

**Conflict Linkages:  
Democratic Institutions and Their Effect on  
Ethnic Political Violence**

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Comprehensive Exercise

April 27, 2007

The phenomenon of political violence committed by the citizens against the state is the source of much debate and contention. Explanations of political violence by minority and ethnic groups in a country cover a wide range of factors, from socioeconomic disparity to cultural and political discrimination. The question remains as to how one might reduce the motivation to resort to violence. The use of democratic institutions has been suggested as one way in which states reduce their amount of violence. This presents the question of the role of political institutions on the level and nature of political violence. Simply put, does the kind of institutional framework matter in determining incentives for political violence committed by ethnic groups when other possible causes are controlled? In this paper I will evaluate the link between ethnically charged political violence and the institutional makeup of a country over time. I argue that the extant literature is too rigid in its conclusions. The literature argues that either certain institutions or set of institutions is better at combating ethnic violence, while I contend that a more nuanced approach to ethnic political violence needs to be taken by policy makers. This paper concludes that a definitive set of institutions fails to account for nature of inter-institutional relations and how numerous institutional frameworks can alleviate ethnic political violence.

The rationale behind ethnic political violence and its link to democratic institutions is imbedded in the rationalizations of ethnic violence from the outset. Ethnic political violence occurs for a number of reasons including but not limited to disenfranchisement with the current system due to economic strife or general state weakness, as well as failures in consolidation and exclusion from the power structure (Brown, Coté Jr., Lynn-Jones, and Miller, 1997). In a situation in which political violence occurs, often the failure or lack of democratic institutions is the underlying cause.<sup>1</sup> Democratic institutional shortcomings can compound violence problems

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<sup>1</sup> Institutional failure is not limited to mean improper functioning of the institution, but can include inappropriate kinds of institutions based on societal constraints. For example, in a multiethnic state the prevailing logic suggests

if they fail to ameliorate grievances through peaceful channels and if they leave violence as the only recourse. The importance of democratic institutions in maintaining stability underscores ethnic strife because they can provide an apparatus that allows for equal representation and access of minority groups to the decision-making bodies.

The causes of ethnic political violence outlined below are not universal as each episode contains its own set of nuances. However, much the literature argues that many of the factors that can lead to ethnic conflict can be decreased or eliminated with effective democratic institutions.<sup>2</sup> Backed by this rationale, I contend that certain democratic institutions can diminish the desire to violently oppose the state better than others; however I avoid making any prescriptive conclusions.

### **The Causes of Political Violence**

The literature on political violence that is relevant to this study is concerned with the causes of ethnic violence and the issues on which groups contend, although there is little agreement on the subject.<sup>3</sup> The work of Gurr and Harff point to three main issues that bring about violence: “the desire for ‘exit’ or independence from the state, the demand for greater autonomy within the state, or the recognition and protection of minority interests within a plural society” (Gurr and Harff, 1994: 111).<sup>4</sup> Brown et al. (1997) expand upon these three general wants by outlining the four underlying factors that can cause internal conflict in a state:

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that a presidential system would leave minority groups perpetually excluded from the executive branch and lead to conflict and instability.

<sup>2</sup> This paper acknowledges the contending school of thought that suggests democratic institutions can lead to increased ethnic violence, but accepts the argument put forth by Lijphart (1977) and others that institutions can effectively reduce ethnic violence regardless of the regime type.

<sup>3</sup> The “ethnic” component is discussed below.

<sup>4</sup> The strength of desire for each of the three issues can be decreased through effective democratic institutions. The desire for both to independence and more autonomy can be curtailed through a federalist structure that grants more freedoms and self-governance. Minority interests can be maintained with a proportional electoral system that provides representation to minority groups. The argument is not that institutions are the total solution to ethnic violence, but demonstrates how they can work to help alleviate the motivations behind violence. There is contention over this issue as Thorp, Caumartin, and Gray-Molina (2006) argue that ethnicity is rarely a motivating factor in political violence in ethnically divided Latin American countries.

structural, political, economic/social, and cultural/perceptual.<sup>5</sup> The literature contends that the presence of one or a combination of these factors can bring about internal conflict especially along ethnic lines (Brown et al., 1997; Horowitz, 1985; Gurr and Harff, 1994; Diamond and Plattner, 1994). The rationale is that these factors will lead a group to question the legitimacy of the government and turn to self-reliance. For example, a structurally weak state will see more instances of political violence due to power struggles and groups' compulsion to provide their own defense (Brown et al., 1997).<sup>6</sup> The elements of the state and their relation to political violence underscore the importance of democratic institutions and their role in curbing conflict.

The ethnic component of the violence committed against the state is undeniable and it is widely supported in the literature due to the dynamics of groups with common interests. The authors that support this position argue that ethnic conflict is a necessary piece in understanding the nature of political violence since the conflict is frequently the result of disequilibrium or discrimination (both economic and cultural) along ethnic lines in the society (Gurr, 2000; Regan and Norton, 2005; Rapoport and Weinberg, 2001, Eckstein, 2001; Daley, 2006; Brown et al., 1994). Much of the literature explores the historical factors that enfranchised some groups but excluded others, which helps illustrate the often longstanding inequalities that can persist in democracies that can lead to violence. Gurr (2000) asserts that ethnic violence is more likely to occur in an institutional situation where marginalized ethnic groups have higher incentives to protest. Horowitz (1985) and Gurr (2000) present institutional prescriptions for curbing ethnopolitical violence that advocate different forms of the consociational system of government

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<sup>5</sup> Each larger factor contains a number of subset factors. Structural factors includes weak states, intra-state security concerns, and ethnic geography; Political factors includes contains discriminatory political institutions, exclusionary national ideologies, inter-group politics, and elite politics; Economic/Social factors includes economic problems, discriminatory economic systems, problems stemming from economic development and modernization; Cultural/Perceptual factors includes patterns of cultural discrimination, problematic group histories. See Brown et al. (1997) for more information.

<sup>6</sup> Maintenance of group security directly relates to the security dilemma, which will be discussed below.

outlined by Lijphart (1977). The attention given to the ethnic underpinnings of political violence is extensive and exemplifies the strength of the linkage between the two.

Inherently linking ethnic groups and political violence is the assumption that groups can act collectively towards political goals. This paper accepts the argument put forth by Saideman, Lanoue, Campenni, and Stanton (2002) and Lichbach (1995), which contends that ethnic and minority groups can act together successfully. The ability to overcome the problem of collective action is integral to understanding how groups perceive themselves and their political situation. The significance of ethnic groups acting collectively suggests that the benefits of action outweigh the costs for a dissident and that a group can attain positive results from protest. Gurr and Harff (1994) further this logic by suggesting that “[f]inding like-minded individuals with similar grievances intensifies discontent and increases willingness to take action,” (Gurr and Harff, 1994: 84).<sup>7</sup> Identification with an ethnic group provides the setting for individuals to form a collective and take action against perceived injustices. Establishing that ethnic groups act collectively toward a common goal is useful in understanding the larger and nuanced dynamics at play in ethnic political conflict.

