0.0409)	0.0686* (0.0424)	0.0686* (0.0424)	0.0686* (0.0424)	0.0686* (0.0424)	0.0136* (0.0083)	0.0710* (0.0435)	0.0710* (0.0435)	0.0136* (0.0083)	0.0136* (0.0083)	0.0710* (0.0435)	0.0710* (0.0435)	0.0136* (0.0083)
Military Expenditure	0.0017 (0.0065)	0.0003 (0.0013)	0.0038 (0.0067)	0.0007 (0.0013)	0.0020 (0.0067)	0.0004 (0.0013)	-0.0018 (0.0064)	0.0020 (0.0067)	0.0020 (0.0067)	0.0020 (0.0067)	0.0020 (0.0067)	0.0004 (0.0013)	0.0021 (0.0068)	0.0021 (0.0068)	0.0004 (0.0013)	0.0004 (0.0013)	0.0021 (0.0068)	0.0021 (0.0068)	0.0004 (0.0013)
Youth Unemployment	-0.8294 (0.6085)		-1.0462* (0.6133)		-0.7683 (0.6221)		-0.7683 (0.6221)	-0.7683 (0.6221)	-0.7683 (0.6221)	-0.7683 (0.6221)	-0.7683 (0.6221)		-0.7353 (0.6230)	-0.7353 (0.6230)		-0.7353 (0.6230)	-0.7353 (0.6230)	-0.7353 (0.6230)	-0.7353 (0.6230)
Intercept	337.98*** (0.00)		353.1*** (0.00)		345.99*** (0.00)		345.99*** (0.00)	345.99*** (0.00)	345.99*** (0.00)	345.99*** (0.00)	345.99*** (0.00)		355.67*** (0.00)	355.67*** (0.00)		355.67*** (0.00)	355.67*** (0.00)	355.67*** (0.00)	355.67*** (0.00)
Wald Chi2 (Prob.)	80		80		80		80	80	80	80	80		80	80		80	80	80	80
N	2003		2003		2003		2003	2003	2003	2003	2003		2003	2003		2003	2003	2003	2003
Groups																			

Table 2.5.i.f. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events:Role of Polity

	(4)			(5)			(6)		
	Natural Gas Rents			Forest Rents			Mineral Rents		
	Coef.	M.E.	M.E.	Coef.	M.E.	M.E.	Coef.	M.E.	M.E.
Lag of Internal Violence Polity	1.6706*** (0.1486)	-0.0039* (0.0024)	-0.0055** (0.0027)	1.6730*** (0.1470)	-0.0041* (0.0025)	-0.0041* (0.0025)	1.6757*** (0.1482)	-0.0042* (0.0025)	-0.0042* (0.0025)
Natural Resource Rents	0.0424 (0.0597)	0.0084 (0.0117)	0.0510** (0.0225)	0.0105 (0.0167)	0.0021 (0.0033)	0.0025 (0.0078)	0.0472** (0.0191)	0.0093** (0.0038)	0.0181*** (0.0055)
Polity * Natural Resource Rents	-0.2326** (0.0971)	-0.0459** (0.0189)	-0.0507** (0.0257)	-0.2147** (0.0952)	-0.0426*** (0.0187)	-0.0426** (0.0186)	-0.2197** (0.0950)	-0.0435** (0.0186)	-0.0205* (0.0118)
GDP per capita	0.0012 (0.0065)	0.0002 (0.0013)	0.0007 (0.0013)	0.0024 (0.0067)	0.0005 (0.0013)	0.0005 (0.0013)	0.0007 (0.0066)	0.0001 (0.0013)	0.0186 (0.0186)
Political Globalization	0.0729* (0.0376)	0.0144** (0.0076)	0.0143** (0.0074)	0.0711* (0.0375)	0.0141** (0.0073)	0.0141** (0.0073)	0.0728* (0.0376)	0.0144** (0.0073)	0.0002 (0.0074)
Military Expenditure	0.0019 (0.0064)	0.0004 (0.0013)	0.0008 (0.0013)	0.0013 (0.0064)	0.0003 (0.0013)	0.0003 (0.0013)	0.0013 (0.0064)	0.0003 (0.0013)	0.0002 (0.0013)
Youth Unemployment	-0.9376 (0.6083)			-1.0109* (0.6167)			-0.9661 (0.6107)		
Intercept	355.98*** (0.000)			363.92*** (0.000)			355.36*** (0.000)		
Wald Chi2	80			80			80		
(Prob.)	2001			2004			2004		
N									
Groups									

Table 2.5.i.g. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Political Constraints

	(1)				(2)				(3)				
	Natural Resource Rents				Oil Rents				Coal Rents				
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	M.F.E.
Lag of Internal Violence	1.6847*** (0.1500)		1.6864*** (0.1489)		1.6836*** (0.1492)		1.6842*** (0.1476)		1.6515*** (0.1568)		1.6456*** (0.1565)		
Political Constraints	-0.0894 (0.2973)	-0.0174 (0.0578)	-0.0947 (0.2947)	-0.0184 (0.0571)	-0.0765 (0.2706)	-0.0150 (0.0530)	-0.0807 (0.2653)	-0.0157 (0.0517)	-0.0520 (0.0375)	-0.0101 (0.0072)	-0.0522 (0.0378)	-0.0100 (0.0073)	-0.0100 (0.0073)
Natural Resource Rents	0.0083 (0.0072)	0.0016 (0.0014)	0.0119* (0.0070)	0.0023* (0.0013)	0.0054 (0.0073)	0.0011 (0.0014)	0.0096 (0.0067)	0.0019 (0.0013)	0.1830 (0.1439)	0.0354 (0.0279)	0.7700** (0.3518)	0.1483** (0.0674)	0.1483** (0.0674)
Political constraints * Natural Resource Rents			-0.0571 (0.0390)	-0.0111 (0.0076)			-0.1045* (0.0547)	-0.0204* (0.0106)					
GDP per capita	-0.2311** (0.0988)	-0.0450** (0.0187)	-0.2379** (0.0995)	-0.0462** (0.0188)	-0.2372** (0.0966)	-0.0465** (0.0186)	-0.2488** (0.0982)	-0.0485** (0.0188)	-0.1978** (0.0973)	-0.0382** (0.0184)	-0.2001** (0.0983)	-0.385** (0.0186)	-0.385** (0.0186)
Political Globalization	0.0017 (0.0071)	0.0003 (0.0014)	0.0018 (0.0071)	0.0003 (0.0014)	0.0016 (0.0068)	0.0003 (0.0013)	0.0015 (0.0068)	0.0003 (0.0013)	0.0031 (0.0072)	0.0006 (0.0014)	0.0030 (0.0072)	0.0006 (0.0014)	0.0006 (0.0014)
Military Expenditure	0.0765** (0.0376)	0.0149** (0.0072)	0.0782** (0.0376)	0.0152** (0.0072)	0.0756** (0.0378)	0.0148** (0.0073)	0.0769** (0.0377)	0.0150** (0.0072)	0.0726** (0.0363)	0.0140** (0.0069)	0.0728** (0.0363)	0.0140** (0.0069)	0.0140** (0.0069)
Youth Unemployment	-0.0009 (0.0062)	-0.0002 (0.0012)	-0.0013 (0.0062)	-0.0003 (0.0012)	-0.0012 (0.0063)	-0.0002 (0.0012)	-0.0024 (0.0062)	-0.0005 (0.0012)	0.0001 (0.0068)	0.0002 (0.0013)	-0.0002 (0.0069)	-0.0004 (0.0013)	-0.0004 (0.0013)
Intercept	-0.9819 (0.6845)		-1.0385* (0.6867)		-0.8097 (0.6082)		-0.7984 (0.6080)		-1.0094 (0.6434)		-1.0155 (0.6500)		
Wald Chi2 (Prob.)	407.18*** (0.00)		406.95*** (0.00)		367.74*** (0.00)		370.53*** (0.00)		331.65*** (0.00)		338.25*** (0.00)		
N	2054		2054		2050		2050		1855		1855		
Groups	81		81		81		81		80		80		

