Federalism and Intrastate Struggles: The Role of Diversity and Disparity

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Abstract

Both policy-makers and scholars have turned their attention to federalism as a means for managing conflicts between central governments and subnational interests. But both the theoretical literature and the empirical track record of federations make for opposing conclusions concerning federalism's ability to prevent civil conflict. This paper argues that the existing literature falls short on two accounts: First, it lacks a systematic comparison of peaceful and conflict-ridden cases across federal states; second, the conditional ingredients of peace-preserving federalism have not been theorized. Our argument is that the "peace-preserving" effect of specific federal traits—fiscal decentralization, fiscal transfers, and political co-partisanship—are conditional on a society's income level and ethnic composition. The argument is tested on an original dataset across 22 federal states from 1978 to 2000.

I. Introduction

In August 2005, the Indonesian government and the Islamist Free Aceh Movement, which for 30 years has fought for the Aceh province's independence from Jakarta, signed a peace accord in which the rebels agreed to give up their armed struggle in return for the right to establish a form of regional self-government within the Indonesian state. In October of the same year, the Iraqi government ratified a draft Constitution that emphasized federalism as a key means to accommodate the country's different ethnic and religious groups. Similarly, in more culturally homogenous societies, governments have pursued decentralization as a means to address regional conflict (Colombia) or decentralized existing federations to accommodate sharp regional differences (Brazil). Likewise, decentralization and regional autonomy measures have figured prominently in debates about how to contain conflict in Afghanistan, Angola, Bosnia, Colombia, Cyprus, Mozambique, Nigeria, South Africa and Sri Lanka. While all these states have a long list of issues to sort out about the division of powers between tiers of government and how to achieve domestic peace, in each of them, policy makers have turned to some form of federalism—or decentralized governance—as a possible means for managing conflicts between the central government and sub-national groups in pursuit of greater autonomy or outright independence. This study is about the diverse capacity of states, in particular federal or decentralized states, to contain such struggles.

Scholars have theorized (and state leaders have tried out) different ways for containing conflicts in internally divided states, be they a result of ethnic, territorial, or economic cleavages. The theoretical justification for federalism or decentralization is based on the combination of shared-rule with self-rule: Federalism offers the potential to retain the territorial integrity of the state while providing some form of self-governance for disaffected groups. Thus, a growing literature has emphasized the merits of federalism as "peace-preserving."[1] Notable, however, is a set of countervailing arguments that include diametrically opposed hypotheses and empirical research reaching very different conclusions. While some argue that federal institutions reduce the likelihood of armed conflict by providing subnational challengers with institutional channels for voicing their demands, others suggest that such institutions may encourage nationalist mobilization and/or separatist conflict. Moreover, while federal states may be less likely to experience political violence than unitary states, contemporary regional conflicts in the Indian, Nigerian, Columbian and Russian federations and historic regional violence in the U.S., Argentine and Venezuelan federations suggest there are major exceptions to the peace-preserving federal ideal.

Given this empirical diversity and theoretical conflict, this study investigates *under which conditions* federalism is peace-preserving (or not), rather than the more typical concern with whether federations are more peaceful than unitary systems. While researchers have rightfully investigated the federal/unitary distinction, there has been little systematic attention to federalism's diverse capacity to ameliorate—or exacerbate—regional and ethnic cleavages.[2] This study rejects the notion that federalism can be a one-size-fits-all solution to ethnic and other forms of intrastate conflict. Instead, it proposes a vision of federalism deeply rooted in the specific features of diverse societies.[3] We argue that the degree to which federal institutions can contribute to preserving peace depends on how these institutions respond to the characteristics of the societies they govern. Specifically, we hypothesize that the degree to which fiscal decentralization, intergovernmental fiscal transfers, and political copartisanship across tiers of government can contribute to peace depends on a society's level of wealth and ethnic composition.

To test the study's hypotheses, we conduct a large-N analysis of political protest and violence across 22 federal states from 1978 to 2000 using newly collected data. We organize the paper as follows: First, we

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[1] The phrase 'peace-preserving' federalism is coined by Bermeo (2002).

[2] Recent research that has begun to address this question focuses on the political-economic conditions for self-determination movements (Sambanis and Milanovic 2004) and the degree to which a country's minority population is concentrated in one province (Hale 2004).

[3] In this regard, our study is consistent with "state in society" approaches (Migdal 2001).

provide an overview of the incongruous literature on conflict management as it relates to federalism. Subsequently, we show how many of the conflicting hypotheses in the literature result from a failure to consider the diverse social make-up of federations, and we develop hypotheses that pay careful attention to the interaction effects between federal institutions and social underpinnings. In the third section we discuss our methodological approach before interpreting the empirical findings. To preview, we find evidence of important interactions among the distribution of income across regions, the ethnic make-up of society, fiscal decentralization, fiscal transfers, and intergovernmental partisanship in shaping the likelihood of conflict in federal societies. We conclude by suggesting where research might go next, emphasizing the value of complementary case study work to further examine the causal processes underpinning our findings.

II. Conflict Management and Federalism

In the academic conflict literature, federalism has received conflicting reviews. A number of scholars and policy makers have come to view decentralized governance, territorial autonomy, or some sort of federal arrangements as a useful strategy for managing intrastate conflicts. By definition, federalism includes autonomy for the sub-units, while leaving the international borders intact. According to William Riker's classic definition,

> A constitution is federal if (1) two levels of government rule the same land and people, (2) each level has at least one area of action in which it is autonomous, and (3) there is some guarantee (even though merely a statement in the constitution) of the autonomy of each government in its own sphere (1964: 11).

In combining regional self-rule and shared governance, federalism may represent a compromise between regional interests, who seek self-determination and/or protection of their rights, and the central leadership of the state, which is reluctant to give up territory and power. Though the exact federal design is typically unspecified, researchers increasingly argue that federalism can peacefully accommodate heterogeneous interests by decentralizing key policies and, thus, providing a stake for decentralized elites in the maintenance of the existing state.

Though much of this research is focused on the capacity of federalism to address distinctly ethnic tensions, a substantial body of work has linked decentralized governance with peace in otherwise divided societies. In Brazil and Argentina, research has linked such factors to the sustainability of states in contexts of heterogeneous economic endowments and extreme levels of regional inequality (Botana 1988, Rock 1987). In Colombia, decentralizing reforms in the early 1990s were explicitly designed to achieve a lasting peace in a civil war rooted in economic and ideological grievances, not ethnic divisions (Castro 1998). Similarly, many have emphasized the importance of federalism for the capacity of the 13 colonies to form the United States and the sustainability of the U.S. in the face of substantial regional divergence in modes of economic production, levels of income and ideology (Foner 1995, Weingast 1998b). In Canada, federalism accommodates not only linguistic differences (Quebec) but regional interests more generally, as differences in size, wealth, and demography have created strong regional preferences and loyalties, particularly in the West (Simeon 2004). The same goes for Russia. While the federal system was an inheritance from the USSR's "affirmative action empire" (Martin 2001), in the 1990s federalism became a means to manage regional demands from non-ethnic as well as ethnic regions. Many of the 42 bilateral power-sharing agreements Yeltsin signed with regional elites in the 1990s were agreements with non-ethnic regions over fiscal and economic matters. According to former vice premier (1991-1996) Sergei Shakhrai, who was in charge of formulating most of these agreements, this feature of Russian federalism helped "assemble" the Russian regions and stem centrifugal tendencies (Shakhrai 2003).

Similar claims are made in research on ethnically diverse societies. Bächtiger and Steiner (2004: 34-35), for example, point to how the Swiss federal arrangements have helped meet religious and linguistic

groups' demands for autonomy over policy areas such as education, religion and language, thus alleviating cultural grievances. Likewise, Ahuja and Varshney (2005) argue that federalism in India has helped hold this vast and heterogeneous state together by "embracing" diversity. Indeed, Bermeo (2002) finds that federal regimes in general do better than unitary regimes in terms of accommodating ethnic armed rebellion, minority discrimination, and grievances. These findings echo Gurr (2000), Hechter (2000), Stepan (2001), and Saideman et al (2002) in suggesting that decentralized governance reduces the incidents of nationalist conflict by funneling ethnic collective action into forms of protest within the bounds of "normal" politics. Likewise, Lijphart (1990) points to regional autonomy (if not federalism) as part of successful power-sharing. To these federal advantages one can add the check that federal institutions provide on the central government (Weingast 1998)—a significant concern of regional minorities fearful of being swept aside by national majorities. Lake and Rothchild (1996) argue that this is exactly how federal institutions can contain conflicts by mitigating the ethnic security dilemma. Unifying much of this research on "peace-preserving" federalism is a sense that federal institutional engineering offers the prospect of reducing conflict around territorial cleavages—be they based on social, economic, ethnic or cultural features (Amoretti and Bermeo 2004).

Yet while this branch of the literature has pointed to federalism as a cure for internal conflicts, others have argued that federalism instead may be more of a curse for intrastate peace and stability: Federal arrangements might offer regional groups the opportunity to mobilize resources and a network of institutions through which to mobilize—a dynamic observed in ethnically homogenous and heterogeneous societies alike. Analyses of pre-constitutional violence (Cain and Dougherty 1999) and the civil war in the U.S., for instance, emphasize the substantial authority and bureaucratic capacity of state governments and the consequent difficulty of coordinating national responses to regional challenges. Spiller and Tommasi (2006) provide a similar account of Argentina, where a highly decentralized federal constitution has generated sharp constraints on policy change, thereby inducing short political time horizons on the part of provincial politicians and contributing to decades of constitutional instability and occasional violence. According to Eaton (2005), decentralization in Colombia has served to increase financing for rebels, further eroded the capacity of the central government and contributed to the creation of "parallel states" on the ideological left and right within the country. In an analogous (but non-federal) context, contemporary debates regarding federalism in Italy show how decentralization in the early 1970s has fostered further claims for autonomy in the relatively rich north (Amoretti 2004).

A number of scholars suggest these problems are particularly acute in ethnically divided societies. Many, for instance, see the ethno-federal structures of the Soviet Union as key to understanding its demise (Suny 1993, Brubaker 1996, Bunce 1999). The Soviet Union, writes Suny, was an "incubator of new nations" that helped form the nationalist movements that eventually killed it (1993: 87). Likewise, Bunce (1999) argues that the federal structures of the Soviet Union, as well as Yugoslavia and Czechoslovakia contributed to those states' collapse. The federal systems encouraged shifts in power from the center to the periphery, which provided the nationalist challengers with resources for mobilization. The result was breakdown along regional lines. Specifically, Bunce points to how the combination of ethno-federal structures, economic decline, and state repression promoted the construction of sub-national consciousness. She explains that, "in the absence of federalism, geographically concentrated minorities seem to be less prone to either want to leave the state or (…) to succeed in doing so" (1999: 138).[4]

[4] While Bunce writes about the breakdown of communist countries, others have found a similar trend in the post-communist era. Both Treisman (1997) and Hale (2000) find that a high degree of regional autonomy has been positively correlated with separatism in Russia in the 1990s. It is along similar lines that Snyder (2000) argues that federalism (or power-sharing) does not represent a means to contain nationalist conflict, as federal institutions lock in elite-driven hostile ethnic identities.

In addition to this longstanding debate on the capacity of federalism to prevent conflict, recent research shows similar divisions with regard to federalism in post-conflict settings. Examining how provisions of territorial decentralization in 38 peace settlements (1945-1998) affect post-conflict reconciliation, Hoddie and Hartzell (2005) find that such provisions appear to strengthen the immediate post-war peace and encourage the holding of transitional elections.[5] However, Lake and Rothchild (2005), while acknowledging such short-term benefits, point out that there are few instances of post-civil war institutionalization of post- territorial decentralization. In other words, whether there are any long-term benefits of post-conflict territorial autonomy is questionable.