Ethnic violence can also have an emotion-based motivation, as opposed to the more rational approach of collective action (Horowitz, 1985; Peterson, 2002; Saideman et al., 2002). The argument suggests that emotions shape a group’s interpretation of a situation and can elicit certain emotions that can lead to violent action.<sup>8</sup> Feelings such as weakness, fear of survival, and subordination can motivate a group to act against the group in power to alleviate such emotions.

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<sup>7</sup> Groups identity can be strengthened by the following factors: shared grievances, religion, language, history, culture and place of residence (Gurr and Harff, 1994).

<sup>8</sup> Peterson outlines four primary emotions that lead to action: Fear, Hatred, Resentment, and Rage. See Peterson (2002).

The idea of deep-seeded hatred is rejected in most of the literature, suggesting instead that groups act predominately on fear related to a pressing threat.

Nationalism contains elements of collective action and group membership dynamics and therefore is frequently associated or intertwined with ethnic conflict. Dandeker (1998) points out that it is because “national identity is bound up with territory and political autonomy that national conflict are fundamentally associated with the risk of violence” (Dandeker, 1998: 26). A nationalistic movement’s potential for violence stems from four basic conditions: 1) whether the movement has attained statehood 2) the movement’s proximate relation to its national diaspora 3) the movement’s respect or denial of other nationalistic independence movements 4) the movement’s respect or abuse of its own minorities (Van Evera, 1997). It is very difficult to disaggregate ethnic and nationalistic conflicts, as there are numerous points of overlap between the two. In this paper, nationalistic conflicts are included in the analysis of ethnic conflict.

### *Institutional Solutions*

The prevailing prescriptions on what institutional and social dynamics are useful in combating political violence take numerous forms depending on the root cause of the conflict. There are some significant divergences in the literature on conflict resolution and reduction hinging on which institutional framework best depresses the incentives for political violence. The literature on divided and plural societies is particularly relevant as it discusses institutions allow groups to coexist in a state. Although most authors agreed on the importance of “grand” coalition building, proportional elections, and mutual veto powers to bring all groups into the

political and decision-making process and allowing them to protect their interests, there is intense contention over federalism or territorial autonomy.<sup>9</sup>

On the one hand, federalism can disperse conflict and allow groups control over their own affairs (Diamond and Plattner, 1994). The logic follows that “decentralization permits groups that may have no hope of being prominent in the central government to have some venue to express their cultural distinctiveness,” (Diamond and Plattner, 1994: xxvii; Lake and Rothchild, 1997). Saideman et al (2002), Peterson (2002), and Lake and Rothchild (1997) extend the support for federalism claiming that it helps alleviate the security dilemma put forth by Posen (1993).<sup>10</sup> Although federalism can be an essential element in cases of linguistic or cultural cleavages, it “may more aptly be described as the objective of certain conflict groups rather than as a process through which the conflict is regulated,” suggesting the possibility of federalism with subversive effects (Lijphart, 1977; Nordlinger, 1972: 31). Horowitz (1985) is considerate of the possible problems with federalism and is careful not to embrace it altogether, arguing that it is important how federalism is structured and implemented as well as how many sub units are created. The rationale follows that dividing a country into too many small states can lead to unviability and fiscal strain. Linz and Stepan (1978) warn against the implementation of federalism, arguing that it can reinforce existing tensions by accentuating divided loyalties.<sup>11</sup>

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<sup>9</sup> Lijphart’s central characteristic of consociational democracy is the “grand coalition,” which requires “participation by the leaders of all significant segments” of society (Lijphart, 1977: 31). See Lijphart (1977) and Nordlinger (1972) for more information on their specific arguments.

<sup>10</sup> Saideman et al. (2002) argue that the greatest threat to an ethnic group come from the government when that group is not in power. “Groups may fear that others control the government and may use its resources (the army, the secret police, the courts, economic influence) against them” (Saideman et al., 2002: 106). Thus groups seek to control the state, which only adds to the fears of other groups who are in competition with each other. The dilemma is useful in demonstrating how groups can come in conflict with one another over access to the decision-making apparatus of the government. See Posen (1993) for more on the security dilemma.

<sup>11</sup> The subversive potential of federalism cannot be overlooked, but its potential usefulness in abating ethnic conflict is the quality on which this analysis focuses. See Bunce (1999) for further discussion of subversive federalism.

With regard to other aspects of Lijphart's consociational model, Horowitz (1985) questions the plausibility of a "grand coalition," contending that political tension and intraethnic competition will constrain the opportunities for interethnic cooperation. The importance of proportional elections as a tool to allow minority groups some representation at the national level is consistent throughout most of the literature, however some leave open the possibility for implementation of presidential systems that allow the "freedom of leadership to pursue a conflict-reducing course," (Horowitz, 1985: 576). Saideman et al. (2002) explicitly argue on the side of presidentialism for reducing political violence, but agree with logic that plurality electoral systems are more likely to see incidents of conflict. Drawing on Shugart and Carey (1992) and Shugart and Mainwaring (1997), Saideman et al. (2002) point to the system of checks and identifiability offered by presidential systems that better satisfy the conditions of ethnic security dilemma. According to the theory, groups are more likely to become violent when they cannot block policies designed to harm them, therefore benefiting from the division of power in presidential systems. The checks offered by the legislative branch, even if one party controls both the presidency and the legislature, allow for more potential veto players so an ethnic group can stop discriminatory policy.<sup>12</sup> Veto player theory parallels the idea of mutual veto that Lijphart (1977) and Nordlinger (1972) support in the consociational model, however Saideman et al. (2002) neglect to include an institutional veto player measure and fail to test its role in curbing ethnic conflict.

Based on the literature there are a number of relationships that I expect to find between democratic institutions and level of political violence. This study tests the consociational model's claims that proportional electoral systems, coalitional governments, federalist states, and increased mutual veto powers will reduce the level of political violence perpetrated by ethnic and

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<sup>12</sup> For more information on Veto Player Theory see Tsebelis (2002).

minority groups. With the relevant literature explored, the next section focuses on the methodology I use in this paper.

### **Method of Study**

This study focuses on cases of conflict involving ethnic and minority groups over time (from 1992 to 1998) as reported by the *Minorities at Risk* (MAR) dataset (Gurr, 1999). It tests the findings of the study conducted by Saideman et al. (2002) that concluded that the presence of a proportional electoral system and a federal state system reduce the amount of political violence. An important implication of their study suggests that the electoral system is more important than the design of the executive institution, which was an unexpected finding due to the claims present in the literature that contends the difference between presidential and parliamentary systems.

Given the different dynamics of populations across countries and regions in terms of economic, social and ethnic indicators, I will conduct a cross-regional study comparing the kind and level of political violence with the variety of institutional frameworks present from both the MAR dataset and the Comparative Democratic Institutions (CDI) dataset (2006).<sup>13</sup> The resulting dataset consists of politically active ethnic and minority groups divided into 111 national groups across 46 countries totaling 777 group-year cases.