Table 2.5.i.h. Dynamic Probit Estimates on Impact of Natural Resource Rents on Violent Events: Role of Political Constraints

	(1)						(2)						(3)						
	Natural Gas Rents			Forest Rents			Mineral Rents			Natural Gas Rents			Forest Rents			Mineral Rents			
	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	Coef.	M.E.	
Lag of Internal Violence	1.6333*** (0.1629)	-0.0432 (0.0652)	1.6266*** (0.1631)	-0.0429 (0.0650)	1.6763*** (0.1481)	-0.0194 (0.0522)	1.6763*** (0.1481)	-0.0194 (0.0522)	1.6633*** (0.1573)	-0.0099 (0.0072)	1.6633*** (0.1573)	-0.0099 (0.0072)	1.6633*** (0.1573)	-0.0099 (0.0072)	1.6633*** (0.1573)	-0.0099 (0.0072)	1.6633*** (0.1573)	-0.0099 (0.0072)	1.6633*** (0.1573)
Political Constraints	-0.2292 (0.3468)	0.0081 (0.0116)	-0.2278 (0.3469)	0.0043 (0.0109)	-0.0985 (0.2656)	0.0016 (0.0033)	-0.0985 (0.2656)	0.0016 (0.0033)	-0.0512 (0.0375)	0.0089* (0.0049)	-0.0512 (0.0375)	0.0089* (0.0049)	-0.0512 (0.0375)	0.0089* (0.0049)	-0.0512 (0.0375)	0.0089* (0.0049)	-0.0512 (0.0375)	0.0089* (0.0049)	-0.0512 (0.0375)
Natural Resource Rents	0.0431 (0.0615)	(0.0116)	0.0228 (0.0579)	(0.0109)	0.0081 (0.0167)	(0.0033)	0.0081 (0.0167)	(0.0033)	0.0461* (0.0255)	(0.0049)	0.0461* (0.0255)	(0.0049)	0.0461* (0.0255)	(0.0049)	0.0461* (0.0255)	(0.0049)	0.0461* (0.0255)	(0.0049)	0.0461* (0.0255)
Political Constraints * Natural Resource Rents			0.4211 (0.3278)	0.0792 (0.0620)			-0.2154*** (0.0696)				-0.0422*** (0.0136)				-0.0009 (0.0963)				-0.0002 (0.0014)
GDP per capita	-0.2067* (0.1124)	-0.0390* (0.0208)	-0.2149* (0.1123)	-0.0404* (0.0207)	-0.2184** (0.0957)	-0.0430** (0.0186)	-0.2184** (0.0957)	-0.0430** (0.0186)	-0.1887** (0.0963)	-0.0398** (0.0197)	-0.1887** (0.0963)	-0.0398** (0.0197)	-0.1887** (0.0963)	-0.0364** (0.0182)	-0.1888** (0.0963)	-0.0364** (0.0182)	-0.1888** (0.0963)	-0.0364** (0.0182)	-0.1888** (0.0963)
Political Globalization	-0.0032 (0.0074)	-0.0006 (0.0014)	-0.0042 (0.0073)	-0.0008 (0.0014)	0.0014 (0.0069)	0.0003 (0.0014)	0.0014 (0.0069)	0.0003 (0.0014)	0.0021 (0.0071)	0.00004 (0.0014)	0.0021 (0.0071)	0.00004 (0.0014)	0.0021 (0.0071)	0.0004 (0.0014)	0.0021 (0.0071)	0.0004 (0.0014)	0.0021 (0.0071)	0.0004 (0.0014)	0.0021 (0.0071)
Military Expenditure	0.0683* (0.0376)	0.0129* (0.0069)	0.0686* (0.0382)	0.0129* (0.0070)	0.0749* (0.0389)	0.0147** (0.0075)	0.0749* (0.0389)	0.0147** (0.0075)	0.0728** (0.0357)	0.0140** (0.0068)	0.0728** (0.0357)	0.0140** (0.0068)	0.0728** (0.0357)	0.0140** (0.0068)	0.0727** (0.0358)	0.0140** (0.0068)	0.0727** (0.0358)	0.0140** (0.0068)	0.0727** (0.0358)
Youth Unemployment	-0.0020 (0.0068)	-0.0004 (0.0013)	-0.0015 (0.0069)	-0.0003 (0.0013)	-0.0006 (0.0064)	-0.0001 (0.0013)	-0.0006 (0.0064)	-0.0001 (0.0013)	-0.0003 (0.0067)	-0.0002 (0.0013)	-0.0003 (0.0067)	-0.0002 (0.0013)	-0.0003 (0.0067)	-0.0001 (0.0013)	-0.0004 (0.0068)	-0.0001 (0.0013)	-0.0004 (0.0068)	-0.0001 (0.0013)	-0.0004 (0.0068)
Intercept	-0.7294 (0.7118)		-0.6611 (0.7121)		-0.8512 (0.6211)		-0.8512 (0.6211)		-1.0284* (0.6415)		-1.0284* (0.6415)		-1.0284* (0.6415)		-1.0202 (0.6420)		-1.0202 (0.6420)		-1.0202 (0.6420)
Wald Chi2 (Prob.)	368.97*** (0.00)		368.46*** (0.00)		369.07*** (0.00)		369.07*** (0.00)		412.91*** (0.00)		412.91*** (0.00)		412.91*** (0.00)		324.94*** (0.00)		324.94*** (0.00)		324.94*** (0.00)
N	1755		1755		2051		2051		2051		2051		2051		1858		1858		1858
Groups	81		81		81		81		81		81		81		80		80		80

Appendix 2C
 Panel Probit Estimates
 Table 2.5.ii.a. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Media Integrity

	(1)				(2)				(3)				
	Natural Resource Rents				Oil Rents				Coal Rents				
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	M.E.
Media Integrity	0.0034 (0.0046)	0.0021 (0.0003)	0.0583 (0.4108)	0.0037 (0.0261)	0.0280 (0.4021)	0.0018 (0.0256)	0.0229 (0.3917)	0.0015 (0.0250)	0.1562 (0.1505)	0.0010 (0.0254)	0.0190 (0.4033)	0.0012 (0.0261)	
Natural Resource Rents	0.0369 (0.4026)	0.0023 (0.0256)	0.0049 (0.0053)	0.0003 (0.0003)	0.0016 (0.0052)	0.0001 (0.0003)	0.0543* (0.0318)	0.0035* (0.0021)	0.0156 (0.3913)	0.0101 (0.0098)	0.1644 (0.1566)	0.0107 (0.0103)	
Media Integrity *			-0.0134 (0.0311)	-0.0009 (0.0020)			-0.1535** (0.0688)	-0.0098** (0.0046)			-0.0119 (0.1629)	-0.0008 (0.0106)	
Natural Resource Rents													
GDP per capita	-0.1616** (0.0674)	-0.0103** (0.0044)	-0.1615** (0.0677)	-0.0103** (0.0044)	-0.1647** (0.0694)	-0.0105** (0.0035)	-0.1643** (0.0689)	-0.0105** (0.0045)	-0.1147 (0.0723)	-0.0074 (0.0048)	-0.1148 (0.0728)	-0.0074 (0.0048)	-0.0074 (0.0048)
Population	0.1615*** (0.0512)	0.0103*** (0.0034)	0.1604*** (0.0503)	0.0102*** (0.0034)	0.1604*** (0.0531)	0.0102*** (0.0035)	0.1615*** (0.0507)	0.0103*** (0.0034)	0.1803*** (0.0529)	0.0117*** (0.0036)	0.1808*** (0.0513)	0.0117*** (0.0036)	0.0117*** (0.0036)
Youth Unemployment	0.0110** (0.0046)	0.0007** (0.0003)	0.0108** (0.0046)	0.0007** (0.0003)	0.0110** (0.0047)	0.0007** (0.0003)	0.0107** (0.0046)	0.0007** (0.0003)	0.0093* (0.0049)	0.0006* (0.0003)	0.0093* (0.0050)	0.0006* (0.0003)	0.0006* (0.0003)
Political Globalization	-0.0038 (0.0047)	-0.0002 (0.0003)	-0.0037 (0.0047)	-0.0002 (0.0003)	-0.0039 (0.0048)	-0.0003 (0.0003)	-0.0041 (0.0047)	-0.0003 (0.0003)	-0.0082 (0.0055)	-0.0005 (0.0004)	-0.0083 (0.0054)	-0.0005 (0.0004)	-0.0005 (0.0004)
Intercept	-3.3930*** (1.0028)		-3.3995*** (1.0035)		-3.3108*** (1.0431)		-3.3072*** (1.0038)		-3.7064*** (1.0404)		-3.7155*** (1.0108)		
Wald Chi2 (Prob.)	18.56*** (0.0050)		18.85*** (0.0087)		18.26*** (0.0056)		22.50*** (0.0021)		18.51*** (0.0051)		18.52*** (0.0098)		
N	2318		2318		2317		2317		2314		2314		
Groups	84		84		84		84		84		84		