This study picks up on the debate about federalism as peace-preserving, but rather than focusing on *whether* federal institutions contribute to intrastate peace, the study seeks to investigate the *conditions under which* federal institutions are peace-preserving.[6] We do so for two reasons. First, as currently construed, this debate over the pros and cons of federalism is indeterminate—both sides make reasonable theoretical claims and can point to some evidence in support of their propositions. Second, as Figure 1 below indicates, over the past decades, some federations have been entirely free from internal cleavages, others have gone through periods of significant violent conflict, and still others again have experienced occasional uprisings. Thinking about federalism as either a cure or a curse for internal peace and stability does not allow us to investigate these differences among federal states.[7]

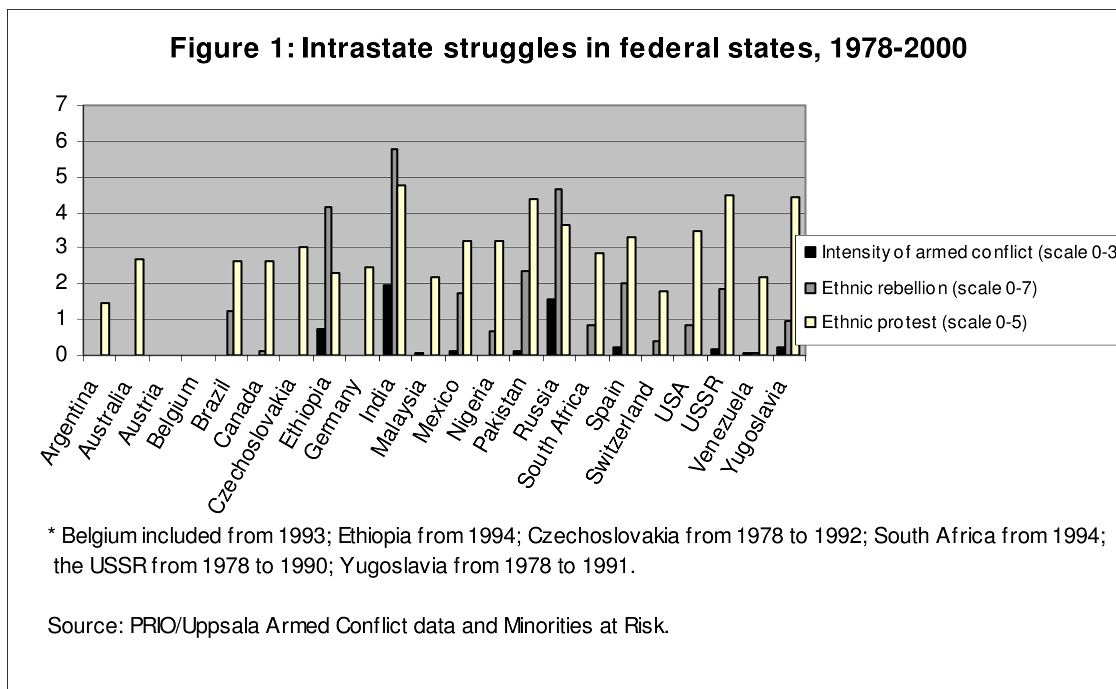

Figure 1: Intrastate struggles in federal states, 1978-2000

* Belgium included from 1993; Ethiopia from 1994; Czechoslovakia from 1978 to 1992; South Africa from 1994; the USSR from 1978 to 1990; Yugoslavia from 1978 to 1991.

Source: PRIO/Uppsala Armed Conflict data and Minorities at Risk.

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[5] These provisions, the authors argue, send a costly and credible signal that all the parties to the peace agreement recognize "the need of the other side to be secure from coercion at the hands of the government during the initiation phase" (Hoddie and Hartzell 2005: 102).

[6] For work with a similar argument but focused largely on parties, see Brancati (2006). In general, this is a research agenda that is promoted by Amoretti and Bermeo (2004), but they do not systematically examine the conditions under which "peace-preserving" federalism works.

[7] Nor does a cure vs. curse debate allow us to investigate the track record of conflict within federal states. We know, for example, that the conflict "score" for India is due to conflicts primarily in Assam, Jammu and Kashmir, Mizoram, Nagaland, Punjab, Tripura—just a few of India's 32 states. Likewise, Russia's conflict "score" is due to conflicts and protests mainly in Buryatia, Chechnya, Dagestan, Ingushetia, Karachaevo-Cherkessia, Sakha, Tatartstan, and Tyva—a small share of Russian's 89 regions.

We argue that the main lesson from the diverging views on federalism is that there is no single federal formula for peace in divided societies. In order to understand the conditions under which federalism "works," we need to take into account the federal arrangements themselves as well as underlying societal traits, in particular inter-regional inequality and ethnic diversity. Thus, we need to theorize how particular features of federations—their level of fiscal decentralization and partisan integration, for instance—interact with social characteristics to shape the likelihood of conflict. The next section specifies these key relationships.

III. Hypotheses about Federalism and Conflict

If debates in the conflict literature over the value of federal and unitary approaches to managing ethnic and regional divisions have made insufficiently precise claims regarding the conditions under which institutional arrangements are likely to achieve peaceful outcomes, the federalism literature itself has fallen into a similar trap. Indeed, generations of researchers on federalism have been preoccupied with prescribing a set of design principles to achieve various aims, be they stability, economic growth, or democracy. Since Madison's oft-quoted argument in *Federalist 45* that federal powers "will be exercised principally on external objects, as war, peace negotiation, and foreign commerce (…)" and that state power would "extend to all the objects, which, in the ordinary course of affairs, concern the lives, liberties and properties of the people; and the internal order improvement and prosperity of the state (…)," researchers have sought to allocate the powers of national and regional governments with the belief that there is some optimal federal design, regardless of the social, economic, and cultural characteristics of a given society. Thus, in his classic treatment, Wheare (1953) prescribes a long list of shared powers between national and regional governments. More recently, Weingast (1995) argues that federalism protects market to the degree that subnational governments are in charge of economic policies and face hard budget constraints, and Filippov et al (2004) advocate a unifying, national party system as a means to coordinate peaceful federal bargaining.[8]

As with the debate over the pros and cons of federalism in managing conflict, we find this tendency in the federalism literature problematic. Given the tremendous diversity of issues facing nations, we agree with Sharma (1953) that it is impossible to prescribe *a priori* the distribution of powers between national and subnational governments in any given case. In this regard two issues are prominent. First, the appropriate design principles are certain to vary depending on the ends one seeks. The institutions ideally suited for subnational fiscal discipline are likely different from those that foster peaceful in a regionally divided society. Second, the institutions likely to foster peace are dependent on the ethnic, economic, and policy challenges facing a given nation. While one set of institutions might promote peace in one nation, they might do just the opposite in another with different underlying social, political, and economic characteristics. Fiscal decentralization, for instance, may be wise in a society characterized by high levels of equality, but it is likely to foster conflict where high levels of inequality exaggerate regional differences.

Consistent with these insights, we develop a series of conditional hypotheses that account for why some federations seem to contribute to peace while others do just the opposite. In doing so, we build and follow on the recommendations of Horowitz, who in his seminal work suggests that it is particularly important to

[8] Filippov et al recognize that implementation of any political institutions requires careful consideration of how those institutions may interact with other institutions (2004: 5) and their economic/cultural environment. However, the authors focus on institutions, maintaining that even though the "supergame" of norms, conventions, and culture matters, it "lies outside the realm of conscious design so that we can focus on formal rules and the question of whether choices exist that encourage federal stability regardless of culture" (2004: 161).

consider how federalism works in ethnically homogenous versus heterogeneous settings and points out that regional income levels may influence devolution as a conflict management tool (Horowitz 1985: 613-28). In particular, we focus on the interaction between regional economic inequality, the fiscal system, the party system, and ethnic divisions in shaping the likelihood of conflict. In developing the conditional hypotheses, we discuss how each of their component parts has been subject to theorizing in the intrastate conflict and federalism literatures and then go on to explain how they are likely to interact, producing different outcomes in diverse settings.

Ethnic Diversity and Inequality

A large literature focuses on the role of national and ethnic identities as a cause (or component) of intrastate conflicts. While some argue that ethnicity contributes to conflict because of emotions such as long-standing hatreds (Kaplan 1993) or resentment toward ethnic groups different from one's own (Petersen 2002), others suggest that fear-driven security dilemmas make ethnic groups resort to violence as a means to protect the existence of their group (Posen 1993, Lake and Rothchild 1996). Others point to how political leaders may stir up hostility among different ethnic groups ("play the ethnic card") in order to keep or acquire power (Gagnon 1995), using myths and symbols to justify such hostility (Kaufman 2001). Yet others again maintain that ethnic conflicts rest on social psychology and favoritism for one's own group (Hewstone and Greenland 2000). Regardless of the specific mechanisms, in nearly all cases, ethnic identity is hypothesized to help solve the collective action problems associated with protest and organized violence. In particular, this seems to be the case when ethnic minorities are territorially concentrated and the territory is seen as indivisible (Toft 2003). Indeed, a serious debate continues in the ethnic conflict literature on the pros (Bermeo 2002), cons (Bunce 1999, Bunce and Watts 2005, Roeder 2005) and conditions under which (Hale 2004) "ethnofederalism" might funnel the capacity for ethnically-based collective action into non-violent politics.

Arguments of a more materialist nature, in contrast, posit that it is not identities but access to wealth that cause conflict. In particular income inequalities may create economic grievances and mobilization on the part of the poorer party (Muller and Seligson 1987). In Gurr's (1970) classic formulation, collective disadvantages and relative deprivation are at the heart of violent political mobilization. While departing from the relative deprivation mechanism, Gurr (2000) finds in later work that minority group discrimination does contribute to conflict. Others have argued that a particularly wealthy region in an unequal society may find subsidizing the rest of the country burdensome and hope to improve its economic lot by escaping via secession—itself likely to promote conflict (Alesina et al 2000, and Sambanis and Milanovic 2004).[9] Thus, redistributive demands can come from either rich or poor regions in highly unequal settings.

In much of the literature, these mechanisms are conceptualized as competitors—conflicts are motivated by either material or identity-based considerations. In many settings they often intersect, however, and there is reason to expect their effects to condition each other. Indeed, Horowitz (1985) argues that very often, the initiators of ethnic violence are relatively economically "backwards" ethnic groups, while relatively "backwards" regions are the ones that tend to seek secession. Likewise, the basic premise of the *Minorities at Risk* project is that ethnic groups are "at risk" only to the degree that they are discriminated against, either economically, socially, culturally, or politically (Gurr 2000), and Stewarts' work (2003, 2005) on "horizontal inequality" has inspired research on how inequalities in economic and political resources between culturally defined groups may influence conflict (Mancini 2005, Østby 2005).

[9] Two of the recent large-n studies of civil war, Fearon and Laitin (2003) and Collier and Hoeffler (2004) find no support for the proposition that inequality contributes to conflict. The problem with these findings, however, is that the empirical measure for inequality is Gini coefficients, which measure inequality at an individual level, while the theoretical arguments concern group-level inequality (e.g. Østby 2005).

If ethnic groups are geographically concentrated and ethnicity helps solve the collective action problems associated with pressing demands on the government, such collective action is more likely as the grievances that spark collective action mount. More precisely, high levels of inequality have two effects that are likely to contribute to grievance. First, increased inequality exacerbates the redistributive claims that minorities are likely to make on the central state. Second, and consistent with current models of democracy (Boix 2003, Acemoglu and Robinson 2000), as the prospective costs of such redistribution climbs, the central government may be less likely to meet it. Ethnicity is likely to accentuate these dynamics. Consistent with the literature on the capacity of ethnic identities to facilitate collective action, ethnic elites are likely to have an easier time organizing initial demands for the central authorities to ameliorate inequality. Moreover if, as Toft (2003) and Walter (2006) claim, political elites at the national level see ethnically based claims as threatening,[10] the central government may be particularly unlikely to respond to them—or even respond with force. Ease of collective action will facilitate counter-mobilization by ethnic minority regions, and escalation to violence becomes more likely. As Sambanis (2006) notes, most separatist violence emerges as a result of central refusal to respond to initially moderate demands on the part of minorities.