I take advantage of cross-sectional time-series analysis with panel-corrected standard errors to account for heteroskedasticity and autocorrelation. I include lags of the dependent variable in the model to correct for residual serial auto-correlation.<sup>14</sup> Using Ordinary Least

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<sup>13</sup> The CDI dataset was produced by students in the POSC 385 Comparative Democratic Institutions course as part of a class project fall term 2006. The dataset consists of institutional and economic trend variables for 70 countries. I employ the following institutional measures from the CDI dataset: presidential or parliamentary system, plurality or proportional electoral system, federalism, institutional veto players, and Gallagher Index.

<sup>14</sup> For more information on the use of cross-sectional time-series analysis with panel-corrected standard errors, see Montero (forthcoming) and Beck and Katz (1995, 1996).

Squares regressions with panel-corrected standard errors allows this study to look at the effect of institutions over time and account for changes in the institutional framework of a state which will show how different political institutions play different roles in affecting the level of ethnic political dissent. Looking at the cases over time also accounts for changes in the activities of the different ethnic groups as well as the effect of changes in institutional structure.

The main dependent variables in the study come directly from the MAR dataset and are divided into two types of political violence: protest and rebellion.<sup>15</sup> Each reports the most severe incident of protest or rebellion committed by each relevant group in a given year, and range from 0-5 and 0-7 respectively.<sup>16</sup> As there are two dependent variables in this study, I will be analyzing each in order to observe the different dynamics of rebellion and protest in their relation to political institutions.

The coding of the variables forces a number of shortcomings that must be addressed. First, the variables capture only the highest scoring action by a group in a given year regardless of how many total incidents might have been committed by a group in that year. Therefore, if a group holds a protest of under 100,000 people, there is no measure of how many protests they held of under 10,000 people, since they receive only one score for the larger action. Second, the two variables do not account for anomic protests such as a massive war protest, instead capturing only actions committed by ethnic minority groups against the state, which is a result of how they

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<sup>15</sup> See Appendix A for frequency tables for each dependent variable.

<sup>16</sup> The protest variable is coded as follows: 0 = no incident reported, 1 = verbal opposition, 2 = symbolic acts of resistance, 3 = demonstration with less than 10,000 participants, 4 = demonstration with less than 100,000 participants, 5 = demonstration with over 100,000 participants.

The rebellion variable is coded as follows: 0 = no rebellion reported, 1 = political banditry, 2 campaigns of terrorism, 3 = local rebellion, 4 = small-scale guerilla activity, 5 = intermediate-scale guerilla activity, 6 = large-scale guerilla activity, 7 = protracted civil war.

For more information on the coding of these variables consult the MAR codebook available at: <http://www.cidcm.umd.edu/inscr/mar/data.asp>.

were initially coded in the MAR dataset. Despite these shortcomings, the variables are useful as they accurately report the maximum level of dissent expressed by a group in a given year.

The independent variables in this study are the institutional variables from the CDI and MAR datasets and are coded for the type of executive construction, electoral system, federalism, and number of institutional veto players.<sup>17</sup> I also employ measures of disproportionality in the lower house of the legislature using the Gallagher Index.<sup>18</sup> These additional institutional measures are included to account for elements in the literature that have not been included in other studies. They should help capture some of the nuanced properties of political institutions that are not represented by the dichotomous main independent measures of institutional makeup.

Other controls are included in my analysis in order to account for other factors that could affect the dynamics between ethnic groups in a society. Controls for economic development include GDP per capita and government expenditures as a percentage of GDP to control for social spending and governmentally funded expansion. Using these controls gives us an effective measure of how the country is doing economically over time, which can directly affect a citizen's incentives to protest or rebel. The rationale is that if a citizen sees economic improvement, he or she is less likely to protest that government's policy. Other variables that are included in my analysis are the Freedom House measure of political rights, the level of group concentration within a country, and a control for the total number of groups in a country listed in the dataset.

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<sup>17</sup> Institutional veto players “are players...who can block the adoption of a policy” with formal veto power (Tsebelis, 1995: 305).

<sup>18</sup> The Gallagher Index (or Least Squares) is found by calculating the difference between the percentage of votes received and the percentage of seat won for each political party then summing the differences in order to get a measure of overall disproportionality for the election.

The equation is as follows: 
$$LSq = \sqrt{\frac{1}{2} \sum (V - S)^2}$$
 (Lijphart, 1999).

This study also includes indices from the MAR dataset for cultural, economic, and political differences, which account for the differentials between a group and the dominant group in the country. The differentials are not necessarily the result of any direct discrimination and include six different components that produce each index. These controls are useful in accounting for any inherent differences between ethnic groups over a broad spectrum of facets.<sup>19</sup> I also included control variables that measure ethnic and religious fractionalization to account for the level of homogeneity of the society. The variables do not measure inter- and intra-group dynamics, which are the keys to understanding how the relative fractionalization will affect the level ethnic conflict (Horowitz, 1985). The literature contends that neither high nor low levels of ethnic or religious fractionalization are sufficient to account for increased political violence, which is the basis for their use as controls (Fearon and Laitin, 2003; Mousseau, 2001). Lastly, I included regional control dummies in order to observe if political violence was concentrated in certain regions over the years of analysis due to the social and political dynamics unaccounted for in my other variables.

## **Results**

The outcome of my statistical analysis produced some puzzling and provocative results, which raise a number of questions about the previous large-N studies done on this topic. Both the models of protest and rebellion were inconsistent and varied depending on which variables were

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<sup>19</sup> The Economic Differentials Index varies from -2, which indicates the group is most advantaged, to 4, which indicates an extreme disadvantage. The components that make up the Economic Differential Index are Income, Land/Property, Higher Education, Presence in Commerce, Presence in Professionals, and Presence in Official Positions.

The Culture Differentials Index varies from 0 to 4 with 0 coded as no difference to 4 coded as extreme differential. The components of the Culture Differentials Index are Different Ethnicity/Nationality, Different Language, Different Historical Origin, Different Religion, Different Social Customs, and Different Residence.

The Political Differentials Index varies from -2, which indicates an advantaged position, to 4, which indicates extreme differentials. The components of the Political Differentials Index are Access to Power, Access to Civil Service, Recruitment, Voting Rights, Rights to Organize, Equal Legal Protection.

For more information about these variables see the Minorities at Risk codebook available at: <http://www.cidcm.umd.edu/inscr/mar/data.asp>, as well as Gurr (1999, 2000).

included or dropped. In every model that included the lag of the dependent variable, the majority of the explanatory power was coming from the lagged variable. When certain variables came up significant in one test, they lost their significance when other independent and control variables were included, however tests for multicollinearity showed none present. Some variables were dropped from analysis completely due to consistent insignificant relationships in all iterations of the models. Despite some inconsistencies, the results do reinforce some of the theories in the literature. In the following sections I will discuss a number of the models I analyzed for both dependent variables.