Table 2.5.ii.b. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Media Integrity

	(4)			(5)			(6)			
	Natural Gas Rents			Forest Rents			Mineral Rents			
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Media Integrity	0.0491 (0.4194)	0.0031 (0.0267)	0.0433 (0.4189)	0.0028 (0.0266)	0.0267 (0.3955)	0.0017 (0.0255)	0.0270 (0.3965)	0.0017 (0.0255)	-0.0109 (0.3937)	-0.0167 (0.3968)
Natural Resource Rents	0.0114 (0.0363)	0.0007 (0.0023)	0.0093 (0.0448)	0.0006 (0.0029)	0.0020 (0.0117)	0.0001 (0.0008)	0.0039 (0.0118)	0.0003 (0.0008)	0.0622*** (0.0231)	0.0582 (0.0423)
Media Integrity * Natural Resource Rents			0.0233 (0.2768)	0.0015 (0.0176)			-0.0128 (0.0545)	-0.0008 (0.0035)		0.0055 (0.0483)
GDP per capita	-0.1628** (0.0661)	-0.0104** (0.0043)	-0.1622*** (0.0647)	-0.0103** (0.0042)	-0.1338* (0.0743)	-0.0086* (0.0049)	-0.1290* (0.0784)	-0.0083 (0.0052)	-0.1384** (0.0666)	-0.1380** (0.0667)
Population	0.1607*** (0.0517)	0.0102*** (0.0034)	0.1615*** (0.0494)	0.0103*** (0.0033)	0.1701*** (0.0542)	0.0110*** (0.0036)	0.1722*** (0.0563)	0.0111*** (0.0037)	0.1788*** (0.0525)	0.1793*** (0.0531)
Youth Unemployment	0.0112** (0.0047)	0.0007** (0.0003)	0.0113** (0.0047)	0.0007** (0.0003)	0.0104** (0.0049)	0.0007** (0.0003)	0.0105** (0.0049)	0.0007** (0.0003)	0.0107** (0.0048)	0.0107** (0.0049)
Political Globalization	-0.0042 (0.0046)	-0.0003 (0.0003)	-0.0043 (0.0047)	-0.0003 (0.0003)	-0.0059 (0.0047)	-0.0004 (0.0003)	-0.0062 (0.0050)	-0.0004 (0.0003)	-0.0067 (0.0047)	-0.0067 (0.0047)
Intercept	-3.3274*** (1.0022)		-3.3384*** (0.9631)		-3.5648*** (1.1524)		-3.6314*** (1.2243)		-3.6137*** (1.0256)	-3.6240*** (1.0414)
Wald Chi2 (Prob.)	18.44*** (0.0052)		18.40** (0.0103)		17.93*** (0.0064)		17.90** (0.0124)		20.91*** (0.0019)	20.94*** (0.0039)
N	2315		2315		2321		2321		2322	2322
Groups	84		84		84		84		84	84

Table 2.5.ii.c. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Judicial Independence

	(1)				(2)				(3)			
	Natural Resource Rents				Oil Rents				Coal Rents			
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Judicial Independence	-0.4654 (0.4237)	-0.0299 (0.0278)	-0.5433 (0.4125)	-0.0348 (0.0272)	-0.4963 (0.4305)	-0.0319 (0.0007)	-0.5606 (0.4154)	-0.0357 (0.0273)	-0.4036 (0.4189)	-0.0265 (0.0280)	-0.4123 (0.4297)	-0.0270 (0.0287)
Natural Resource Rents	0.0023 (0.0046)	0.0001 (0.0003)	0.0416 (0.0409)	0.0027 (0.0026)	0.0001 (0.0055)	0.00001 (0.0004)	0.1023** (0.0438)	0.0065** (0.0028)	0.0516 (0.0940)	0.0034 (0.0061)	0.5743* (0.3423)	0.0376* (0.0232)
Judicial Independence * Natural Resource Rents			-0.1410 (0.1159)	-0.0090 (0.0075)			-0.3583*** (0.1233)	-			-1.1761 (0.9170)	-0.0769 (0.0615)
GDP per capita	-0.1541** (0.0737)	-0.0099** (0.0048)	-0.1562** (0.0746)	-0.0100** (0.0048)	-0.1521* (0.0778)	-0.0098* (0.0051)	-0.1634** (0.0785)	-0.0104** (0.0050)	-0.1064 (0.0752)	-0.0070 (0.0050)	-0.1093 (0.0761)	-0.0071 (0.0050)
Population	0.1492*** (0.0504)	0.0096*** (0.0035)	0.1492*** (0.0501)	0.0096*** (0.0034)	0.1494*** (0.0524)	0.0096*** (0.0036)	0.1469*** (0.0509)	0.0094*** (0.0035)	0.1625*** (0.0517)	0.0107*** (0.0037)	0.1691*** (0.0531)	0.0111*** (0.0037)
Youth Unemployment	0.0105*** (0.0047)	0.0007** (0.0003)	0.0106** (0.0048)	0.0007** (0.0003)	0.0106** (0.0048)	0.0007*** (0.0003)	0.0100** (0.0048)	0.0006** (0.0003)	0.0084* (0.0049)	0.0006* (0.0003)	0.0089* (0.0049)	0.0006* (0.0003)
Political Globalization	-0.0020 (0.0045)	-0.0001 (0.0003)	-0.0023 (0.0045)	-0.0001 (0.0003)	-0.0023 (0.0046)	-0.0001 (0.0003)	-0.0018 (0.0047)	-0.0001 (0.0003)	-0.0064 (0.0054)	-0.0004 (0.0004)	-0.0065 (0.0054)	-0.0004 (0.0004)
Intercept	-3.1152*** (0.9859)		-3.0337*** (0.9891)		-3.0868*** (1.0437)		-2.9681*** (1.0212)		-3.3961*** (1.0159)		-3.4790*** (1.0397)	
Wald Chi2 (Prob.)	19.72*** (0.0031)		22.61*** (0.0020)		19.57*** (0.0033)		25.68*** (0.0006)		18.70*** (0.0047)		21.25*** (0.0034)	
N	2318		2252		2317		2317		2314		2314	
Groups	84		84		84		84		84		84	

Table 2.5.ii.d. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Judicial Independence