Though large-N empirical work on federal and unitary cases has found little evidence to support such an interaction effect there is reason to believe that federalism may politicize *both* inequality and ethnic diversity in a way absent in unitary systems. Research in economic geography has demonstrated that populations, production, and poverty are often regionally concentrated (Krugman 1992). Take the example of inequality. While inequality might become an important political issue in a unitary system, it is unlikely to have particular geographic salience since geographic units have no formal input into the policy process. In contrast to unitary systems, federalism is built on the premise of providing voice to geographically concentrated issues. Thus, in a federation, the issue of inequality is likely to be politicized in a uniquely geographic manner. Exactly such politicization of inequality is evident in many federations, as stark intergovernmental battles over the regional incidence of taxation, intergovernmental transfers, and national spending in countries as different as Canada and Brazil can attest. Given the organizational potential of ethnicity, such conflicts are likely to be particularly stark when overlapped with geographically concentrated minority groups.

Take as an example Punjabi Sikhs' quest for greater autonomy within India.[11] The demands in the 1950s and -60s were driven by concerns about language, culture, and religion, but in the 1970s and -80s, economic discontent was added to the mix. While the speeches of the militant leader Sant Jarnail Singh Bhindranwale referred to cultural concerns and emphasized Sikhs as a separate community (e.g. Judge 2005), the main Sikh political party (Akali Dal), emphasized economic and political matters, calling for the Indian state to become a federal state in a "real and meaningful" way.[12] A major point was the notion that Punjab was deprived of river waters flowing through the province—a key concern in an agricultural state.[13] As a relatively wealthy state compared to the rest of India (Brass 1991: 229), the demands for autonomy reflected the sense that because Punjab and the Punjabi Sikhs in so many ways contributed to the Indian union—Punjab was the country's "bread-basket"—they were not getting their fair share back.

[10] According to both Toft (2003) and Walter (2006), governments' willingness to accommodate ethnic challengers depends on the number of potential ethnic challenges in a country. The higher the number of potential challengers, the less likely governments are to accommodate.

[11] These demands resulted in a nine-year long violent conflict with Delhi in 1984, after the Indian army attacked the Sikhs' most important shrine, the Golden Temple in Amritsar.

[12] From the Anandpur Sahib Resolution of 1977. Reprinted in Grover (1999): 307-321.

[13] As stated by G.S. Dhillon, a Sikh historian who was in charge of writing the Sikh version of the events leading up the Golden Temple massacre in 1984: "(T)he facts indicate that there has been a calculated plan to denude Punjab and its people of its natural wealth and thereby seriously to jeopardize the economic, industrial, and agricultural destiny of the State" (2004: 63).

Thus, consistent with the expectation that federalism may politicize both ethnicity and inequality, we hypothesize that ethnic heterogeneity contributes to conflict as inter-regional inequality mounts:

> *H1: The interaction of regionally concentrated ethnic groups and high inter-regional income inequality contributes to conflict.*

Fiscal Decentralization and Regional Income Inequality

Proponents of federal solutions to governing complex societies often cite the fiscal decentralization associated with federalism as a means to foster unity through diversity in both ethnically homogenous (Inman and Rubinfeld 1997, Buchanan 1995) and heterogeneous settings (Hechter 2000, Hooghe 2004, Simeon 2004).[14] If we take decentralization to mean the capacity of local and regional governments to spend money in the manner they see fit, the seminal works in fiscal federalism (Tiebout 1956, Oates 1972) outline numerous potential advantages of decentralization. First and most importantly, decentralized spending can accommodate the demands of regional interests for some policy autonomy. Because regional leaders are assumed to have better information about their regions and be more politically responsive to regional citizens (Hayek 1957), the result can be public spending more reflective of diverse regional preferences.

In ethnically homogenous settings this logic underpins frequent calls for states rights and the desire by regional citizens to defend regional prerogatives from the clutches of national electoral majorities. Researchers of heterogeneous societies have emphasized particular features of decentralization. Echoing a common argument in the broader decentralization literature, Hechter (2000), for instance, suggests that regional minority groups are likely to want policy-making capacity regarding issues central to their identity—such as language, education, and culture—arguing that local provision of public goods that are valued by only segments of the population "is superior because it increases the likelihood that the right mix of goods will be produced—that mix which is most consistent with the distinctive values of the national group" (2000: 143). Irrespective of the precise policy sphere, decentralized autonomy means little in the absence of money to spend on decentralized priorities. Whether decentralized preferences deviate substantially from those of the rest of society on issues of redistribution, religion, language or schooling, the capacity to act on those preferences are limited by the ability of regional governments to spend on anti-poverty programs, religious courts or culturally sensitive schools.

Yet recommendations for fiscal decentralization miss one crucial point, namely that it has a tendency to exacerbate inter-regional inequalities (Linz and Stepan 2000, Leibfried and Pierson 1995, Swank 2002). Given that poor regions have greater fiscal needs and a harder time raising the revenues to meet those needs, central governments are typically responsible for addressing deep regional inequalities via inter-regional redistribution—a responsibility often times complicated by fiscal decentralization. Several mechanisms seem to underpin this regularity.

First, as subnational governments consume a larger share of the public budget, the central government is left with less capacity to engage in redistribution from wealthy to poor regions (Prud'homme 1995). Even if a central government in a highly decentralized setting is dedicated to easing inter-regional inequalities, the fiscal tools at its disposal are sharply diminished. For instance, Hooghe (2004: 71-73) notes that while the relatively rich Flemish region welcomed greater spending power with the federal reforms in 1989, French-speaking politicians in the poorer Walloon region were concerned about losing out from such an arrangement. Second, fiscal decentralization is associated with intergovernmental competition for capital that under some conditions can exacerbate inequalities. As Cai and Treisman (2005) note, when there is significant divergence in initial endowments across regions, decentralized intergovernmental competition

[14] Likewise, Suberu, who argues that "(f)ederalism remains the lifeblood of Nigeria's survival as a multiethnic country" (2004: 346), considers the country's fiscal *over*centralization as a source of conflict.

for capital can exacerbate inequalities as poor regions have little potential to attract capital and rich regions actually draw capital out of poor regions. The competition for tax base can also exacerbate regional inequalities by fostering an intergovernmental "race to the bottom" where social policy is decentralized (Peterson 1995). Hesitant to increase taxes on mobile factors and serve as a magnet for the poor, regional politicians are likely to restrict the kind of redistribution that might alleviate inequalities. As a result, there is near universal accord on the negative impact of federalism on social spending (Castles 1999). Third, the propensity for subnational governments to serve as important veto players at the national level in fiscally decentralized settings can contribute to the difficulty of establishing extensive redistributive policies at the central level (Swank 2002). As the number of veto players mounts, it becomes easier for a coalition of relatively wealthy regions to block legislation aimed at reallocating societal resources from wealthy to poor regions. The net result of these factors may be that that while wealthy regions will be able to fund substantial public goods provision, crowd in private sector investment, and grow relatively quickly, poor regions will lag ever farther behind. Thus, where inter-regional income inequality is high, fiscal decentralization will likely exacerbate those inequalities. As a result, where inequalities are pervasive, fiscal decentralization will likely contribute to conflict.

> *H2: The interaction of fiscal decentralization and inter-regional income inequality contributes to conflict.*

Fiscal Transfers and Ethnic Diversity

If fiscal decentralization has the potential to exacerbate inequalities, researchers often cite central government transfers as a means to ameliorate regional disparities within societies. Indeed, fiscal federalists have long recommended that the redistributive role of government be reserved for the national government in order to ensure normatively desirable levels of inter-regional fairness (Oates 1972). The importance of the distinction between subnational spending (what we refer to as fiscal decentralization above) financed by taxes raised by regional governments themselves and those raised by national governments and subsequently transferred to subnational governments is well established in the fiscal federalism literature (e.g. Rodden 2002). While wealthy regions in some nations might have the aptitude to raise substantial own-source revenues, many regional governments in federations have little revenue raising capacity. Indeed, given economies of scale in the collection of many taxes, regional governments across the world tend to be left with narrow, income elastic tax bases (Wibbels and Rodden 2006). The result is tremendous variation across countries in terms of how decentralized spending is financed. In cases like the Canada, state and provincial governments raise the lion's share of their own revenues. In cases such as Argentina and Nigeria, subnational governments are overwhelmingly dependent on the fiscal transfers from the central government.

The complexities of varying transfer systems aside, the fiscal federalism and conflict literatures both emphasize the importance of transfers for alleviating inter-regional conflicts. In the fiscal federalism literature, the central government is the only actor that can internalize the costs associated with inter-regional inequalities and prevent the much discussed potential for a race to the bottom among regions. In most cases, this redistribution occurs through the central governments capacity to reallocate national revenues in favor of poor regions. In the conflict literature, these issues are typically framed with reference to the central government's capacity to purchase the compliance of separatist (or potentially separatist) regions in avoiding conflict. Suberu (2004), while accrediting the conflict in the Niger Delta to a lack of fiscal decentralization, acknowledges that central control of revenues and redistribution through transfers has promoted equality among Nigeria's regions. In a related vein, Treisman (2001) has attributed the Russian federation's ability to hold together during the "parade of sovereignties" in the early 1990s[15]

[15] Of Russia's 32 ethnically-defined regions, 25 declared sovereignty during the 1990-1991 period, and many followed up by either adopting their own constitution, asserting the right to control natural resources, or even—as in the case of Chechnya and Tatarstan—declaring outright independence.

to Moscow's strategy of buying off separatist regions with tax breaks and fiscal transfers. This strategy of "fiscal appeasement" ensured regional support for the center.[16]

Yet if some suggest that central transfers can stem conflict, systems of intergovernmental transfers represent among the most conflictual aspects of many federations. Exactly because they are inherently redistributive, the rules governing transfers pique the interest of regional politicians. Thus, in Argentina, Canada, Brazil, Nigeria, and elsewhere, the intergovernmental fiscal system has been at the center of federal politics for decades. Even in India and Australia, where the distribution of federal transfers are determined periodically by "apolitical" decision-making bodies, the politics of intergovernmental finance remain a matter of high debate. Thus, while large fiscal transfers can have peace promoting aspects, they can also exaggerate distributive conflicts between regions.

We expect the extent to which transfers promote peace to be conditioned by the ethnic composition of a society. Where ethnic differences are pronounced, both minority and majority politicians are more likely to see transfers as a necessary means to maintaining peace. Ethnic minority politicians are likely to welcome the additional resources that transfers bring, and ethnic majority politicians are likely to see transfers as a tool to avoid costly ethnic mobilization and separatist threats. Thus, the Czech republic of Czechoslovakia significantly subsidized the Slovak republic for decades in peace, and the ultimately peaceful breakup of the federation had little to do with fiscal transfers (Filippov et al 2004). In countries without major ethnic divisions, on the other hand, large intergovernmental transfers will serve to exacerbate distributive clashes among rich and poor regions and may even contribute to conflict. We, therefore, expect the peace-promoting aspects of intergovernmental transfers to build as ethnic diversity mounts and fall as ethnic diversity declines.