### *Rebellion*

The tests involving incidents of rebellion do not confirm conclusions from previous studies when the lagged variable is included. Since there are quite different dynamics at play that motivate a group to rebel rather than protest, one would not expect to see the same result as with protest, which is confirmed in my analysis.

Beginning with a simple model at first and then systematically adding control variables, my first regression (and all my subsequent models) included the lagged dependent and the four main independent variables indicating the different institutional structures as well as the Gallagher index. The results from Model 1 showed that aside from the lagged dependent variable only the measure for PR (not including mixed member systems) was significant, indicating that proportional elections systems suffered fewer rebellious acts. As controls for cultural, economic, and political difference are included in the regression in Model 2, the type of electoral system continues to be significant along with the cultural and political difference indices. The results suggest that as *political* differences increase rebellious acts increase and as *cultural* differences increase the amount of rebellion decreases.

The latter relationship seems counterintuitive, as one would expect that a culturally homogenous country would suffer from fewer rebellions. This counterintuitive finding is continued and expanded when the controls for ethnic and religious fractionalization are included in the regression in Model 3. PR remains significant in the expected direction while the cultural difference index and the measure of religious fractionalization are significant and run in the opposite direction one would expect. This finding suggests a situation in which mostly homogenous societies experience rebellion. A further discussion of this finding can be found in the conclusion section of this paper.

Model 4 includes the measure for group concentration and removes the ethnic fractionalization measure. The political differentials index becomes significant again which suggests a relationship between level of group concentration and the level of political difference between groups and the majority. The model is also becoming more robust as it explains over 78 percent of the variance in the rebellion variable while including 640 cases.

Model 5 includes the Freedom House measure of political rights, which comes out significant and operates in the expected direction, suggesting that as political rights increase, incidents of rebellion decrease. Although this outcome is fairly straightforward, the addition of the Freedom House measure causes the executive construction variable to be significant for the first time, demonstrating that parliamentary systems see more incidents of rebellion than presidential systems over time. The direction of the relationship is contrary to the consociational argument and requires further discussion in the next section. The number of institutional veto players also becomes significant suggesting that over time the more veto players a system has the more rebellion it will experience. Model 5 also contains a control for the total number of groups

**Table 1: Cross-Sectional Time-Series Analysis of Rebellion, 1992-1998**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Lag of Rebellion	<b>.8729162</b> (.0557824)***	<b>.8724701</b> (.0559544)***	<b>.839642</b> (.0660685)***	<b>.8509124</b> (.0627926)***	<b>.8358467</b> (.0669633)***	<b>.8351185</b> (.0670473)***
Executive Construction (ordinal)	.0279621 (.0212318)	.0197077 (.021835)	.0311996 (.0242581)	.028866 (.022034)	<b>.0896567</b> (.0388922)**	<b>.0947231</b> (.0399403)**
Proportional Only Electoral System	<b>-.0735286</b> (.0346651)**	<b>-.1061204</b> (.0399989)**	<b>-.0901625</b> (.0393469)**	<b>-.1437832</b> (.0523736)**	<b>-.1498382</b> (.0493429)**	<b>-.1451202</b> (.0522953)**
Institutional Veto Players	.040277 (.032088)	.0433931 (.0310671)	.0354355 (.0284768)	.0227617 (.0261072)	<b>.0571261</b> (.0318105)*	<b>.0610678</b> (.0316007)*
Gallagher Index	.0330084 (.3371652)	.1835561 (.3419097)	.674689 (.424035)	.3996538 (.3161536)	.3364704 (.3181934)	.3204329 (.3204072)
Federal	-.0297457 (.0834275)	-.0239053 (.0790768)	-.0279184 (.1508081)	.0559028 (.0908734)	.0507267 (.10164)	.0405748 (.1102701)
Freedom House Political Rights					<b>.0727936</b> (.0378272)*	<b>.0810947</b> (.0437451)*
Group Concentration				.0481028 (.0386346)	.0423405 (.0324011)	.0440904 (.0338734)
GDP per capita						.00000191 (.00000308)
Number of Groups in the Country					<b>-.0207727</b> (.0119026)*	-.0196219 (.013221)
Culture Differential Index		<b>-.0382386</b> (.0200511)*	<b>-.0405058</b> (.0235081)*	<b>-.0357626</b> (.0183476)*	<b>-.0388034</b> (.0187825)**	<b>-.0377454</b> (.0189803)**
Political Differential Index		<b>.0400113</b> (.0230181)*	.01356 (.0278429)	<b>.0360894</b> (.0181929)**	.0089156 (.0257067)	.0091856 (.0255113)
Economic Differential Index		-.0018446 (.0085394)	.0141003 (.0162922)	.0020075 (.0107534)	.0137992 (.0177627)	.0132867 (.0172388)
Religious Fractionalization			<b>-.4293847</b> (.179376)**	<b>-.3668471</b> (.1666638)**	<b>-.3797117</b> (.1722629)**	<b>-.391457</b> (.1709121)**
Ethnic Fractionalization			.4697883 (.3889784)			
Constant	-.0216372 (.0910213)	.0309882 (.0929278)	-.0053029 (.1035844)	.1026305 (.086787)	-.093833 (.1172483)	-.1495776 (.1832523)
N	656	640	640	640	640	640
R <sup>2</sup>	0.7832	0.7844	0.7887	0.7871	0.7893	0.7894
Wald X <sup>2</sup>	1019.00	1593.94	10128.22	13038.38	22883.17	32145.49
Prob > X <sup>2</sup>	0.0000	0.00000	0.0000	0.0000	0.0000	0.0000

Note: Figures are regression coefficients with unbalanced data. Numbers in parentheses are panel-corrected standard errors. \* significance at .1; \*\* significance at .05; \*\*\* significance at .001.