	(4)			(5)			(6)			
	Natural Gas Rents			Forest Rents			Mineral Rents			
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Judicial Independence	-0.5026 (0.4305)	-0.0323 (0.0283)	-0.5286 (0.0391)	-0.0294 (0.0281)	-0.4460 (0.4220)	-0.0291 (0.0281)	-0.4335 (0.4230)	-0.0280 (0.0279)	-0.3940 (0.4339)	-0.0255 (0.0285)
Natural Resource Rents	-0.0007 (0.0361)	0.00005 (0.0023)	-0.0103 (0.0391)	0.0002 (0.0008)	0.0033 (0.0117)	0.0037 (0.0051)	0.0613*** (0.0216)	0.0040*** (0.0014)	0.0813** (0.0376)	0.0053** (0.0025)
Judicial Independence * Natural Resource Rents			0.1296 (0.2902)		-0.1632 (0.2569)	-0.0106 (0.0167)			-0.0491 (0.0766)	-0.0032 (0.0050)
GDP per capita	-0.1514** (0.0735)	-0.0097** (0.0048)	-0.1477** (0.0725)	-0.0080 (0.0054)	-0.1333* (0.0709)	-0.0087* (0.0047)	-0.1300* (0.0717)	-0.0084* (0.0047)	-0.1317* (0.0715)	-0.0085* (0.0047)
Population	0.1496*** (0.0518)	0.0096*** (0.0035)	0.1537*** (0.0510)	0.0104*** (0.0037)	0.1555*** (0.0506)	0.0101*** (0.0035)	0.1677*** (0.0514)	0.0108*** (0.0036)	0.1655*** (0.0513)	0.0107*** (0.0035)
Youth Unemployment	0.0107** (0.0048)	0.0007** (0.0003)	0.0108** (0.0048)	0.0006** (0.0003)	0.0098** (0.0047)	0.0006** (0.0003)	0.0102** (0.0047)	0.0007*** (0.0003)	0.0098** (0.0048)	0.0006** (0.0003)
Political Globalization	-0.0023 (0.0045)	-0.0001 (0.0003)	-0.0027 (0.0045)	-0.0003 (0.0003)	-0.0041 (0.0046)	-0.0003 (0.0003)	-0.0052 (0.0046)	-0.0003 (0.0003)	-0.0052 (0.0046)	-0.0003 (0.0003)
Intercept	-3.0911*** (1.0141)		-3.1521*** (1.9965)		-3.3615*** (1.1629)		-3.3975*** (1.0086)		-3.3450*** (1.0107)	
Wald Chi2 (Prob.)	19.58*** (0.0033)		19.56*** (0.0066)		19.34*** (0.0072)		22.11*** (0.0012)		22.25*** (0.002)	
N	2315		2315		2321		2322		2322	
Groups	84		84		84		84		84	

Table 2.5.ii.e. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Polity

	(1)				(2)				(3)					
	Natural Resource Rents				Oil Rents				Coal Rents					
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Polity	-0.0044 (0.2216)	-0.0003 (0.0145)	-0.0146 (0.0126)	-0.0010 (0.0009)	-0.0006 (0.0112)	-0.00004 (0.0007)	-0.0083 (0.0116)	-0.0005 (0.0008)	-0.0067 (0.2191)	-0.0004 (0.0146)	-0.1013 (0.2313)	-0.0067 (0.0151)	-0.0067 (0.0151)	-0.0067 (0.0151)
Natural Resource Rents	0.0029 (0.0047)	0.0002 (0.0003)	0.0228** (0.0115)	0.0015* (0.0008)	0.0011 (0.0054)	0.0001 (0.0003)	0.0283* (0.0159)	0.0018* (0.0011)	0.1571 (0.1516)	0.0104 (0.0101)	0.1456 (0.1515)	0.0096 (0.0099)	0.0096 (0.0099)	0.0096 (0.0099)
Polity * Natural Resource Rents			-0.0372* (0.0214)	-0.0024* (0.0015)			-0.0474* (0.0261)	-0.0031* (0.0017)			-0.0195 (0.0180)	-0.0013 (0.0012)	-0.0013 (0.0012)	-0.0013 (0.0012)
GDP per capita	-0.1623** (0.0687)	-0.0106** (0.0046)	-0.1413** (0.0706)	-0.0093** (0.0047)	-0.1642** (0.0719)	-0.0107** (0.0048)	-0.1709** (0.0735)	-0.0111** (0.0049)	-0.1159 (0.0730)	-0.0077 (0.0049)	-0.1241* (0.0750)	-0.0082* (0.0050)	-0.0082* (0.0050)	-0.0082* (0.0050)
Population	0.1677*** (0.0535)	0.0109*** (0.0037)	0.1632*** (0.0505)	0.0107*** (0.0036)	0.1667*** (0.0551)	0.0109*** (0.0037)	0.1589*** (0.0536)	0.0104*** (0.0037)	0.1873*** (0.0552)	0.0125*** (0.0039)	0.1995*** (0.0624)	0.0131*** (0.0044)	0.0131*** (0.0044)	0.0131*** (0.0044)
Youth Unemployment	0.0129*** (0.0047)	0.0008*** (0.0003)	0.0133*** (0.0046)	0.0009** (0.0003)	0.0130*** (0.0047)	0.0008*** (0.0003)	0.0135*** (0.0048)	0.0009*** (0.0003)	0.0112** (0.0049)	0.0007** (0.0003)	0.0123** (0.0052)	0.0008** (0.0003)	0.0008** (0.0003)	0.0008** (0.0003)
Political Globalization	-0.0046 (0.0046)	-0.0003 (0.0003)	-0.0042 (0.0044)	-0.0003 (0.0003)	-0.0047 (0.0047)	-0.0003 (0.0003)	-0.0040 (0.0046)	-0.0003 (0.0003)	-0.0091* (0.0055)	-0.0006* (0.0004)	-0.0094* (0.0056)	-0.0006* (0.0004)	-0.0006* (0.0004)	-0.0006* (0.0004)
Intercept	-3.4283*** (1.0559)		-3.5211*** (1.0234)		-3.3680*** (1.0908)		-3.2316*** (1.0740)		-3.7648*** (1.0844)		-3.8651*** (1.1654)		-3.8651*** (1.1654)	
Wald Chi2	19.32***		22.61***		19.08***		21.76***		19.42***		20.35***		20.35***	
(Prob.)	(0.0037)		(0.0020)		(0.0040)		(0.0028)		(0.0035)		(0.0049)		(0.0049)	
N	2252		2252		2251		2251		2248		2248		2248	
Groups	84		84		84		84		84		84		84	