> *H3: The interaction of large federal fiscal transfers and regionally concentrated ethnic groups detracts from conflict.*

National Party Systems and Ethnic Representation

A considerable amount of research on federalism emphasizes the importance of national party systems as enabling a federation's center to promote unity across levels of government (Riker 1964, Stepan 2001, Filippov et al 2004). Many argue that by providing a mechanism for integrating and ultimately transcending parochial tendencies, national party systems are the glue that keeps federations from dissolving into a cacophony of conflicting regions. In Filippov et al's (2004) account of the splintering of the Soviet Union and Czechoslovakia, for instance, it is the decline of the Communist Party that precipitates federal failure. Absent the party's mechanisms for disciplining centrifugal pressures, both systems broke apart. On the flip side, Brancati (2006) suggests that regional parties increase conflict by reinforcing separatist identities, producing legislation that favors some groups over others and mobilizing groups to engage in separatism. By extension, inclusive national parties should contribute to peace.

It is not hard, however, to imagine a situation in which a disciplined, national party might contribute to civil conflict. Exclusion from the national governing coalition can have important, negative implications for minorities. Legislation governing important features of decentralized governance can fail to take into account the considerations of minorities or even take aim at their interests. Similarly, substantial research on contexts as diverse as India (Khemani 2001), the U.S. (Ansolabehere and Snyder 2004), and Argentina (Jones et al 2000) suggest that national parties target transfers to subnational co-partisans at the expense of regions governed by opposition parties. Together these factors suggest that while a large, unifying national party can improve the coherence of policy-making writ large, it can do so at the expense of minority groups if those groups are excluded from the governing coalition. Thus, Lake and Rothchild (2005) warn that decentralized governance is only likely to work in post-conflict societies when no single

[16] In a small-N study, Aléman and Treisman (2005) find limited support for this theory across federations.

group in society can control the national government. Likewise, Filippov et al suggest that, "if a society is described by two or a few clear-cut ethnic, religious, linguistic, or racial divisions, parties, unless dissuaded somehow from doing so, will most naturally tend to form around those divisions so that compromise and negotiation can only occur outside of them" (2004: 189).

As such, if a disciplined, national party represents ethnic majorities but not ethnic minorities, it is likely to exacerbate the sense of isolation of minorities and contribute to conflict. Indeed, Wilkinson (2004) finds that local violence was more likely in India when Muslim minorities were not electorally valuable for Hindu majorities and, thus, excluded from governance. Bunce (1999) provides a similar account of civil war in Yugoslavia, which was precipitated by the refusal of Serbian leaders to rotate the collective presidency to the Croatian delegate. In contrast, when ethnic minorities are included in national governing coalitions, the central government has a direct electoral interest in accommodating minority regions and thereby fostering peace.

> *H4: The interaction of strong party ties across tiers of government (copartisanship) and the inclusion of ethnic minorities in those party ties (ethnic copartisanship) detract from conflict.*

IV. Data and Methods

To test the hypotheses outlined above, we conduct a time-series, cross-sectional analysis of conflict in 22 federal or semi-federal states from 1978 to 2000. The focus on federal states is consistent with our question, which is about how (not whether) federal institutions affect the likelihood of civil conflict. To be clear, we are not interested in explaining differences between federal and unitary systems; we are interested in explaining variation among federations. To be included, a country must have an intermediate (between local and national) level of government with non-trivial, independent powers. The cases are Argentina, Australia, Austria, Belgium (federal state since 1993), Brazil, Canada, Czechoslovakia, Ethiopia (federal since 1995), Germany, India, Malaysia, Mexico, Nigeria, Pakistan, Russia (federal since 1992), the Soviet Union, South Africa, Spain, Switzerland, the United States, Venezuela, and Yugoslavia. These include the countries that scholars in the field have traditionally defined as federal based on Riker's definition and add cases (Belgium and South Africa) where constitutional reforms in the 1990s introduced federalism more recently.[17] Generally speaking, in selecting our sample we have chosen to err on the side of inclusiveness so as to maximize comparisons and approximate the universe of federal cases while avoiding arbitrary exclusion.[18] The time period covers the three decades with the largest number of ethnic conflicts in the post-World War II period, as well as the three decades with the largest number of intrastate wars since 1816 (Sarkees et al 2001). Appendix 1 provides details and sources for the data, much of which we have collected from country-specific sources.

In order to test our hypotheses, we introduce a series of distinctly federal variables (many new to the study of intra-state conflict) and multiplicative terms in order to capture the conditional relationships discussed above. To examine the first hypothesis—that the presence of regionally concentrated ethnic groups interacts with regional inequality—we use both a new measure for ethnic concentration, which indicates the share of a country's population living in ethnic regions, and a new measure for inter-regional inequality. Consistent with much of the ethnic conflict literature, we use a broad definition of ethnicity based on group identities such as race, language, and religion in determining ethnic regions. We consider ethnic majority/minority regions to be those in which half of the population belongs to an ethnic group

[17] See Elazar (1994), Watts (1996), and Treisman (2002).

[18] The dataset builds considerably on that collected by Rodden and Wibbels (2002) by including region-specific measures of inequality, identifying ethnic-majority regions, the share of those regions governed by the party governing nationally, and adding several cases: Belgium, Ethiopia, Russia, South Africa, and the three communist countries that disintegrated in 1991 and 1992.

that is a minority in the country as a whole (Aléman and Treisman 2005).[19] Appendix 2 provides an overview of ethnic regions across federal states. Note that this measure is an indicator of ethnic federalism.

To capture the inter-group component of the theoretical arguments about income discrepancies, we do not use Gini coefficients, which are based on nationally aggregated data from household surveys of income and, thus, measure inequality among individuals. Instead, we use regional GDP per capita data, relying on country-specific sources. [20] For each country-year, we calculate the inter-regional decile dispersion ratio, which measures the income of the richest 10th percentile among the regions divided by the income of the bottom 10th percentile (i.e. the income of the rich is presented as multiples of the income of the poor).[21]

For the second hypothesis, we measure fiscal decentralization as the share of total public sector spending that is conducted at the provincial level. We rely on the IMF's *Government Finance Statistics* for some of this data but note that it does not report data for many of our cases and mischaracterizes the fiscal system in others (see the Appendix 1 for details on sources).[22] In these latter cases, we have resorted to national sources. Our measure of fiscal decentralization is interacted with the inter-regional inequality measure described above.

For the third hypothesis, we measure fiscal transfers as the share of total public sector spending that goes to federal grants and shared revenues. Sources include the IMF's *Government Finance Statistics,* as well as sources specific to countries not covered (or improperly covered) by the IMF (see Appendix 1). This indicator is interacted with the ethnicity measure described above. We lag both the measure of fiscal decentralization and central transfers as we do not expect institutions to have an immediate effect on conflict.

For the final hypothesis concerning party systems, we have collected data on national *and* regional election results to construct a variable that measures the share of regional governments controlled by the nationally governing party. For both the federal and provincial level of government, the ruling party or coalition is the party of the chief executive.[23] This indicator is designed to assess the common argument

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[19] Several countries have regions that are commonly known as ethnic regions even though the ethnic groups in question actually make up a fairly small percentage of the region's population. For example, the Russian Federation has 32 regions that are designated as ethnic regions (e.g. Treisman 1997), but in some of these only a small percentage of the population belongs to the ethnic group that the region is named after. In order to capture more of these regions, we construct a second measure for ethnic minority regions where we include regions in which 1/4 of the population belongs to an ethnic group that is a national minority. Using this latter measure does not impact our findings. See Appendix 1 for data sources.

[20] For states where provincial GDP data is not available, we use either provincial income data (Switzerland) or provincial primary school enrollment data (Ethiopia and Nigeria).

[21] As an alternative measure for the overlap of ethnic concentration and regional income, we calculate, for each country, the average ethnic region's GDP per capita as a share of the entire country's average GDP per capita. See discussion on page 30 below.

[22] Most importantly, the IMF counts automatic transfers from national taxes to regional governments as revenue raised by the regions themselves for several of our cases, including Germany, Mexico and Argentina and as revenue to the central government. In other words, those revenues are incorrectly double-counted. Given the importance of distinguishing between spending financed by regional taxes and that financed by national transfers for our third hypothesis, moreover, we have relied on national sources for these cases.

[23] Because of Switzerland's unusual executive power, where the neither the national nor provincial executives are embodied in one person but in a collegial body of seven persons at the national level and collegial bodies of five to nine members at the province level, we code it as follows: In each province, we considered the number of executive members who were from the four parties that have been represented in the national executive since 1959; if all members of a province's executive body were from one, two, three, or four of the parties in the national executive, it was coded as 1. If one of the members of the canton's executive body was from any of the parties represented in the

that large, regionally inclusive governing parties solve collective action problems and promote efficient policy making better than narrow governing parties. In order to test whether ethnic copartisanship has a peace-preserving effect, we construct a measure that captures the share of the ethnic regions that is ruled by the same party or coalition that rules at the national level. This variable is then interacted with the indicator for overall copartisanship. As per the fourth hypothesis, we expect that large governing coalitions that exclude ethnic provinces will exacerbate conflict.

In addition to the hypotheses discussed above, we consider several alternative explanations that we expect to influence conflict in federal states. First, we include a measure for the economic strength of the state, measured as real per capita income (in 1985 US dollars).[24] Bermeo (2002) finds that in comparison to unitary states, federations are more likely to be "peace-preserving" if they are economically developed. Fearon and Laitin (2003) see GDP per capita as an indicator of state strength, arguing that stronger states are more likely to have the financial, administrative, military, and police capacities needed to capture and destroy potential violent challengers. We would expect this to be particularly important in federal states, where the central government, by definition, has given up some authority to sub-national actors.[25] For the same reason, we include a variable indicating the size of the country's population. Second, we include a dummy variable for oil exporters to control for the argument that primary commodity exports represent an attractive target for nascent opposition movements (Collier and Hoeffler 2004). While oil resources are linked to conflict across all states, there is reason to believe that federal states in particular may experience conflict over such resources, in particular if the oil is concentrated in a few regions of the state, and the central government seeks to redistribute the revenues generated from such resources.[26] Moreover, Treisman (1997) has suggested that in Russia in the early 1990s, oil-rich regions were in a stronger bargaining position vis-à-vis the central government than regions without such natural resources, and they were, thus, more likely to be assertive in their separatist demands to the central government. Third, given Gurr's (2000) argument that democracies are less likely than authoritarian states to experience political violence, we control for democracy using the lagged Polity IV regime index for democracy minus autocracy score.[27] Authors such as Brancati (2006) and Bermeo (2002) have argued that federalism may be meaningful only in democratic states, hence it is of particular importance to control for democracy across a sample that includes both democratic and non-democratic federal states. Finally, in order to account for previous conflict, we include the lagged dependent variable.

We note that our relatively small number of observations underscore the need for parsimony in our models and preclude the "garbage can" approach to independent variables common in the large-N conflict literature. Following the advice of Clarke (2005), who warns against including a large number of control variables out of concern for omitted variable bias,[28] we consider only the alternative explanations that we believe are likely to affect conflict in our sample of cases. Therefore, we do not include all of the variables identified as at times significant in the conflict literature, such as political instability, non-contiguous territory, mountainous terrain, and new state. The arguments linking mountainous terrain to conflict are essentially about state strength, which should be captured by the measure of GDP per capita.

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national executive, the measure for co-partisanship was "one over total number of seats in the provincial executive", and so on. The yearly number in the dataset is the average for all the ethnic provinces in that year. For country-years with authoritarian rule, the variable was coded as 1.

[24] Data until 1999 from Fearon and Laitin (2003), available at http://www.stanford.edu/~jfearon/.

[25] Collier and Hoeffler (2004) see the same indicator as measuring how poor or rich a certain state is, and they find that richer states are less likely to experience conflict than poor ones. Again, we would think that wealth may be of particular import in federations, at least if the central government is to engage in significant redistribution among the regions of the state.

[26] See Suberu (2001) on Nigeria.