Table 1 continued:

	Model 7	Model 8	Model 9	Model 10	Model 11
Lag of Rebellion	<b>.8117303</b> (.077121)***	<b>.8410545</b> (.0655311)***	<b>.8426463</b> (.0672438)***	<b>.8354191</b> (.0686488)***	
Executive Construction (ordinal)	.0429173 (.0412021)			<b>.092002</b> (.0392576)**	<b>.4879934</b> (.0545492)***
Executive Construction (dichotomous)		-.1424595 (.1044079)	-.0773041 (.0964715)		
Proportional Only Electoral System	-.1399647 (.0970345)	<b>-.1768977</b> (.0655937)**			<b>-.4171898</b> (.1108559)***
PR with Mixed systems			-.0640357 (.0636917)	-.0483112 (.0561408)	
Institutional Veto Players	<b>.0731268</b> (.0425692)*	<b>.073759</b> (.0387229)*	.0559035 (.0401638)	<b>.0627872</b> (.0341866)*	<b>.2273576</b> (.0408918)***
Gallagher Index	.4484061 (.393369)	.4828296 (.3377609)	<b>.7722025</b> (.336318)**	<b>.53614</b> (.3148986)*	-.2299326 (.5443779)
Federal	.0951998 (.0671394)	.0560388 (.1195971)	.0976607 (.1172286)	.0681979 (.1110224)	<b>-.264723</b> (.1026754)**
Freedom House Political Rights	<b>.1294098</b> (.6656618)*	.04079 (.0346747)	.0385918 (.0324468)	<b>.0812593</b> (.0403792)**	<b>.4930983</b> (.069634)***
Group Concentration	.0521955 (.0373409)	.0425163 (.0341467)	.0287525 (.0344578)	.0331281 (.0351255)	<b>.3905556</b> (.0371364)***
GDP per capita	-.00000359 (.00000817)	-.00000161 (.00000297)	-.00000138 (.00000330)	.00000206 (.00000315)	<b>.0000181</b> (.00000574)**
Number of Groups in the Country	<b>-.0241717</b> (.0134873)*	-.0109191 (.0129127)	-.0034358 (.0124895)	-.0119283 (.0121464)	.0237139 (.0258448)
Culture Differential Index	<b>-.046249</b> (.0219693)**	<b>-.0301005</b> (.0179633)*	<b>-.0345348</b> (.0182891)*	<b>-.0393623</b> (.0194847)**	<b>-.0625471</b> (.037484)*
Political Differential Index	.0170337 (.0177393)	.0232914 (.0233805)	.0147788 (.0230074)	.000736 (.0238915)	<b>-.0952761</b> (.045356)**
Economic Differential Index	.0173587 (.0197077)	.0101582 (.0174615)	.0099864 (.0178451)	.0145911 (.0173241)	<b>.1838527</b> (.0215192)***
Religious Fractionalization	<b>-.4838237</b> (.1955147)**	<b>-.4002042</b> (.1659301)**	<b>-.4107573</b> (.1657197)**	<b>-.4133721</b> (.1741132)**	<b>-1.590982</b> (.1895533)***
Africa Region Dummy	.1294098 (.6656618)				
North America Region Dummy	.0088961 (.0742091)				
Latin America Region Dummy	-.2883311 (.3348521)				
Central Europe Region Dummy	-.1015043 (.2033012)				
East Asia Region Dummy	<b>-.1773465</b> (.0632936)**				
Other Region Dummy	<b>.173303</b> (.0959638)*				
Constant	.0577897 (.1784059)	.0530202 (.1732719)	.0212136 (.1667062)	-.1984752 (.1655975)	-1.724013 (.3645703)
N	640	640	640	656	640
R <sup>2</sup>	0.7919	0.7883	0.7872	0.7885	0.3063
Wald X <sup>2</sup>	60.34	334610.74	1172.37	89123.70	660.52
Prob > X <sup>2</sup>	0.0000	0.00000	0.0000	0.0000	0.0000

Note: Figures are regression coefficients with unbalanced data. Numbers in parentheses are panel-corrected standard errors. \* significance at .1; \*\* significance at .05; \*\*\* significance at .001.

in the country, which is significant and has a negative coefficient, indicating that as the fewer groups in a country the more rebellious acts it experiences.

The next set of models included the economic and regional controls that produced some unexpected results. In Model 6, the addition of the GDP per capita variable (although insignificant itself) causes the number of groups control to be insignificant. The variables for executive construction, electoral system, institutional veto players, cultural difference index, religious fractionalization, and the Freedom House measure of political rights remained significant as in the previous model.

The inclusion of the regional dummies in Model 7 causes the executive construction and PR measure to become insignificant while veto players, the number of groups control, cultural difference index, and religious fractionalization maintained their significance. Both the East Asian region dummy and the Other region dummy were significant but operated in opposite directions.<sup>20</sup> The result suggests that over time the East Asian countries experienced fewer rebellious acts while countries in the Other region experienced increased rebellion.

The final iterations of the rebellion dependent variable produce results that are unexpected and have interesting implications for further discussion. Model 8 includes a measure of the electoral system that is dichotomous rather than ordinal so that mixed systems are included with parliamentary systems. The electoral system, institutional veto players, the cultural difference index, and religious fractionalization are significant and having the same relationship with the dependent variable as in prior models. Of important note is the Freedom House measure of political rights no longer being significant, which is explained by the coding of the ordinal executive construction variable that accounted for authoritarian regimes. Not controlling for

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<sup>20</sup> The regional control labeled “Other” consists of countries in Middle East and Australia and New Zealand.

authoritarian regimes leaves the political rights in a country insignificant in relation to the number of rebellious acts over time.

Model 9 keeps the dichotomous measure of executive construction and substitutes the PR only variable with an electoral system measure that includes mixed-member systems with PR systems. The results of that model are strikingly different and indicate an unexpected interaction between the variables, as only the Gallagher Index, the Cultural Differentials Index, and religious fractionalization being significant. The Gallagher Index relationship suggests that as disproportionality in the lower house of the legislature increases over time the level of rebellion in the country also increases. The relationship suggests that mixed-member systems, which contain elements of both majoritarian and proportional electoral systems, interact with the disproportionality index and not accounting for mixed-member systems makes disproportionality significant.

Model 10 reverts back to the ordinal measure of executive construction, while keeping the mixed-member and PR combined electoral system variable. This iteration results in executive construction, institutional veto players, the Gallagher Index, the Freedom House political rights, the Cultural Differentials Index, and religious fractionalization all significant. The results display some interesting interactions between the variables especially with regard to the Gallagher Index and electoral system and executive construction and political rights. It seems as though when regime type is accounted for in the executive construction variable then the political rights become significant as those factors are indelibly linked. The same link applies to electoral system and the disproportionality index, as the type of electoral system will inevitably be responsible for the level of disproportionality.

When the lagged dependent variable is removed in Model 11, many variables are significant but the model loses most of its explanatory power by only explaining 30 percent of the variance in the dependent variable. This finding is not incredibly surprising, as one would expect the amount of rebellious acts in the previous year to explain much of the rebellion in the next year. This result from Model 11 suggests that without the lagged dependent variable the model is under-specified and makes the significant relationships in the model unreliable.

### *Protest*

In building a complete model of the protest dependent variable was much the same as the tests of rebellion, as I started out simply then progressively including more controls to see if the initial institutional variables held their significance. In the first iteration I included the lagged dependent variable and the five institutional measures: federalism, executive construction, institutional veto players, proportional electoral system (PR) and the Gallagher Index. The only measure that was significant, aside from the lagged dependent variable (which was significant in every iteration), is the institutional veto players measure, suggesting that countries with more veto players experience more incidents of protest over time. Model 1 was able to capture 43 percent of the variance in the protest dependent variable including 656 cases.