Table 2.5.ii.f. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Polity

	(4)				(5)				(6)				
	Natural Gas Rents				Forest Rents				Mineral Rents				
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	M.E.
Polity	-0.0008 (0.0108)	-0.0001 (0.0007)	-0.0049 (0.0111)	-0.0003 (0.0007)	-0.0033 (0.2174)	-0.0002 (0.0144)	-0.0038 (0.0109)	-0.0002 (0.0007)	-0.0158 (0.2158)	-0.0010 (0.0141)	-0.0638 (0.2256)	-0.0042 (0.0146)	-0.0042 (0.0146)
Natural Resource Rents	0.0061 (0.0350)	0.0004 (0.0023)	0.1272*** (0.0477)	0.0084*** (0.0033)	0.0010 (0.0117)	0.0001 (0.0008)	0.0155 (0.0213)	0.0010 (0.0014)	0.0636*** (0.0223)	0.0042*** (0.0015)	0.0591** (0.0238)	0.0039** (0.0016)	0.0039** (0.0016)
Polity * Natural Resource Rents			-0.1667** (0.0724)	-0.0110** (0.0050)			-0.0338 (0.0521)	-0.0022 (0.0035)			-0.0028 (0.0048)	-0.0002 (0.0003)	-0.0002 (0.0003)
GDP per capita	-0.1630** (0.0679)	-0.0106** (0.0045)	-0.1746** (0.0686)	-0.0116** (0.0046)	-0.1383* (0.0766)	-0.0091* (0.0052)	-0.1349* (0.0762)	-0.0090* (0.0052)	-0.1389** (0.0676)	-0.0091** (0.0045)	-0.1418** (0.0674)	-0.0093** (0.0045)	-0.0093** (0.0045)
Population	0.1663*** (0.0542)	0.0109*** (0.0037)	0.1650*** (0.0514)	0.0109*** (0.0036)	0.1752*** (0.0562)	0.0116*** (0.0039)	0.1721*** (0.0554)	0.0114*** (0.0038)	0.1882*** (0.0550)	0.0123*** (0.0038)	0.1889*** (0.0552)	0.0123*** (0.0038)	0.0123*** (0.0038)
Youth Unemployment	0.0132*** (0.0048)	0.0009*** (0.0003)	0.0137*** (0.0047)	0.0009*** (0.0003)	0.0122** (0.0049)	0.0008** (0.0003)	0.0117** (0.0048)	0.0008** (0.0003)	0.0127*** (0.0048)	0.0008*** (0.0003)	0.0128*** (0.0048)	0.0008*** (0.0003)	0.0008*** (0.0003)
Political Globalization	-0.0048 (0.0046)	-0.0003 (0.0003)	-0.0050 (0.0045)	-0.0003 (0.0003)	-0.0067 (0.0047)	-0.0004 (0.0003)	-0.0063 (0.0046)	-0.0004 (0.0003)	-0.0079* (0.0047)	-0.0005* (0.0003)	-0.0078* (0.0047)	-0.0005* (0.0003)	-0.0005* (0.0003)
Intercept	-3.3683*** (1.0490)		-3.2583*** (1.0076)		-3.566*** (1.2182)		-3.5442*** (1.1997)		-3.7093*** (1.0789)		-3.5157*** (1.0765)		-3.5157*** (1.0765)
Wald Chi2	19.16***		22.22***		18.81***		19.62***		21.89***		22.02***		22.02***
(Prob.)	(0.0039)		(0.0023)		(0.0045)		(0.0064)		(0.0013)		(0.0025)		(0.0025)
N	2349		2249		2255		2252		2256		2256		2256
Groups	84		84		84		84		84		84		84

Table 2.5.ii.g. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Political Constraints

	(1)				(2)				(3)			
	Natural Resource Rents				Oil Rents				Coal Rents			
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Political Constraints	-0.0576 (0.2830)	-0.0037 (0.0181)	-0.0752 (0.2854)	-0.0048 (0.0181)	-0.0897 (0.2916)	-0.0057 (0.0186)	-0.0140 (0.3373)	-0.0008 (0.0194)	-0.0830 (0.2846)	-0.0054 (0.0186)	-0.0549 (0.2831)	-0.0036 (0.0184)
Natural Resource Rents	0.0031 (0.0045)	0.0002 (0.0003)	0.0043 (0.047)	0.0003 (0.0003)	0.0012 (0.0052)	0.0001 (0.0003)	0.0554** (0.0236)	0.0032** (0.0014)	0.1531 (0.1494)	0.0100 (0.0097)	0.2888* (0.1723)	-0.0187* (0.0114)
Political Constraints * Natural Resource Rents			-0.0715 (0.0521)	-0.0045 (0.0032)			-0.0221*** (0.0081)	-			-0.8522 (0.7298)	-0.0552 (0.0481)
GDP per capita	-0.1636** (0.0681)	-0.0104** (0.0044)	-0.1664** (0.0700)	-0.0105** (0.0045)	-0.1649** (0.0709)	-0.0105** (0.0047)	-0.1566** (0.0760)	-0.0090** (0.0046)	-0.1163* (0.0725)	-0.0076 (0.0048)	-0.1179 (0.0730)	-0.0076 (0.0048)
Population	0.1582*** (0.0541)	0.0101*** (0.0036)	0.1591*** (0.0552)	0.0101*** (0.0037)	0.1581*** (0.0558)	0.0101*** (0.0037)	0.1803*** (0.0605)	0.0104*** (0.0037)	0.1770*** (0.0550)	0.0115*** (0.0038)	0.1791*** (0.0565)	0.0116*** (0.0039)
Youth Unemployment	0.0110** (0.0047)	0.0007** (0.0003)	0.0111** (0.0048)	0.0007** (0.0003)	0.0110** (0.0048)	0.0007** (0.0003)	0.0117** (0.0051)	0.0007** (0.0003)	0.0093* (0.0049)	0.0006* (0.0003)	0.0093* (0.0050)	0.0006* (0.0003)
Political Globalization	-0.0032 (0.0048)	-0.0002 (0.0003)	-0.0032 (0.0050)	-0.0002 (0.0003)	-0.0034 (0.0048)	-0.0002 (0.0003)	-0.0050 (0.0054)	-0.0003 (0.0003)	-0.0076 (0.0054)	-0.0005 (0.0003)	-0.0078 (0.0054)	-0.0005 (0.0004)
Intercept	-3.3189*** (1.0434)		-3.3316*** (1.0622)		-3.2640*** (1.0914)		-3.6913*** (1.1416)		-3.6455*** (1.0687)		3.6724*** (1.0926)	
Wald Chi2 (Prob.)	18.23*** (0.0057)		19.85*** (0.0059)		18.29*** (0.0055)		19.57*** (0.0066)		18.46*** (0.0052)		19.88*** (0.0058)	
N	2312		2312		2315		2069		2308		2308	
Groups	84		84		84		83		84		84	

Table 2.5.ii.h. Probit Estimates on Impact of Natural Resource Rents on Onset of Violent Conflict: Role of Political Constraints

	(4)			(5)			(6)			
	Natural Gas Rents			Forest Rents			Mineral Rents			
	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.	Coeff.	M.E.
Political Constraints	-0.0949 (0.2885)	-0.0061 (0.0185)	-0.1124 (0.2859)	-0.0073 (0.0185)	-0.0487 (0.3072)	-0.0030 (0.0191)	-0.1065 (0.2849)	-0.0068 (0.0183)	-0.2009 (0.3173)	-0.0121 (0.0192)
Natural Resource Rents	0.0093 (0.0344)	0.0006 (0.0022)	0.0023 (0.0118)	0.0002 (0.0008)	0.0353 (0.0283)	0.0022 (0.0018)	0.0621*** (0.0223)	0.0040*** (0.0015)	0.0779*** (0.0226)	0.0047*** (0.0014)
Political Constraints * Natural Resource Rents										
GDP per capita	-0.1644** (0.0671)	-0.0105** (0.0044)	-0.1347* (0.0753)	-0.0087* (0.0050)	-0.1222* (0.0726)	-0.0076* (0.0047)	-0.1394** (0.0671)	-0.0089** (0.0044)	-0.0705 (0.0741)	-0.0042 (0.0046)
Population	0.1574*** (0.0544)	0.0100*** (0.0036)	0.1668*** (0.0570)	0.0108*** (0.0038)	0.1833*** (0.0567)	0.0114*** (0.0038)	0.1767*** (0.0549)	0.0113*** (0.0037)	0.1797*** (0.0576)	0.0108*** (0.0039)
Youth Unemployment	0.0113** (0.0048)	0.0007** (0.0003)	0.0104** (0.0049)	0.0007** (0.0003)	0.0120** (0.0056)	0.0007** (0.0004)	0.0107** (0.0048)	0.0007** (0.0003)	0.0098* (0.0052)	0.0006* (0.0003)
Political Globalization	-0.0035 (0.0047)	-0.0002 (0.0003)	-0.0052 (0.0047)	-0.0003 (0.0003)	-0.0074 (0.0052)	-0.0005 (0.0003)	-0.0062 (0.0046)	-0.0004 (0.0003)	-0.0082* (0.0049)	-0.0005* (0.0003)
Intercept	-3.2539*** (1.0470)	-3.7026*** (1.0695)	-3.5056*** (1.2026)	-3.8141*** (1.0989)	-3.8141*** (1.0989)	-3.5800*** (1.0628)	-3.5800*** (1.0628)	-4.0309*** (1.1302)	-4.0309*** (1.1302)	-4.0309*** (1.1302)
Wald Chi2 (Prob.)	18.44*** (0.0052)	16.68** (0.0196)	18.04*** (0.0061)	20.96*** (0.0038)	20.96*** (0.0038)	20.98*** (0.0019)	20.98*** (0.0019)	14.8** (0.0387)	14.8** (0.0387)	14.8** (0.0387)
N	2313	2067	2319	2252	2252	2320	2320	1989	1989	1989
Groups	84	83	84	82	82	84	84	84	84	84