[27] Data until 1999 from Fearon and Laitin (2003), available at http://www.stanford.edu/~jfearon/.

[28] Clarke's point is that including too many control variables can make the bias on our coefficients of interest equally bad or worse than potentially omitted variable bias.

Likewise, political instability should be captured by the lagged dependent variable. In none of our cases does conflict happen in the non-contiguous parts of the country, nor do we have any new states in our sample. We note that our model slightly outperforms Fearon and Laitin´s (2003) benchmark and more exhaustive model in our sample.[29]

The Dependent Variable

In this paper, we assess how federal structures interact with inter-regional inequality and ethnic concentration to affect the incidence of conflict within a state—be they conflicts concerning the central government's power and policies, control over territory, as well as ethnic grievances. Thus, we employ three measures for our dependent variable: First, for a broad indicator of internal conflict, we use the Intensity of Conflict measure from the Armed Conflict 1946-2004 dataset (Gleditsch et al 2002, Harbom and Wallensteen 2005), which codes the level of conflict from 0-3 on the basis of annual deaths.[30] Conflict in the dataset is defined as "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths" (Strand et al 2005: 3). Second, to assess the degree to which federal institutions may mitigate violent conflicts that specifically involve ethnic groups in conflict with the government, we employ the Minorities at Risk (MAR) dataset's indicator for ethnic rebellion.[31] This is a categorical variable that indicates an ethnopolitical group's anti-regime rebellion, ranging from political banditry to protracted civil war. Finally, given the finding in the literature that federalism mitigates armed ethnic conflict but actually may encourage ethnic protests (e.g. Hechter 2000), we use MAR's measure for ethnic protest. The ethnic protest measure is a categorical variable that indicates an ethnopolitical group's anti-regime non-violent protest activities, ranging from verbal opposition to mass demonstrations with more than 100,000 demonstrators. Each country's average score on the dependent variables in the 1978-2000 period is shown in Figure 1. As we are primarily interested in whether there is conflict in any given federal state, we transform each of the measures into dichotomous variables.[32]

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[29] Relying on the area under the ROC (Receiver Operating Characteristic) curve as a measure for accuracy (King and Zeng 2001), we compared our models to that of Fearon and Laitin's model on our sample and violent conflict variables. The area under the ROC curve ranges from 0.5 to 1, and numbers closer to 1 are preferred because 1 indicates that the diagnostic test for the model achieves both 100 percent sensitivity and 100 percent specificity. Both in terms of armed conflict and ethnic conflict, we found that our model produced a higher number (for the logit model of armed conflict, 0.9830 compared to 0.9745, and for the logit model of ethnic conflict, 0.9532 compared to 0.9335). Fearon and Laitin did not design their model to explain non-violent conflict, such as our measure for major ethnic protest.

[30] More precisely, 0 is no conflict; 1 is minor conflict, which means more than 25 battle related deaths per year every year over the course of the conflict; 2 is intermediate conflict, which means more than 25 battle related deaths per year and a total conflict history of more than 1000 battle related deaths; 3 is war, which means more than 1000 battle-related deaths for every over the course of the conflict. The unit of the analysis in the Armed Conflict dataset is conflict-year. In cases where there were more than one conflict per *country*-year in our dataset, we marked the highest level of conflict.

[31] The dataset is maintained by the Center for International Development and Conflict Management at the University of Maryland and is available via the center's website, at http://www.cidcm.umd.edu/inscr/mar/ (last accessed 10/13/06). The MAR data is group-level data, and we use the MARGene (Bennett and Davenport 2003) software to transform the group conflict scores into country-year indicators. In the event of there being more than one group in conflict in a country in any given year, we used the highest level of conflict. Prior to 1985, the MAR indicators are available on a five-year basis, so we use MARGene's linear interpolation function for the 1978-1985 period.

[32] For each of them, we chose a cut-off point ca. one standard deviation above the average in our sample. For armed conflict, this means that the cut-off point is 1, minor armed conflict. For ethnic rebellion, we focus on whether, in any given year, a country has experienced a conflict categorized as "local rebellion" or above. For ethnic protest, we focus on whether, in any given year, a country has experienced a protest categorized as "medium demonstration." The protest scale ranges from 0 to 5, where 0 means no protest, 1 means verbal oppression, 2 means symbolic resistance, 3 means small demonstration with less than 10,000 participants, 4 means medium demonstration with less than 100,000 participants, and 5 means large demonstration with more than 100,000 participants.

Estimation Procedures

To investigate the effects of the independent variables on armed conflict, ethnic rebellion, and ethnic protest in a society we run logit regressions. The results are reported with robust standard errors defined as clustering on the cross-sections. In each model, we include the variables for the alternative explanations mentioned above, as well as four interactive terms and their constitutive variables to assess the role of the conditional hypotheses outlined above. Given the complications associated with interpreting the results of models with interaction terms (discussed below), we use our results to generate graphical representations of the predicted impact of our conditional hypotheses on conflict. We discuss robustness checks below. All estimations are done in Stata 8.0.

V. Findings

Table 1 reports the results for each of the three dependent variables. The results lend support to several of our interaction hypotheses. After a brief discussion of the control variables, we focus on the paper's major hypotheses and illustrate the dynamics of these interactions.

Turning first to the non-federal variables, we find, as expected, that higher GDP per capita appears to reduce the likelihood of both armed conflict in general and ethnic rebellions in particular, as well as large ethnic protests. Also as expected, countries with large population size are more conflict-prone than those with smaller populations. Contrary to the literature linking natural resources to armed conflict and ethnic separatism, we find that oil exporting federations are *less* prone to ethnic rebellion than those without such natural riches, although oil seems to have no discernible effect on neither armed conflict in general nor ethnic protest. With regards to the former point, we believe this is a function of the fact that the countries with the highest level of ethnic conflict in our sample, Ethiopia and India, are comparatively resource poor, while resource rich countries in our sample such as Venezuela, Nigeria, and Malaysia evince relatively low or nonexistent levels of ethnic conflict. Democracy has no significant impact on a federation's likelihood of ethnic conflict, but surprisingly it appears to increase the likelihood of armed conflict. Again, this is likely a function of the smaller sample of countries that are federal as the two cases with the highest levels of armed conflict are India and post-democratization Russia, though we note that others have reported a positive coefficient on democracy as well (Fearon and Laitin 2003, Miguel et al 2004). In all cases, previous conflict is a predictor of present conflict.

In terms of the distinctly federal variables, the statistical significance of the interaction terms lend support to H1, H2, and H3. We see preliminary evidence that the interaction terms "fiscal decentralization*regional inequality" and "ethnic concentration*central grants" have an expected and significant impact on the likelihood of armed conflict (Model 1), while the interaction terms "fiscal decentralization*regional inequality" and "ethnic concentration*regional inequality" have an expected and significant influence on the likelihood of ethnic rebellion and protest (Models 2 and 3). Nevertheless, as a growing body of methods literature makes clear (Franzese, Kam, and Jamal 2001, Clark, Gilligan and Golder 2005, Braumoeller 2004), interpreting regression output for interactive models is complicated by a number of factors associated with the conditional relationships among the variables. First and most importantly, the coefficients in interaction models no longer indicate the average effect of a constitutive variable as they do in an additive model. Indeed, the coefficients on the constitutive terms themselves may not have substantive meaning and rarely speak directly to the interactive relationships of interest. The coefficient for "fiscal decentralization," for instance, tells us the impact of a one unit increase of fiscal decentralization when regional inequality is 0. But there are no cases in our dataset that score a 0 on regional inequality, which varies from 1.12 to 5.46. Second and relatedly, multicollinearity between constitutive and interaction variables (a byproduct of multiplicative terms) can inflate standard errors, making standard significance measures useless. Moreover, aside from the fact that we are not strictly interested in the model parameters (see point 1 above) anyway, standard errors of interaction coefficients may tell us little about the standard errors of the estimated effects of the interaction, which depends on the

values of the constitutive terms. In short, the nature of interactive models requires a different approach to interpreting statistical output than pursued in standard additive models.

Table 1: Peace-Preservation in Federal States

	Model 1: Armed Conflict	Model 2a: Ethnic Rebellion	Model 2b: Ethnic Rebellion	Model 3: Ethnic Protest
Per Capita Income	-0.419**	-0.368***	-0.206**	-0.193**
	(0.214)	(0.132)	(0.103)	(0.091)
Oil	-0.518	-2.290***	-0.644*	0.548
	(0.850)	(0.770)	(0.375)	(0.506)
Population (log)	1.832***	0.984***	0.745**	0.777***
	(0.504)	(0.345)	(0.324)	(0.257)
Democracy	0.264**	-0.007	0.027	-0.045
	(0.122)	(0.042)	(0.036)	(0.061)
Ethnic Regional Concentration	-4.863	-27.494***	-2.267	-6.477
	(9.234)	(9.932)	(4.200)	(6.796)
Inter-Regional Inequality	-3.025*	-3.141**	-0.479	-3.429***
	(1.630)	(1.243)	(0.668)	(1.146)
Fiscal Decentralization	-9.673*	-10.282*	-4.078	-10.613*
	(5.153)	(6.118)	(5.773)	(5.588)
Central Government Grants	3.114	-12.288**	-6.128	-2.328
	(5.052)	(5.510)	(6.589)	(2.025)
Federal/Provincial Co-Partisanship	2.825	2.139	2.411	1.867
	(2.326)	(2.255)	(2.460)	(2.098)
Ethnic Federal/Provincial Co-Partisanship	-4.711**	-6.166***	-3.233***	1.857
	(1.992)	(1.351)	(1.182)	(1.745)
Fiscal Decentralization * Regional Inequality	5.959**	7.905***	2.974	5.750***
	(2.910)	(2.749)	(2.186)	(2.217)
Ethnic Concentration * Regional Inequality	3.391	5.904***		3.810**
	(2.689)	(2.051)		(1.945)
Ethnic regional wealth			-2.097*	
			(1.247)	
Ethnic Concentration * Central Grants	-54.289**	35.126**	9.795	-13.649
	(22.086)	(17.665)	(17.972)	(9.382)
Copartisanship * Ethnic Copartisanship	1.379	0.958	0.211	-3.976
	(2.437)	(2.845)	(3.093)	(2.869)
Lagged DV	1.480***	3.640***	3.356***	2.454***
	(0.428)	(0.627)	(0.600)	(0.340)
Constant	-15.829***	-0.733	-6.284	-2.177
	(6.017)	(5.433)	(4.023)	(3.983)
N =	356	356	356	356
Pseudo R squared	0.7143	0.6231	0.6004	0.5309

*Note: The estimations are the result of logit regressions. Standard errors, defined as clustering on the cross-section, are in parentheses. The estimations are done in STATA 8. * significant at 0.10; ** significant at 0.05; *** significant at 0.01.*

Therefore, as recommended by Franzese, Kam, and Jamal (2001), we present the impact of our interactive hypotheses on conflict graphically, as conditional expectations/predicted values with accompanying 90 percent confidence intervals.[33] We do so by holding one constitutive variable constant at two theoretically interesting values (low and high, defined as one standard deviation below and above the sample mean), interacting it across levels of the other constitutive variable, and generating predicted values of conflict on the basis of the results reported in Table 2.[34] More intuitively, these graphs show how the interaction of the variables impact conflict. The reader will note that we have not graphed all of the hypothesized relationships. For the sake of parsimony, we have presented only those relationships that are significant. In assessing the significance of the interactive relationships we use two rules of thumb: First, whether there is a significant difference in the predicted value of conflict between high and low values of a constitutive variable; and second, whether there is a significant *change* in the predicted value of conflict across the value of a constitutive variable. If *either* condition holds, we graph the predicted value of conflict. Even when we cannot have great confidence in our findings, it is worth noting that the results are generally consistent with our hypotheses. In Appendix 3, we have included the graphs that are consistent with our hypothesized relationships but do not fulfill these statistical significance criteria.