In Model 2, I included the cultural, political, and economic differential indices. Institutional veto players maintained its significant relationship, with federalism and the economic differential index also coming up significant. The direction of the federalism variable suggests that federal countries experience fewer incidence of protest over time, which is consistent with the arguments for federalism in the consociational democracy literature. The economic differentials index also suggests a logical relationship with incidence of protest increase as the economic difference between a group and the majority increases.

The results in Model 3, in which I added the ethnic and religious fractionalization controls, showed that the institutional veto player variable was no longer significant. However, when religious fractionalization is removed and the number of groups control is added in Model 4, institutional veto players becomes significant along with ethnic fractionalization but federalism becomes insignificant. The results suggest some relationship between the changing variables in Models 3 and 4, however there is no multicollinearity affecting the models. The full implications of this result will be discussed in the conclusions section.

Model 5 included controls for economic conditions and trends in the country measured by governmental expenditures as a percentage of GDP and GDP per capita, respectively. Neither economic control is significant while the other variables that were significant in Model 5 maintained their significance. Although the economic controls are insignificant the economic differentials index suggests that economic standing is linked to protests over time. A full discussion of the relationship between economic circumstances and democratic institutions falls outside the realm of this paper but will be touched on briefly in the conclusions section.

Model 6 included the Freedom House political rights measure, which is insignificant but causes the number of groups in the country control to be significant. The direction of the relationship suggests that countries with fewer groups experience more incidence of protest. Although this relationship is opposite to the one suggested by the ethnic fractionalization measure, if one considers a situation in which one group dominates over another group the chance for protest by the marginalized group increases.

Model 7 adds the regional dummy variables to account for any regional phenomenon to incidences of protest. Only the Other region dummy comes up significant with a positive coefficient indicating that countries in that region experienced increased protest over time.

**Table 2: Cross-Sectional Time-Series Analysis of Protest, 1992-1998**

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
Lag of Protest	<b>.667801</b> (.0982048)***	<b>.6617339</b> (.0990556)***	<b>.6610036</b> (.0989848)***	<b>.6517108</b> (.1004316)***	<b>.6581157</b> (.1003471)***	<b>.6583711</b> (.1002523)***
Executive Construction (ordinal)	-.0003467 (.0722387)	-.0040181 (.0777545)	.0008604 (.076332)	.0136789 (.0798952)	.0243237 (.0672173)	.0313102 (.0558305)
Proportional Only Electoral System	-.0201653 (.0973887)	-.0672521 (.0837702)	-.0492313 (.0833813)	-.0988498 (.1058479)	-.0795213 (.127113)	-.0777675 (.1326769)
Institutional Veto Players	<b>.0524308</b> (.0303979)*	<b>.0480775</b> (.0264462)*	.0474071 (.0304436)	<b>.067534</b> (.0332921)**	<b>.0763142</b> (.0334157)**	<b>.0801885</b> (.0364393)**
Gallagher Index	-.097726 (.5869675)	-.272836 (.5625238)	-.0699355 (.5645016)	.0148586 (.5588721)	.0641601 (.5447757)	.0384712 (.6127582)
Federal	-.0302302 (.0481785)	<b>-.0847432</b> (.0457904)*	<b>-.1307917</b> (.0425144)**	-.0892935 (.0829883)	-.0754329 (.1038072)	-.0779401 (.1137671)
Freedom House Political Rights						.0106042 (.058046)
Government Exp. (% of GDP)					.0053013 (.006925)	.0059263 (.0062765)
GDP per capita					-.00000092 (.00000672)	-.000000273 (.00000906)
Number of Groups in the Country				-.0305758 (.0192758)	-.0345277 (.0223838)	<b>-.0355433</b> (.0197405)*
Culture Differential Index		.0668635 (.0543259)	.0601588 (.0548532)	.0670046 (.0502439)	.0692534 (.0607219)	.0689962 (.0596684)
Political Differential Index		-.0226183 (.0261453)	-.0308512 (.0304057)	-.0280226 (.028431)	-.026779 (.0396688)	-.0286992 (.0415758)
Economic Differential Index		<b>.047583</b> (.0201232)**	<b>.0557099</b> (.0207208)**	<b>.0483849</b> (.0222923)**	<b>.0503662</b> (.0257687)*	<b>.0512289</b> (.0263153)*
Religious Fractionalization			-.0159252 (.2109724)			
Ethnic Fractionalization			.2723776 (.2147369)	<b>.3693032</b> (.2058234)*	<b>.4303749</b> (.2386081)*	<b>.415393</b> (.2387217)*
Constant	.4759924 (.1810056)	.2899556 (.1245176)	.1819991 (.1220285)	.1921174 (.1603511)	.0175139 (.2543418)	-.0285595 (.4286293)
N	656	640	640	640	619	619
R <sup>2</sup>	0.4314	0.4387	0.4403	0.4426	0.4541	0.4541
Wald X <sup>2</sup>	202.56	10421.31	512.94	184.72	168.60	2549.57
Prob > X <sup>2</sup>	0.0000	0.00000	0.0000	0.0000	0.0000	0.0000

Note: Figures are regression coefficients with unbalanced data. Numbers in parentheses are panel-corrected standard errors. \* significance at .1; \*\* significance at .05; \*\*\* significance at .001.

Table 2 continued:

	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>
Lag of Protest	<b>.635705</b> <b>(.104329)***</b>	<b>.6367892</b> <b>(.1050506)***</b>	<b>.6357742</b> <b>(.105977)***</b>	
Executive Construction (ordinal)	.0072523 (.0635383)			.089066 (.0589056)
Executive Construction (dichotomous)		.1114647 (.1024526)	.07824 (.0811864)	
Proportional Only Electoral System	-.0333246 (.1991131)	-.0703689 (.1859174)		<b>-.3784965</b> <b>(.1179155)***</b>
PR with Mixed systems			-.0896373 (.1035309)	
Institutional Veto Players	<b>.0665739</b> <b>(.0348468)*</b>	<b>.0833004</b> <b>(.031297)**</b>	<b>.0789029</b> <b>(.0336858)**</b>	<b>.164253</b> <b>(.0320656)***</b>
Gallagher Index	.813395 (.6786181)	.8063009 (.6999311)	.797689 (.7121645)	.7058335 (.7793929)
Federal	-.0686347 (.0957956)	-.0590795 (.0888748)	-.0467391 (.0921045)	.0862432 (.1151164)
Freedom House Political Rights	-.0251223 (.0464971)	-.0153563 (.0440293)	-.0166967 (.0426734)	-.0238471 (.0608227)
Government Exp. (% of GDP)	.0028021 (.0070644)	.0017965 (.0081561)	.0023784 (.0082381)	<b>.0305097</b> <b>(.0068048)***</b>
GDP per capita	-.00000532 (.00000831)	-.00000326 (.00000883)	-.00000381 (.00000877)	-.00000724 (.00000856)
Number of Groups in the Country	-.0207418 (.0256694)	-.0187268 (.024515)	-.0152216 (.0176865)	<b>-.1152158</b> <b>(.0152471)***</b>
Culture Differential Index	.0697573 (.0743898)	.0499683 (.0800798)	.0489855 (.0774721)	<b>.1187929</b> <b>(.0487879)**</b>
Political Differential Index	-.0294135 (.0448978)	-.0067298 (.0408544)	-.0032542 (.0440033)	-.0346742 (.0387701)
Economic Differential Index	.0394258 (.0264108)	.0143364 (.0287688)	.0120561 (.0302504)	<b>.0752212</b> <b>(.0408571)*</b>
Ethnic Fractionalization	<b>.5745489</b> <b>(.2627294)**</b>	<b>.4780101</b> <b>(.2619561)*</b>	.4400921 (.2744623)	<b>.8976703</b> <b>(.287934)**</b>
Africa Region Dummy	-.1018314 (.3038148)	-.0124472 (.3122765)	.0590221 (.2720997)	
North America Region Dummy	.0995993 (.1820544)	.1435189 (.175059)	.1300311 (.1521414)	
Latin America Region Dummy	.0403373 (.231424)	.1625408 (.2517253)	.1683794 (.2465289)	
Central Europe Region Dummy	-.0740489 (.1909602)	-.0261392 (.2150462)	-.0141083 (.1962874)	
East Asia Region Dummy	.4856875 (.4142385)	.4354846 (.4080565)	.4843731 (.3063564)	
Other Region Dummy	<b>.492769</b> <b>(.195127)**</b>	<b>.5760899</b> <b>(.2275198)**</b>	<b>.5854631</b> <b>(.2261738)**</b>	
Constant	.0382944 (.4231292)	-.0046446 (.4193081)	.0481726 (.3983466)	.6639321 (.479774)
N	619	588	588	619
R <sup>2</sup>	0.4620	0.4636	0.4638	0.0900
Wald X <sup>2</sup>	6636.36	32649.43	4375.26	192.16
Prob > X <sup>2</sup>	0.0000	0.0000	0.0000	0.0000

Note: Figures are regression coefficients with unbalanced data. Numbers in parentheses are panel-corrected standard errors. \* significance at .1; \*\* significance at .05; \*\*\* significance at .001.

Only ethnic fractionalization and institutional veto player remained significant in this model, which explained over 46 percent of the variance in the protest dependent variable and include 619 cases.

Changing the nature of the executive construction and electoral system variables has almost no effect on the results demonstrating that the inclusion of mixed-member electoral systems and accounting for authoritarian regimes does not affect the variables' relationship with the dependent variable. Models 8 and 9 use the same new measures for both executive construction and electoral system as in the analysis of rebellion, however the results are not as striking. Only the economic differentials variable is affected as it becomes insignificant when mixed-member systems are included in the PR measure.

In the final protest model, I include all the control variables but remove the lagged dependent variable. In this iteration of the model, many variables come up significant but the explanatory power of the model is severely reduced with only 9 percent of the variation in the dependent variable explained. The model is under-specified without the lagged dependent variable, just as in the results from the rebellion variable.

Overall the outcome of my statistical analysis produces some results that confirm some of the logic in the literature but fail to suggest definitively that the institutional structure of a country is a key determinate of ethnically charged political violence. The inconsistent performance of many of the variables and the overwhelming strength of the lagged dependent variable in every regression raises questions about the explanatory power of the institution and control variables. Some of the results are unexpected and seems to be counterintuitive which raises some interest questions about the relationship between the dependent variable and a

number of the controls. The next section of this paper is devoted to discussion of the findings and their implications.

### **Discussion and Implications**

The results of the regression analysis point to a nuanced relationship between ethnic political violence and democratic institutions. This study diverges from previous studies in that, although it confirms that some institutions are shown to experience lower levels of ethnic conflict over time, it does not demonstrate a definitive set of institutions as better than other. While other studies have suggested an institutional model that combats ethnic political violence, this study's statistical tests cannot claim that one framework should be adopted to alleviate ethnic strife. The interplay between many of the main independent variables and the various control variables without suffering from multicollinearity problems indicate that the simplistic conclusions reached by Saideman et al. (2002) and others fail to grasp the full complexity of institutional dynamics.

The first area of discussion hinges around the ethnic and religious fractionalization variable that had not been included in a previous large-N statistical study on ethnic conflict. The cultural difference index variable from the MAR dataset helped to capture some of the group-specific characteristics concerning religion, but no measures in previous studies have controlled for the overall makeup of the countries. This seems fairly intuitive if one considers that the dataset is divided among ethnic groups in a country. The rationale follows directly from Lijphart (1977), who was advocating for the consociational model of governance in *plural* societies. Is it not reasonable to account for the overall level of plurality or fractionalization of the country? Although it is intuitive to assume that, as a country is more fractionalized, the more incidences of conflict it experiences as groups compete for the power apparatus, which follows

Posen's (1993) security dilemma argument. Some simple bivariate correlations confirm Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg's (2003) argument, as the ethnic fractionalization variable was significantly correlated with a number of the main independent variables including federalism and PR. This is logical considering that the relative level of ethnic fractionalization might influence policy makers to adopt PR and perhaps also federalism. The ethnic fractionalization variable also relates with the economic trend variables, which is consistent with Alesina et al. (2003) who argue that very ethnically fractionalized countries experience slower growth as the variable correlates strongly with GDP per capita. These contending factors suggest removing ethnic fractionalization from analysis of protest and help explain some of the erratic behavior of the model when it is used.

In the regression analysis of rebellion, religious fractionalization was a confounding factor, as it seemed to operate in a counterintuitive direction. The literature on religious fractionalization actually confirms the inverse relationship between level of fractionalization and rebellion, claiming that highly fractionalized countries tend to be more tolerant and free societies that will experience fewer incidents of rebellion. The cultural difference index also captured some of this trend, which also held a negative relationship with rebellion in the regressions. The relationship can also be rationalized through investigation into cases of low religious fractionalization and why they experience more rebellious acts by the minority ethnic groups. A case such as Ireland is useful in understanding the relationship as it contains two groups in high competition for power and therefore a higher chance of rebellious acts committed by one group if it is excluded from the decision-making apparatus.

The next issue that arose from the protest analysis regarded economic controls and their relationship to the institutional structure of the country, particularly with regard to government

expenditures. The rationale behind including government expenditures as a percentage of GDP is based on the idea of social states that expend a large amount on programs designed to increase quality of life for citizens. One would expect for countries that have high government expenditures to have fewer incidents of protest by the majority, but groups that are excluded would be more likely to protest. Although it was never significant in the different iterations of the regression, the coefficient indicated that as government expenditures increased the number of protests increased.