Appendix 2D
Negative Binomial Panel Estimates
Table 2.5.iii.a. Negative Binomial Estimates for Impact of Natural Resource Rents and Media Integrity on the Intensity of Violence

	Natural Rents		Resource		Coal Rents		Forest Rents		Mineral Rents		Natural Gas Rents		Oil Rents	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
Media Integrity	-0.0415 (0.3303)	-0.0446 (0.3317)	-0.0802 (0.3311)	-0.5048 (0.3356)	-0.0051 (0.3347)	-0.1890 (0.3640)	-0.0328 (0.3297)	0.0223 (0.3372)	0.1071 (0.3422)	-0.0496 (0.3502)	-0.0416 (0.3302)	-0.0846 (0.3299)		
Natural Resource Rents	0.0075 (0.0080)	0.0023 (0.0091)	0.0091 (0.1361)	3.9636 *** (0.5806)	0.0539 *** (0.0075)	0.0083 (0.0371)	0.0091 (0.0295)	0.0344 (0.0442)	0.0516 * (0.0315)	0.0067 (0.0416)	-0.0090 (0.0094)	-0.0019 (0.0109)		
Media Integrity * Natural Resource Rents		0.0097 (0.0087)		-6.6928 *** (1.0769)		0.0922 (0.0729)		-0.0432 (0.0550)		0.3187 ** (0.1539)		-0.0152 (0.0104)		
GDP	0.2325 *** (0.0280)	0.2341 *** (0.0281)	0.2388 *** (0.0280)	0.2869 *** (0.0296)	0.3085 *** (0.0301)	0.3143 *** (0.03051)	0.2356 *** (0.0279)	0.2327 *** (0.0281)	0.2265 *** (0.0284)	0.2328 *** (0.0287)	0.2344 *** (0.0279)	0.2407 *** (0.0281)		
Population Density	0.0001 (0.0003)	0.0002 (0.0003)	0.0001 (0.0003)	0.0001 (0.0003)	0.0002 (0.0003)	0.0003 (0.0003)	0.0001 (0.0003)	0.0000 (0.0003)	0.0001 (0.0003)	0.0001 (0.0003)	0.0001 (0.0003)	-0.0000 (0.0003)		
Military Expenditures	0.1027 *** (0.0126)	0.1027 *** (0.0126)	0.1049 *** (0.0124)	0.1010 *** (0.0127)	0.1094 *** (0.0124)	0.1115 *** (0.0125)	0.1036 *** (0.0125)	0.1032 *** (0.0126)	0.1039 *** (0.0126)	0.1035 *** (0.0125)	0.1020 *** (0.0126)	0.1035 *** (0.0125)		
Intercept	-8.6337 *** (0.6994)	-8.7316 *** (0.7057)	-8.7872 *** (0.6989)	-9.7052 *** (0.7225)	-10.733 *** (0.7689)	-10.795 *** (0.7731)	-8.7146 *** (0.6969)	-8.6485 *** (0.7014)	-8.5921 *** (0.6992)	-8.6415 *** (0.7025)	-8.6757 *** (0.6964)	-8.7622 *** (0.6959)		
Wald Chi2 (Prob.)	119.5 *** (0.00)	120.26 *** (0.00)	128.15 *** (0.00)	192.52 *** (0.00)	164.85 *** (0.0000)	165.94 *** (0.0000)	123.19 *** (0.0000)	123.24 *** (0.0000)	122.96 *** (0.0000)	127.11 *** (0.0000)	123.44 *** (0.0000)	127.13 *** (0.0000)		
ln(t)	-1.7211 (0.1392)	-1.7162 (0.1397)	-1.7229 (0.1391)	-1.7882 (0.1348)	-1.7182 (0.1395)	-1.7177 (0.1396)	-1.7226 (0.1390)	-1.7226 (0.1390)	-1.7246 (0.1390)	-1.7279 (0.1387)	-1.7251 (0.1389)	-1.7320 (0.1385)		
ln(s)	0.9134 (0.3369)	-0.0662 (0.3749)	-0.0913 (0.3686)	-0.3986 (0.3110)	-0.0418 (0.3765)	-0.0415 (0.3766)	-0.1008 (0.3665)	-0.0997 (0.3668)	-0.1152 (0.3647)	-0.1341 (0.3611)	-0.1124 (0.3650)	-0.1440 (0.3590)		
Log likelihood	-5.865.9309	-5.865.319	-5.923.3417	-5.906.5912	-5.846.1156	-5.845.3153	-5.904.7720	-5.904.4542	-5.886.9361	-5.884.8610	-5.879.705	-5.878.5745		
LR Test Pooled χ^2	354.87 *** (0.000)	332.31 *** (0.000)	359.89 *** (0.0000)	392.37 *** (0.0000)	346.02 *** (0.0000)	346.46 *** (0.0000)	358.79 *** (0.0000)	357.67 *** (0.0000)	356.08 *** (0.0000)	359.40 *** (0.0000)	356.63 *** (0.0000)	352.66 *** (0.0000)		
Groups	82	82	82	82	82	82	82	82	82	82	82	82		
N	2237	2237	2276	2276	2238	2238	2264	2264	2260	2260	2259	2259		

Table 2.5.iii.b. Negative Binomial Estimates for Impact of Natural Resource Rents and Judicial Independence on the Intensity of Violence