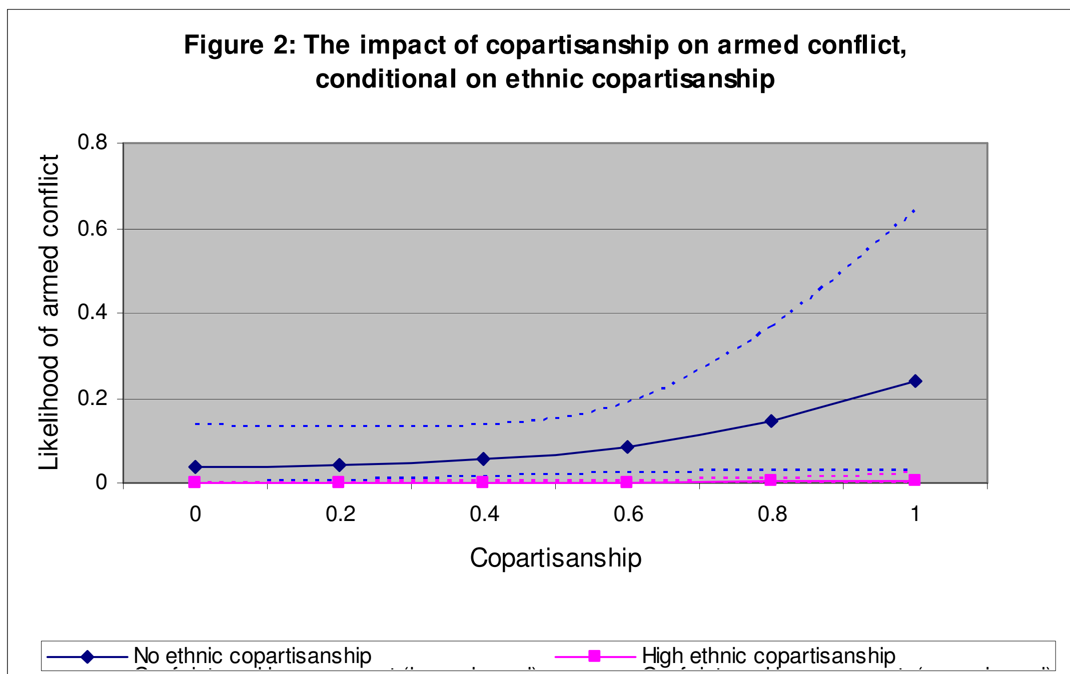

Figure 2: The impact of copartisanship on armed conflict, conditional on ethnic copartisanship

Figure 2 presents our significant results with regard to armed (as opposed to specifically ethnic) conflict. Though we find only suggestive evidence in support of hypotheses one through three (see Appendix Figures A-C in Appendix 3), we find solid evidence for the fourth hypothesis concerning the interaction between copartisanship and ethnic copartisanship as it bears on general armed conflict in a society. The graph underscores the importance of intergovernmental partisan relations in shaping violent conflict. It shows that intergovernmental copartisanship, as indicated by the share of regional governments held by the nationally governing party, has a divergent impact on conflict conditional on whether ethnic regions are copartisans of the center. As expected, the likelihood of conflict mounts with the intergovernmental strength of the nationally governing party when ethnic regions are governed by an opposition party. When

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[33] An alternative would be to plot conditional coefficients (see Clark, Gilligan and Golder 2005), but we find the conditional predictions more substantively interesting.

[34] We use King, Tomz, and Wittenberg's (2000) CLARIFY software to generate these predicted values.

ethnic regions are copartisans of the center, however, increased intergovernmental partisan coherence reduces the likelihood of conflict. This is consistent with, for example, Lijphart (1990) and others' account of the unity-promoting effect of the Congress party in India (similar arguments have been made about the less democratic UMNO and PRI parties in Malaysia and Mexico, respectively), but here we both specify that minority-majority regions need to be part of the governing coalition and test the argument across a large number of cases. Such an interpretation receives additional support in the results presented in Figure 3b, where we graph the predicted probability of an ethnic rebellion existing in a federation. Consistent with the story in Figure 2, it shows that the probability of ethnic rebellion rises once ethnic regions are excluded from the nationally governing party.

The results are even more supportive when we turn squarely to ethnic conflict (as opposed to more general armed conflict). Figure 3a illustrates how fiscal decentralization affects ethnic conflict conditional on inter-regional inequality (hypothesis 2). At low levels of inter-regional inequality—as in, for example, Australia, Czechoslovakia, Pakistan, Spain, Switzerland, and the U.S.—fiscal decentralization appears to have no impact on the likelihood of ethnic conflict. In contrast, when inter-regional inequality is high—as in Ethiopia, Russia, Mexico, Brazil, Nigeria, South Africa, the USSR, and Yugoslavia—increased fiscal decentralization increases the likelihood of ethnic rebellion. While decentralization in such cases serves to underscore inequalities, fiscal centralization, in contrast, probably facilitates central redistribution that can serve to mediate the impact of regional inequities.

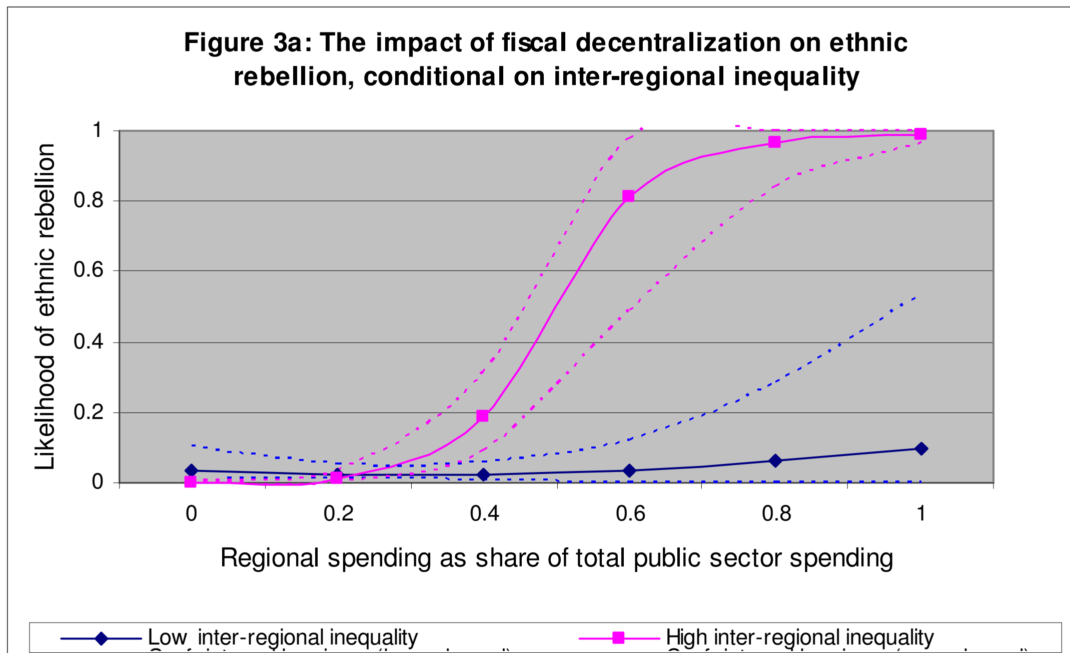
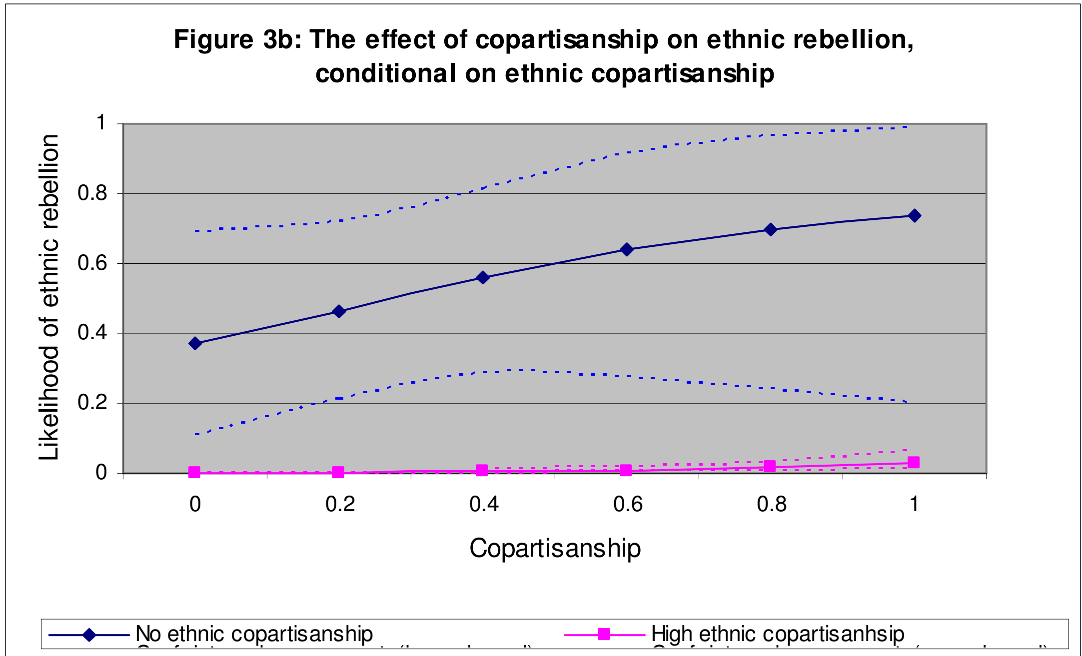


Figure 3a: The impact of fiscal decentralization on ethnic rebellion, conditional on inter-regional inequality



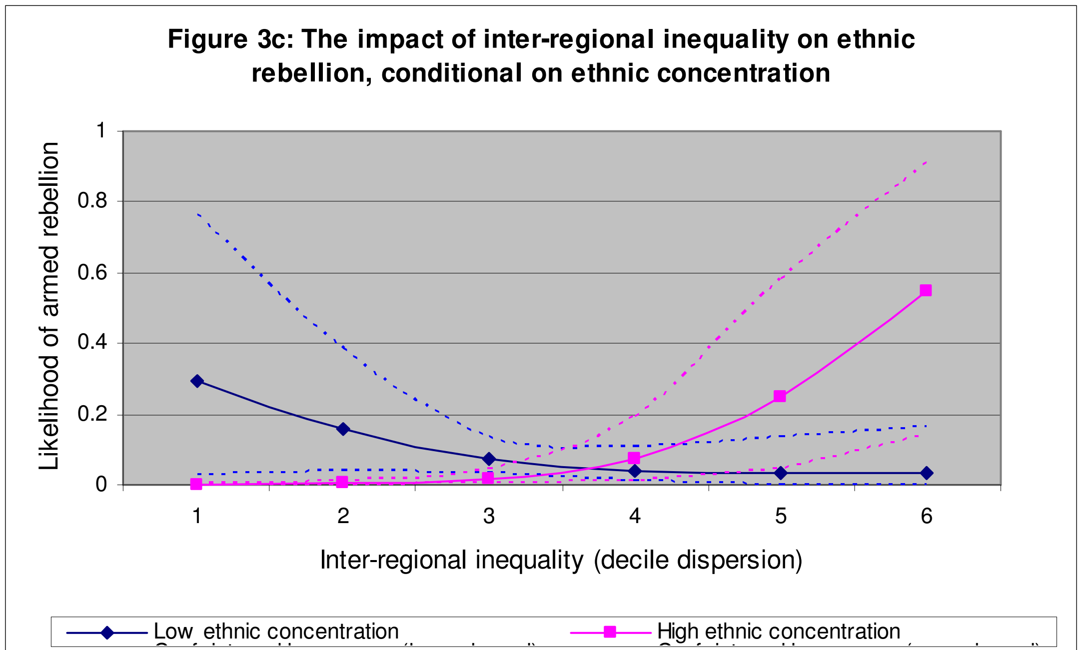


Figure 3c tells a related story, underscoring the interaction between a federation's ethnic makeup and inter-regional inequality (hypothesis 1). The graph suggests that in societies characterized by regional ethnic concentration, as in for example India, Russia, and the USSR, the likelihood of ethnic conflict rises as inter-regional inequality increases. Two explanations present themselves: rich minority-majority regions may take umbrage with redistribution away from them and/or poor minority-majority regions may feel a strong sense of grievance. As a number of recent papers have argued (e.g. Alesina et al 2000, Sambanis and Milanovic 2004) particularly wealthy regions may find subsidizing the rest of the country burdensome and hope to improve their economic lot by escaping via secession. A second possibility is that it the combination ethnic concentration and poverty that spur conflict and/or (Horowitz 1985, Gurr

2000). In order to better distinguish among these two hypotheses, we exchanged the interaction term "ethnic concentration*regional inequality" with an indicator measuring the relative wealth of a country's ethnic regions (calculated as the average of the ethnic regions' wealth over the country's average level of wealth), and we found the indicator to be negative and significant, suggesting that when ethnic regions are relatively wealthy, a country is less likely to experience ethnic rebellion (Model 2b in Table 2).