	Natural Resource Rents		Coal Rents		Forest Rents		Mineral Rents		Natural Gas Rents		Oil Rents	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Judicial Independence	-0.0745 (0.3284)	-0.0733 (0.3290)	-0.0797 (0.3272)	-0.0046 (0.3301)	0.0367 (0.3343)	0.0263 (0.3342)	-0.0809 (0.3265)	-0.0257 (0.3342)	-0.1080 (0.326)	-0.0662 (0.3280)	-0.3249 (0.3355)	-0.2745 (0.3712)
Natural Resource Rents	0.0075 (0.0080)	0.0071 (0.0094)	0.1681* (0.1007)	0.5700*** (0.2025)	0.0539*** (0.0075)	0.0494*** (0.0097)	0.0092 (0.0295)	0.0320 (0.0415)	0.0708 (0.0503)	0.0115 (0.0675)	-0.0128*** (0.0048)	-0.0078 (0.0162)
Judicial Independence * Natural Resource Rents	0.0009 (0.0120)	0.0009 (0.0120)	-1.1846** (0.5000)	-1.1846** (0.5000)		0.0375 (0.0509)		-0.0501 (0.0636)		0.2178 (0.1563)		-0.0139 (0.0439)
GDP	0.2337*** (0.0287)	0.2337*** (0.0287)	0.2303*** (0.0293)	0.2144*** (0.0298)	0.3076*** (0.0307)	0.3032*** (0.0312)	0.2371*** (0.0286)	0.2340*** (0.0289)	0.2363*** (0.0287)	0.2261*** (0.0295)	0.2502*** (0.0286)	0.2496*** (0.0287)
Population Density	0.0001 (0.0003)	0.0001 (0.0003)	0.0001 (0.0003)	0.0001 (0.0003)	0.0002 (0.0003)	0.0002 (0.0003)	0.0001 (0.0003)	0.0000 (0.0003)	0.0001 (0.0003)	0.0001 (0.0003)	-0.0001 (0.0003)	-0.0001 (0.0003)
Military Expenditures	0.1026*** (0.0124)	0.1026*** (0.0124)	0.1056*** (0.0121)	0.1065*** (0.0121)	0.1097*** (0.0123)	0.1084*** (0.012)	0.1034*** (0.0123)	0.1029*** (0.0124)	0.1026*** (0.0124)	0.1033*** (0.0124)	0.1051*** (0.0122)	0.1055*** (0.0122)
Intercept	-8.6541*** (0.6978)	-8.6595*** (0.7016)	-8.6058*** (0.7092)	-8.2862*** (0.7168)	-10.731*** (0.7650)	-10.602*** (0.7841)	-8.734*** (0.6951)	-8.6598*** (0.7009)	-8.6995*** (0.6962)	-8.5078*** (0.7092)	-8.8668*** (0.6890)	-8.8748*** (0.6895)
Wald Chi2 (Prob.)	119.5300 (0.0000)	119.5100 (0.0000)	130.9500 (0.0000)	135.8000 (0.0000)	164.8800 (0.0000)	166.2000 (0.0000)	123.2200 (0.0000)	123.2800 (0.0000)	122.34 (0.0000)	124.3400 (0.0000)	132.7400 (0.0000)	132.7700 (0.0000)
ln(t)	-1.7196 (0.1396)	-1.7193 (0.1396)	-1.7313 (0.1389)	-1.7591 (0.1373)	-1.7193 (0.1397)	-1.7185 (0.1397)	-1.7207 (0.1394)	-1.7206 (0.1394)	-1.7224 (0.1393)	-1.7312 (0.1389)	-1.7319 (0.1387)	-1.7325 (0.1386)
ln(s)	-0.0833 (0.3723)	-0.0822 (0.3728)	-0.1348 (0.3634)	-0.2655 (0.3406)	-0.0473 (0.3776)	-0.0477 (0.3776)	-0.0923 (0.3701)	-0.0908 (0.3707)	-0.1039 (0.3686)	-0.1450 (0.3620)	-0.1421 (0.3608)	0.1449 (0.3602)
Log likelihood	-5865.9131	-5865.9103	-5922.3191	-5919.532	-5846.1097	-5845.8343	5904.7463	-5904.4222	-5887.1517	-5886.2220	-5876.2193	-5876.1691
LR Test	342.9800 (0.0000)	331.3800 (0.0000)	349.56 (0.0000)	352.7000 (0.0000)	333.3000 (0.0000)	333.4700 (0.0000)	346.2400	345.0200 (0.0000)	345.4800 (0.0000)	346.8900 (0.0000)	352.2500 (0.0000)	351.9900 (0.0000)
Pooled χ^2	82	82	82	82	82	82	82	82	82	82	82	82
Groups	2237	2237	2276	2276	2238	2238	2264	2264	2260	2260	2259	2259
N	2237	2237	2276	2276	2238	2238	2264	2264	2260	2260	2259	2259

Table 2.5.iii.c. Negative Binomial Estimates for Impact of Natural Resource Rents and Polity on the Intensity of Violence

	Natural Resource Rents		Coal Rents		Forest Rents		Mineral Rents		Natural Gas Rents		Oil Rents	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Polity	-0.0068 (0.0085)	-0.0308*** (0.0105)	-0.0088 (0.0086)	-0.0167* (0.0088)	-0.0083 (0.0085)	-0.0087 (0.0085)	-0.0076 (0.0085)	-0.0119 (0.0089)	-0.0057 (0.0087)	-0.0172* (0.0093)	-0.0080 (0.0086)	-
Natural Resource Rents	0.0098 (0.0084)	0.0179** (0.0088)	0.1547 (0.1046)	1.0331*** (0.1298)	0.0634*** (0.0177)	0.0576*** (0.0179)	0.0109 (0.0356)	-0.0107 (0.0382)	0.0405 (0.0316)	0.0929** (0.0416)	-0.0063 (0.0097)	0.0066 (0.0107)
Polity * Natural Resource Rents	0.0032*** (0.0008)	-0.120*** (0.0199)	0.0004 (0.0003)	-0.120*** (0.0199)	0.0077 (0.0057)	0.0077 (0.0057)	0.0077 (0.0057)	0.0067* (0.0041)	0.0234*** (0.0067)	0.0234*** (0.0067)	0.004*** (0.0010)	0.004*** (0.0010)
GDP	0.2254*** (0.0286)	0.2318*** (0.0284)	0.2201*** (0.0291)	0.2646*** (0.0304)	0.2330*** (0.0287)	0.2357*** (0.0287)	0.2248*** (0.0286)	0.2274*** (0.0286)	0.2186*** (0.0290)	0.205*** (0.0293)	0.2244 (0.0285)	0.2248*** (0.0284)
Population Density	0.0004 (0.0003)	0.0004 (0.0003)	0.0004 (0.0003)	0.0004 (0.0003)	0.0004 (0.0003)	0.0004 (0.0003)	0.0003 (0.0003)	0.0004 (0.0003)	0.0004 (0.0003)	0.0005* (0.0003)	0.0003 (0.0003)	0.0003 (0.0003)
Military Expenditures	0.1017*** (0.0125)	0.1050*** (0.0124)	0.1028*** (0.0122)	0.1018*** (0.0124)	0.0979*** (0.0125)	0.0996*** (0.0127)	0.1013*** (0.0125)	0.1014*** (0.0124)	0.1014*** (0.0125)	0.0980*** (0.0125)	0.1003*** (0.0125)	0.1027*** (0.0124)
Intercept	-8.473*** (0.7145)	-8.589*** (0.7106)	-8.361*** (0.7254)	-9.431*** (0.7566)	-8.656*** (0.7162)	-8.726*** (0.7178)	-8.452*** (0.7132)	-8.534*** (0.7162)	-8.325*** (0.7202)	-8.018*** (0.7260)	-8.437*** (0.7121)	-8.388*** (0.7103)
Wald Chi2 (Prob.)	116.48 (0.0000)	132.9100 (0.0000)	122.80 (0.0000)	193.02 (0.0000)	125.2800 (0.0000)	127.2700 (0.0000)	115.99 (0.0000)	118.8100 (0.0000)	116.2000 (0.0000)	136.8200 (0.0000)	116.3300 (0.0000)	135.6200 (0.0000)
ln(r)	-1.7003 (0.1414)	-1.7044 (0.1413)	-1.7105 (0.1408)	-1.8650 (0.1329)	-1.6990 (0.1415)	-1.6968 (0.1416)	-1.7007 (0.1414)	-1.6961 (0.1418)	-1.7015 (0.1415)	-1.7406 (0.1387)	-1.7011 (0.1413)	-1.7072 (0.1409)
ln(s)	0.0821 (0.3955)	0.0551 (0.3922)	0.0397 (0.3882)	-0.6546 (0.2732)	0.0892 (0.3962)	0.1012 (0.3980)	0.0799 (0.3952)	0.1072 (0.4006)	0.0742 (0.3949)	-0.0972 (0.3608)	0.0763 (0.3945)	0.0397 (0.3876)
Log likelihood	-	-5669.4299	-	5674.8135	-	-	-	-	-	-	-	5668.5383
LR Test	5677.0997	5682.3227	5682.3227	5674.8135	5672.4615	5671.5754	5678.1034	5676.7859	5668.3357	5660.3458	5677.5628	5668.5383
Vs	325.20 (0.000)	331.53 (0.0000)	328.86 (0.0000)	317.3900 (0.0000)	325.6800 (0.0000)	322.63 (0.0000)	324.87 (0.000)	318.80 (0.0000)	323.4200 (0.0000)	335.7500 (0.0000)	325.4900 (0.0000)	335.1200 (0.0000)
Pooled χ^2	81	81	81	81	81	81	81	81	81	81	81	81
Groups	2110	2110	2110	2110	2111	2111	2111	2111	2107	2107	2110	2110
N	2110	2110	2110	2110	2111	2111	2111	2111	2107	2107	2110	2110