When turning from ethnic conflict to ethnic protest in Figures 4a, 4b, and 4c, we find further evidence for our conditional hypotheses. As with ethnic rebellion, Figure 4a illustrates that as a state becomes more fiscally decentralized, the likelihood of protest increases, if the society is characterized by high levels of inter-regional inequality. Because of the wide confidence intervals around the line representing low levels of inter-regional inequality, we are, however, not able to say with certainty that there is an opposite trend in more egalitarian societies. Whereas we found no evidence for an appeasement effect of fiscal transfers on ethnic rebellion and armed conflict, Figure 4b tells us that in states where ethnic groups are regionally concentrated, higher levels of central transfers are associated with less likelihood of major ethnic protest. Again, the confidence intervals around the line representing low ethnic concentration are too wide to say with certainty that transfers have any effect in relatively homogenous societies.

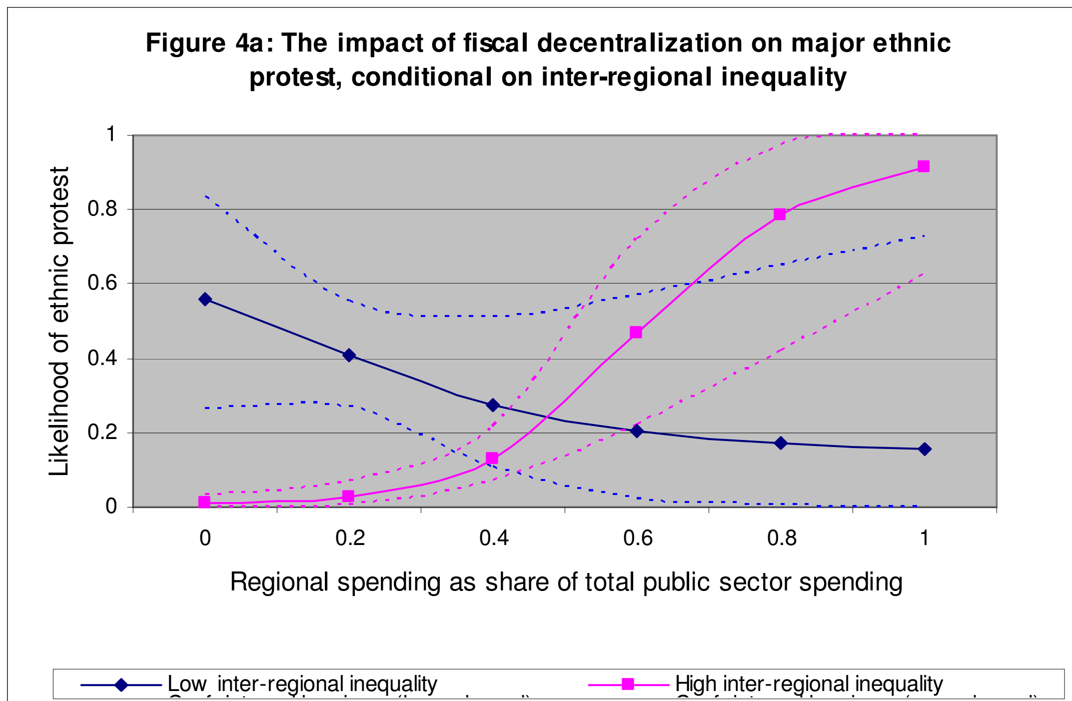


Figure 4a: The impact of fiscal decentralization on major ethnic protest, conditional on inter-regional inequality

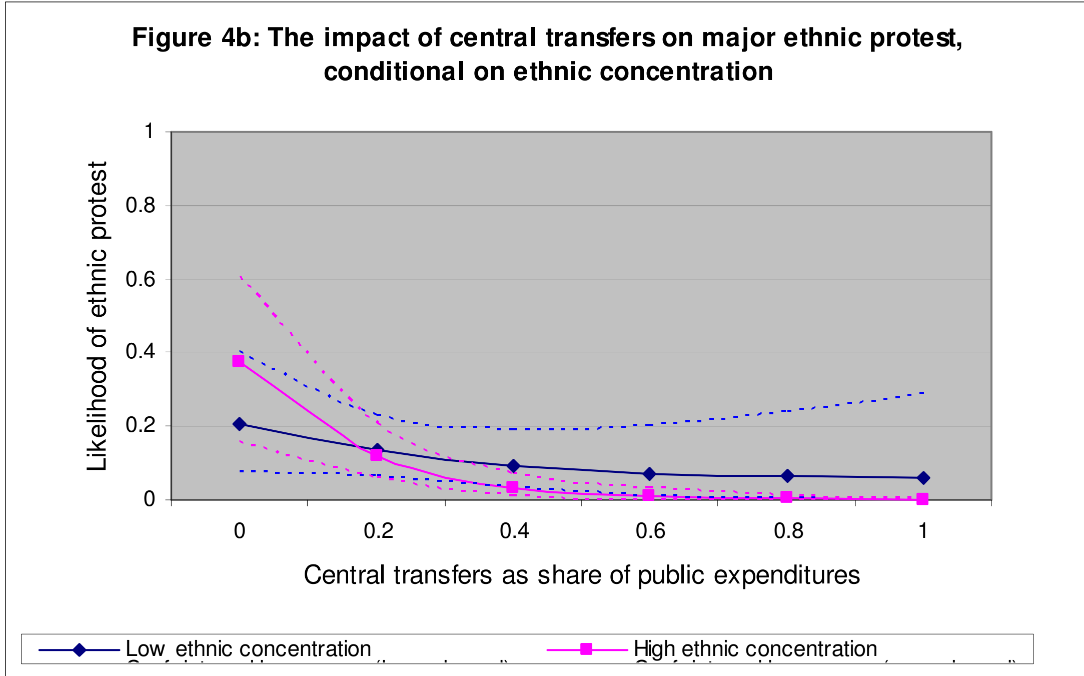


Figure 4b: The impact of central transfers on major ethnic protest, conditional on ethnic concentration

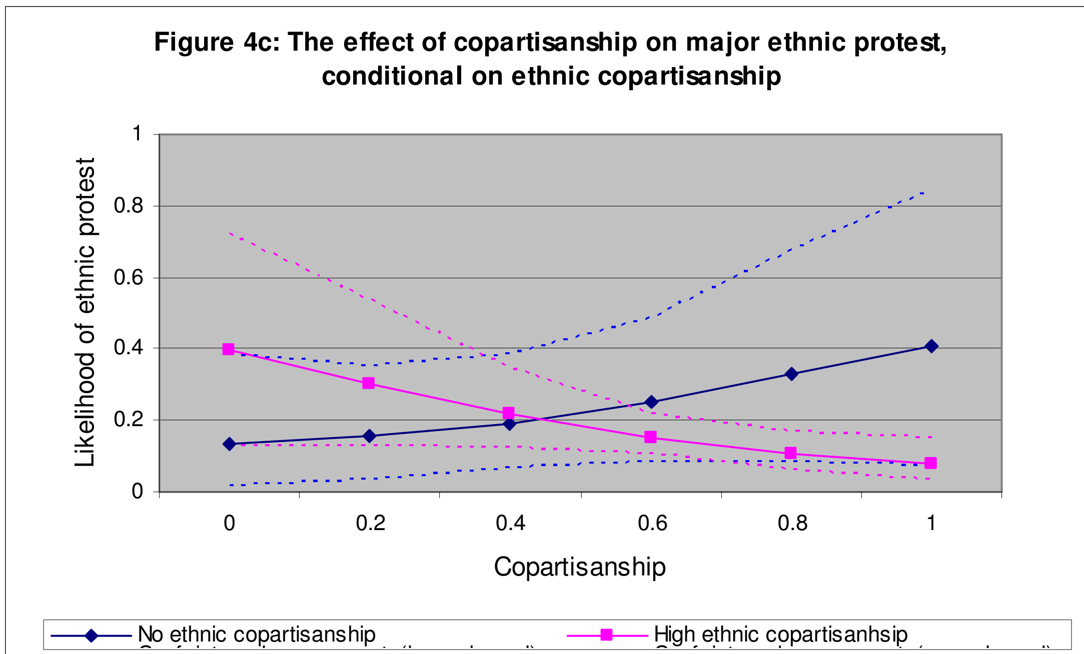


Figure 4c: The effect of copartisanship on major ethnic protest, conditional on ethnic copartisanship

Finally, as in the case of armed conflict in general and ethnic conflict more specifically, Figure 4c lends support to the notion that the party ties across tiers of government are important. Although the confidence intervals are relatively wide, the graphs suggest that as general copartisanship increases, there is a higher chance of major ethnic protest if ethnic regions are excluded from the nationally governing party. Likewise, it is also seems that as general copartisanhip rises, there is a decreasing chance of major ethnic protest if ethnic regions are copartisans of the center.

Robustness Checks
Though we have gone to great pains to collect as much data as possible on these federations, we would like to emphasize that the relatively small number of cases (about 355) under analysis suggest caution in interpreting these results. To increase confidence in the findings, we have estimated a number of alternative models. First, we removed the interaction terms from our models and compared their performance to our full models. Relying on the area under the ROC (Receiver Operating Characteristic) curve as a measure for accuracy (King and Zeng 2001), we found that the models including the interaction terms fare better.[35] As indicated in footnote 30, our models also outperform more standard models in the large-n conflict literature. While the differences among the models are modest, they nonetheless suggest that our interactive models provide more accuracy.

Second, we exchanged the measure of ethnic concentration based on majority/minority regions with one that includes the population of regions in which more than a quarter of the population belongs to an ethnic minority group (the ethnic regions of column 2 in Table1), which made for no major changes in our results. We also estimated our models without Nigeria and without Ethiopia, as those are the two countries for which we do not have income data based on regional GDP (see footnote 20) and for which, in the Nigerian case, regional ethnic data are questionable, but these exclusions made no difference to our main findings regarding conditional effects. Furthermore, estimating all of the models without the clustering of errors on countries produced similar results across the dependent variables.