Table 2.5.iii.d. Negative Binomial Estimates for Impact of Natural Resource Rents and Political Constraints on the Intensity of Violence

	Natural source Rents		Coal Rents		Forest Rents		Mineral Rents		Natural Gas Rents		Oil Rents	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Political constraints	-0.0301 (0.2147)	-0.1528 (0.2457)	-0.0762 (0.2142)	-0.0586 (0.2149)	0.0298 (0.2149)	-0.0183 (0.2150)	-0.0434 (0.2142)	-0.0511 (0.2240)	-0.0164 (0.2148)	-0.0459 (0.2158)	-0.0617 (0.2143)	-0.1075 (0.2250)
Natural source Rents	0.0055 (0.0085)	0.0037 (0.0086)	0.1503 (0.1031)	0.3680** (0.1682)	0.0654*** (0.0178)	0.0279 (0.0249)	0.0132 (0.0357)	0.0102 (0.0438)	0.0447 (0.0311)	0.0177 (0.0374)	-0.0128 (0.0099)	-0.0138 (0.0100)
Political constraints*	0.0133 (0.0126)	-1.0191* (0.6236)				0.2595*** (0.1004)		0.0076 (0.0649)	0.4700** (0.2105)			0.0098 (0.0141)
Natural source Rents												
GDP	0.2267*** (0.0286)	0.2281*** (0.0287)	0.2212*** (0.0293)	0.2141*** (0.0295)	0.2325*** (0.0287)	0.2357*** (0.0287)	0.2262*** (0.0286)	0.2268*** (0.0290)	0.2196*** (0.0289)	0.2226*** (0.0291)	0.2252*** (0.0285)	0.2231*** (0.0287)
Population Density	0.0002 (0.0003)	0.0003 (0.0003)	0.0002 (0.0003)	0.0003 (0.0003)	0.0003 (0.0003)	0.0003 (0.0003)	0.0002 (0.0003)	0.0002 (0.0003)	0.0003 (0.0003)	0.0002 (0.0003)	0.0002 (0.0003)	0.0003 (0.0003)
Military Expenditures	0.1019*** (0.0124)	0.1010*** (0.0125)	0.1040*** (0.0122)	0.1045*** (0.0122)	0.0993*** (0.0125)	0.0987*** (0.0126)	0.1020*** (0.0125)	0.1021*** (0.0125)	0.1020*** (0.0124)	0.1029*** (0.0124)	0.1006*** (0.0124)	0.0995*** (0.0126)
Intercept	-8.506*** (0.7106)	-8.541*** (0.7118)	-8.380*** (0.7239)	-8.230*** (0.7279)	-8.670*** (0.7124)	-8.724*** (0.7121)	-8.489*** (0.7097)	-8.504*** (0.7200)	-8.358*** (0.7142)	-8.413*** (0.7178)	-8.451*** (0.7079)	-8.398*** (0.7132)
Wald Chi2 (Prob.)	113.4600 (0.0000)	114.4600 (0.0000)	121.2800 (0.0000)	122.9400 (0.0000)	123.7100 (0.0000)	128.5800 (0.0000)	113.8000 (0.0000)	113.8600 (0.0000)	114.7400 (0.0000)	119.3900 (0.0000)	115.8700 (0.0000)	115.9800 (0.0000)
ln(r)	-1.715 (0.1405)	-1.7131 (0.1408)	-1.7255 (0.1399)	-1.7425 (0.1391)	-1.7144 (0.1405)	-1.7144 (0.1403)	-1.7159 (0.1404)	-1.7157 (0.1404)	-1.7148 (0.1405)	-1.7213 (0.1401)	-1.7176 (0.1403)	-1.7161 (0.1405)
ln(s)	-0.0801 (0.3749)	-0.0680 (0.3783)	-0.1248 (0.3678)	-0.2073 (0.3551)	-0.0743 (0.3753)	-0.0765 (0.3743)	-0.0826 (0.3744)	-0.0816 (0.3747)	-0.0830 (0.3748)	-0.1145 (0.3687)	0.0915 (0.3729)	-0.0837 (0.3751)
Log likelihood	-5697.879	-5697.343	-5710.808	-5709.353	-5692.506	-5689.304	-5698.396	-5698.389	-5696.680	-5694.422	-5697.241	-5697.010
LR Test	344.7400	332.0100	350.0100	351.1800	344.9500	347.0600	345.0900	345.1000	343.3200	346.9900	346.4300	334.1000
Pooled χ^2	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Groups	81	81	81	81	81	81	81	81	81	81	81	81
N	2157	2157	2158	2158	2158	2158	2158	2158	2155	2155	2157	2157

Appendix 3
Table 3.1. GDP Growth Rate & Credit to Private Sector in Pakistan (1960-2023)

Time Period	State	GDP Growth Rate	Credit to Private Sector (% of GDP)
1960	Peace	11.02274	
1961-62	Conflict	2.79	13.52943
1963-64	Peace	5.54	19.57838
1965	Conflict	7.67	22.91128
1966-70	Peace	4.22	25.70759
1971	Conflict	-2.15	25.11232
1972	Peace	-1.82	28.77289
1973-77	Conflict	1.74	22.30816
1978-82	Peace	3.24	23.85854
1983-99	Conflict	1.68	25.25485
2000	Peace	1.10	16.60362
2001-23	Conflict	2.03	17.25177

Source: WDI, 2023

Table 3.2. Ethnic Power Relations in Pakistan

Year	Status									
	Bengali	Punjabi	Pashkun	Sindhi	Mohajirs	Balochi	Hindu	Ahmadi	Christians	
1947-71	Discriminated	Senior Partner	Junior partner	Powerless	Senior partner	Powerless	Discriminated	Junior partner	-	
1972-73	-	Senior Partner	Powerless	Junior Partner	Powerless	Powerless	Discriminated	Junior Partner	-	
1974-77	-	Senior Partner	Powerless	Junior Partner	Powerless	Discriminated	Discriminated	Discriminated	-	
1978-83	-	Senior Partner	Junior Partner	Powerless	Junior Partner	Powerless	Discriminated	Discriminated	-	
1984-88	-	Senior Partner	Junior Partner	Powerless	Junior Partner	Powerless	Discriminated	Discriminated	Discriminated	
1989-99	-	Senior Partner	Powerless	Junior Partner	Powerless	Powerless	Discriminated	Discriminated	Discriminated	
2000-08	-	Senior Partner	Junior Partner	Powerless	Junior Partner	Discriminated	Discriminated	Discriminated	Discriminated	
2009-13	-	Senior Partner	Junior Partner	Junior Partner	Powerless	Discriminated	Discriminated	Discriminated	Discriminated	
2014-18	-	Senior Partner	Powerless	Junior Partner	Powerless	Discriminated	Discriminated	Discriminated	Discriminated	
2019-21	-	Senior Partner	Junior Partner	Junior Partner	Powerless	Discriminated	Discriminated	Discriminated	Discriminated	

Source: The Ethnic Power Relations (EPR) Core Dataset