VI. Conclusion and Further Research

As policy discussions concerning both post-war Afghanistan and Iraq have shown, federalism or decentralized governance represents one option for managing conflict in divided societies. The literature on intrastate conflict, however, has concluded that federalism is both a cure and a curse for divided states: While the promise of federalism lies in its combination of shared-rule and self-rule, the danger lies in the possibility that federalism encourages mobilization along ethnic lines. Moreover, while the federalism literature does a good job pointing to the possible effects of a number of institutional variables, it has not systematically taken into account how these institutions may produce different effects in different societies. The premise of this inquiry is that the peace-preserving merits of federalism depend not only on the design of the institutions, but on how these respond to the characteristics of the societies they govern. Specifically, we propose that the conditions under which federalism mitigates political violence are a function of the interaction between federal institutions, regional inequality and ethnic diversity in a society.

The empirical analysis lends support to our major proposition. In a number of figures, we illustrate how institutional effects vary—often dramatically—on the underlying social makeup of societies. We find that the degree to which federal states politicize both ethnicity and inequality affect conflict patterns in these states—the interaction of high inter-regional inequality and ethnic concentration increases the likelihood of ethnic conflict. We also find that fiscal decentralization's contribution to ethnic peace is conditional on the distribution of wealth in federal states. Finally, co-partisanship between the government at the national and provincial levels helps "hold the state together" only when the national government's co-partisans include ethnic minority/majority regions. In contrast, a strong national party that excludes ethnic regions serves to exacerbate ethnic conflict.

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[35] The area under the ROC curve ranges from 0.5 to 1, and numbers closer to 1 are preferred because 1 indicates that the diagnostic test for the model achieves both 100 percent sensitivity and 100 percent specificity. In our case, for the logit analysis of armed conflict, the area under the ROC curve of the full model was 0.9830, while the corresponding number for the analysis excluding the interaction terms was 0.9758. For the logit analysis of ethnic conflict, the area under the ROC curve for the full model is 0.9531, while the number for the limited model is 0.9425, and the corresponding numbers for ethnic protest are 0.8045 and 0.7825.

These findings have important implications for the specific literatures on intra-state conflict and federalism, as well as the general literature on institutions. With regards to civil conflict, we take the advice of Saideman et al (2001) who argue that most large-N, cross-national studies of conflict lack many of the domestic-level variables that many theorists expect to influence the propensity for violence within (and between) societies. In finding evidence that federal institutions matter, this research provides impetus to further theoretical and empirical specification of the role of decentralized and intergovernmental politics in shaping conflict. Indeed, given our data constraints and the nature of this large-N project, we believe our findings suggest the need for substantial case study work to more carefully examine the mechanisms underpinning our findings. With regards to the federalism literature, we expand the scope of recent research which has focused overwhelmingly on the role of decentralized governance in the formulation of economic policy. We find further evidence that federalism matters, but in this case its implications reach beyond fiscal, monetary, and redistributive policies to include the very prospects for peace in societies. In contrast to some recent work in comparative federalism, however, we emphasize that the impact of federal institutions is not independent of underlying features of the societies in which those institutions operate. As Filippov et al (2004) note in an excellent recent work on the design of federal institutions, we can identify the key institutional parameters on which federations vary, but the impact of those institutions are likely to vary with several other non-institutional features of polities.

At the broadest level, our research has implications for the ongoing emphasis on institutions in international relations and comparative politics. While one branch of research has emphasized the independent importance of institutions in shaping outcomes, another has emphasized the endogeneity of institutions and their dynamic interaction with other features of societies and the international system in affecting politics. With its emphasis on the interactions between institutions and society, our research squarely falls in the latter category. One crucial implication of the evidence and emphasis here is that prescribing institutional fixes for the economic and political divisions that a number of contemporary federations face is fraught with difficulties. Indeed, one important policy implication of this research is that successful institutional design requires in-depth knowledge of the societies the institutions are meant to govern. If institutions and societies interact in complex ways, institutional engineering becomes a very tricky endeavor indeed. That a certain hegemonic power finds itself engaged in several attempts to engineer institutional solutions in sharply divided societies suggests that its current policymakers have failed to appreciate the intricate connections between states and societies.

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Appendix 1: Data Sources

Data on fiscal decentralization and grants are taken from the IMF, *Government Finance Statistics Yearbook,* various years, with the following exceptions:

Argentina: Unpublished Ministry of Finance Data.

Colombia: Lozano, Ignacio E. 2000. "Colombia's Public Finance in the 1990s: A Decade of Reforms, Fiscal Imbalance, and Debt." Department of Economic Research, Banco de la República, Colombia. Available online at http://www.banrep.gov.co/docum/ftp/borra174.pdf.

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Germany:

- German Federal Statistics Agency. Available at http://www.statistik-bund.de.
- Unpublished data provided by the Finance Ministry of the state of Baden-Württemberg.

Mexico: Combination of *GFS* and Instituto Nacional de Estadística, Geografía e Informática. Various years. "Finanzas Públicas Estatales y Municipales de México."

Nigeria: Central Bank of Nigeria. Various years. *Annual Report and Statement of Accounts*. Lagos: Central Bank of Nigeria. Available online at http://www.cenbank.org/documents/data.asp.

Pakistan: Government of Pakistan, Finance Division. Various years. *Economic Survey*. Karachi: Manager of Publications.

Russia: Data on Russian Public Finance Data, 1993-1999, provided by Judith Thornton, Department of Economics at the University of Washington, Seattle.

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Appendix 2: Ethnic Regions in Federal States, 1978-2000

Federation	Ethnic majority/minority regions	Ethnic minority regions
Belgium (1993-)	Walloon Region: Hainaut, Liege, Luxembourg, Narum, Walloon Brabant (French lang.)	Same
Canada	Quebec (French lang.) Nunavut (Inuktitut lang.)	Same
Czechoslovakia (-1992)	Slovak Republic (Slovak)	Same
Ethiopia (1994-)*	Afar (Affar) Somali (Somalie) Tigray (Tigraway)	***Also*** Benishangul-Gumuz (Jebelawi) Gambelle (Nuwer)
India	Andra Pradesh (Telugu lang.) Assam (Assamese lang.) Goa (Konkani lang.) Gujarat (Gujarati lang.) Jammu and Kashmir (Kashmiri and Urdu lang., Muslim rel.) Karnataka (Kannada) Kerala (Malayalam) Maharashtra (Marathi) Manipur (Manipuri) Meghalaya (Khasi lang., Christian rel.) Mizoram (Lushai/Mizo lang., Christian rel.) Nagaland (non-Hindi lang., Christian rel.) Orissa (Oriya lang.) Punjab (Punjabi lang., Sikh rel.) Sikkim (Nepali lang.) Tamil Nadu (Tamil lang.) Tripura (Bengali lang.) West Bengal (Bengali lang.) UT Dadra and Nagar Haveli (Gujarati lang.) UT Daman and Diu (Gujarati lang.) UT Lakshadweep (Malayalam lang.) UT Pondicherry (Tamil lang.)	Same
Malaysia	Pulau Pinang (Chinese)	***Also*** Sabah (indigenous pop.) Sarawak (indigenous pop.) Johor (Chinese) Perak (Chinese) Selangor (Chinese) Sembilan (Chinese)
Mexico	None	Chiapas (indigenous pop.) Oaxaca (indigenous pop.) Yucatan (indigenous pop.) Quintana (indigenous pop.)
Nigeria**	Abia (Igbo, Christian rel.) Akwa-Ibom (Southern min., Christian rel.) Anambra (Igbo, Christina rel.) Bayleson (Southern min., Christian rel.) Cross Rivers (Southern min., Christian rel.) Delta (Southern min., Christian rel.) Ebonyi (Igbo, Christian rel.) Edo (Southern min., Christian rel.) Ekiti (Yoruba) Enugu (Igbo, Christian rel.) Imo (Igbo, Christian rel.) Lagos (Yoruba) Ogun (Yoruba) Ondo (Yoruba) Osun (Yoruba) Oyo (Yoruba)	Same

	Rivers (Southern min., Christian rel.)	
Pakistan	Sindh (Sindhi) NWFP (Pakhtun)	***Also*** Baluchistan (Balochi)
Russia (1992-)	Aginskiy Buryatskiy AOk R. of Chechnya Chuvasia R. R. of Dagestan R. of Ingushetia Kabardino-Balkarskaya R. Komi-Permyatskiy AOk R. of North Osetia R. of Tyva	***Also*** R. of Altay R. of Buryatia R. of Kalmykia Karachaevo-Cherkesskaya R. R. of Mariy El R. of Mordovia R. of Sakha (Yakutia) R. of Tatarstan Udmurt R. Ust-Ordynskiy Buryatskiy AOk
South Africa (1994-)***	Eastern Cape (Xhosa) Free State (Sotho) Limpopo (Sepedi) Northern Cape (Afrikaans) North West (Setswana) Western Cape (Afrikaans)	***Also*** Mpumalanga (Swati)
Spain	Catalonia (Catalan) Galicia (Galician) Basque Country (Basque)	***Also*** Balearic Islands (Catalan) Valencia (Catalan)
Switzerland	Geneva (French) Jura (French) Neuchâtel (French) Vaud (French) Valais (French) Fribourg (French) Ticino (Italian)	Same
USA****		***Also*** California (Spanish lang., Hispanic) New Mexico (Spanish lang., Hispanic) Texas (Spanish lang., Hispanic) Hawaii (Asian) Maryland (African Am.) South Carolina (African Am.) Georgia (African Am.) Alabama (African Am.) Mississippi (African Am.) Louisiana (African Am.)
USSR (-1991)	Belarus (Belarusan) Ukraine (Ukrainian) Moldova (Romanian) Lithuania (Lithuanian) Latvia (Latvian) Estonia (Estonian) Azerbaijan (Azeri) Armenia (Armenian) Georgia (Georgian) Uzbekistan (Uzbek) Tajikistan (Tajik) Turkmenistan (Turkmen) Kyrgyzstan (Kyrgyz)	***Also*** Kazakhstan (Kazak)
Venezuela		Amazonas (indigenous pop) Delta Amacuro (indigenous pop.)
Yugoslavia (-1991)	Slovenia (Slovene) Croatia (Croat) Montenegro (Montenegrin) Macedonia (Macedonian) Kosovo (Albanian)	***Also*** Bosnia Herzegovina (Bosniak)

Notes: “Minority/majority regions” (M/M regions) are defined as those in which half of the population belongs to an ethnic group that is different from the largest ethnic group in the country as a whole (based on census category ethnic affiliation, religious affiliation, and/or mother tongue/regional language spoken at home). Capital territories are not counted as M/M regions.

“Ethnic minority regions” are defined as regions where one quarter of the population belongs to an ethnic group different from the largest ethnic group in the country as a whole (based on census category ethnic affiliation, religious affiliation, and/or mother tongue/regional language). In this category, regions where more than 25 percent of the population belongs to one or more indigenous groups are also counted. Capital territories are not counted as minority regions.

* In Ethiopia, there is no one national majority group, and the two largest ethnic groups are almost of the same size (in 1994, the Oromo made up 32 percent of the population and the Amara 31 percent of the population). Thus, we consider both the Oromo and Amara to be the largest ethnic groups.

** This is based on Nigeria expert Rotimi Suberu’s classification of which ethnic and religious groups *dominate* in the different states. The Hausa-Fulani is the largest ethnic group (29 percent), while Islam is the dominant religion (50 percent) in the country as a whole. Census data in Nigeria are highly disputed.

*** This is based on language groups (home language). There is no one majority language group in South Africa. The largest language group is the Zulu speakers, who per the 1996 census made up 23 percent of the population (the second largest group was Xhosa speakers, 17.9 percent).

**** First in the 2000 Census do California and Texas have more than 25 percent of the population declaring Spanish to be the language spoken at home, but the share of the population declaring they are of Hispanic origins is above 25 percent also in 1990 (but not in the 1980 census). Maryland does not have an African American population exceeding 25 percent until the 1990 census.

Appendix 3: Additional Figures