More important than the interaction with the dependent variable was the government expenditure variable's relationship with the other institutional independent variables. Government expenditures holds a positive relationship with the executive construction in bivariate analysis which suggests that parliamentary systems have more government expenditures measured as a percentage of GDP. Is the connection derived through the nature of the executive with parliamentary systems sponsoring more social programs than presidential systems? Discussion of the issue falls outside this study but would be a useful area of further research. The regional control variables extend the depth of the relationship between executive construction and government expenditures, with developing regions such as Latin America and East Asia having an inverse relationship with government expenditures while developed countries experienced higher level of government expenditures.

The GDP per capita results are a point of divergence between rebellion and protest as the relationship in bivariate correlations between GDP per capita and protest was insignificant while being negative and significant with rebellion. Although not significant in any of the time-series regressions, GDP per capita relationship with the other institutional indicators and regional dummies should not be ignored. The rebellion results suggest that as personal wealth increases

rebellious acts decrease. This relationship holds except when marginalized groups are more concerned with basic survival and are not able to engage in rebellious acts. However if economic conditions improve marginally, groups will engage the government in an attempt to fundamentally change their position. Saideman et al. (2002) agrees with this rationale contending that “economically disadvantaged groups lack the resources (e.g., time, organization, and leadership) to engage in massive protest activity” (Saideman et al., 2002: 123).

Although the level of development is a key to understanding the impetus to rebel or protest in regard to GDP per capita and its role in the models, it is the connection between GDP per capita and institutions that is important to this inquiry. GDP per capita holds a relationship with the number of institutional veto players in the country which bivariate correlations confirm, suggesting that as institutional veto players decrease the GDP per capita increases. A possible rationalization of the relationship draws on the ease of economic reform and the number of veto players. The argument follows that a large number of veto players makes economic reform difficult or impossible especially in times of crisis.

Using institutional veto players as a factor in determining the connection between ethnic political violence and democratic institutions is confirmed through both the time-series analysis and the arguments in the literature. In the regressions of both dependent variables as institutional veto players increased, rebellions and protests also increased in a statistically significant relationship over time. One would expect that more institutional veto players would effectively stabilize economic policy and keep any malicious or discriminatory domestic policy from being passed against ethnic minorities, thus reducing their impetus for violence. Tsebelis (2002) and Shugart and Carey (1992) contend through a study of presidential and semi-presidential systems with strong presidential legislative powers and more veto players have broken down historically

more than legislatively weak presidential systems that have only one veto player. The increased potential for institutional failure suggested by Tsebelis (2002) is consistent with the findings of this study, confirming that institutional veto players are useful in analyzing ethnic political violence that has been mostly omitted in past studies.

The different result that occurs when mixed-member electoral systems are included or excluded from the PR and executive construction variable in the rebellion analysis is another finding that requires further investigation. When mixed-member and semi-proportional systems are excluded from the PR measure, the veto players measure is the only significant institutional variable in Model 7. However when mixed-member districts are included in the PR variable in Model 10, the Gallagher Index and the executive construction also become significant institutional variables with veto players remaining significant. All three variables have positive coefficients indicating that as they increase, rebellion also increases.

Bivariate tests reveal the effect of the added semi-proportional cases on the variable relationships. When the electoral system measure is just PR it holds a negative relationship with both the executive construction and veto player variables, indicating that as a system becomes more proportional it becomes less presidential and has less veto players. The exact opposite is true when the semi-proportional systems are included in the analysis. The switch in the relationship between the different independent variables suggests that as more semi-proportional systems are included in the regression, disproportionality plays a larger role than executive construction and veto players in determining the number of incidents of rebellion the country experiences.

The final result from the time-series analysis comes from the rebellion tests where the ordinal executive construction was significant but in a direction that indicated parliamentary

systems experience more rebellion over time. The apparent relationship is not confirmed with bivariate tests, which reveal no significant relationship between the executive construction and rebellion variables. The ordinal coding of the variable is put in question due to the inverse relationship of the dichotomous measure of executive construction when it is included in Model 8 and 9. As this result runs in opposition to the other institutional variables only further testing will reveal the true nature of the relationship.

## **Conclusion**

Although this study cuts across a smaller time scale and contains fewer cases than past studies, its results suggest some new dynamics of ethnic political violence that had been omitted. The end results contain some relationships that countered and some that confirmed elements of the consociational literature, suggesting that the consociational institutions model is not as empirically robust as originally hypothesized. The most consistent result is the veto player analysis, which shows that the fewer veto players results in fewer incidents of both rebellion and protest and contradicts the mutual veto theory of the consociational model. On the other hand, some iterations of the analysis show federalism, parliamentary governance, and proportional elections to be effective in reducing the level of political violence over time. Although these results were inconsistent, they confirm some of the consociational model theory.

Despite the results I reserve a caveat, as I argue that none of the results are definitive. I contend that it is inconsequential whether parliamentary governance is more important than proportional elections in stopping ethnic political violence as other studies assert.<sup>21</sup> It is the vested connection between certain combinations of institutions that had been previously ignored that this essay brings to the forefront and merits further analysis. If we assume that there is an institutional framework that is best at combating conflict in plural societies, then contention over

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<sup>21</sup> See conclusions in Saidemen et al. (2003).

which particular individual institution is most effective is inconsequential; what matters is the interplay between the institutions that create effective governance among ethnic groups.<sup>22</sup>

To illustrate this area of further study, I point to the analysis of both dependent variables, in which the institutional veto player variable was significant in the most complete model. The analysis indicates that over time the more institutional veto players a country has the more incidences of protest and rebellion it endures. However it would be foolish to conclude that institutional veto players is any more important in determining the level and kind of political violence committed by ethnic group, because the number of institutional veto players is inherently and statistically connected with the executive construction. Based on the theory behind veto players, institutional veto players are intrinsically connected with presidentialism, which is confirmed with bivariate analysis that shows more institutional veto players occur with more presidential systems.<sup>23</sup>

Regardless of which institutional variable comes up significant in a model, it is the connections inherent between institutions that are worth noting. The fact that PR systems correlate significantly with parliamentary systems and that parliamentary systems correlate significantly with less institutional veto players, which experience less incidents of rebellion over time shown in the time-series analysis, suggests that a recommendation of one type of institution proximately advocates for other institutions.

Although following the logic of proximate advocacy might suggest that aspects of consociational institutions are better at alleviating ethnic conflict than others, I do not contend

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<sup>22</sup> This study tested how the individual institutions perform and drew conclusions about the existing prescriptive models based on how well the individual institutions fit the theoretical framework. As no conclusive model resulted from the time-series analysis, the failure of an empirical validation suggests the necessity of a more nuanced approach.

<sup>23</sup> See Appendix C for a table of bivariate correlations between the main institution independent and political violence dependent variables.

that the consociational model is the ultimate institutional solution to ethnic political violence. My argument advocates for future research to shift away from investigation into specific institutions are the most effective in combating ethnic political violence. Further study of ethnic political violence should look at how the institutions function together to alleviate the conflict. The bivariate relationships between the institutional variables demonstrate how they reinforce one another despite being insignificant in the time-series analysis. Further investigation into the inter-institutional dynamics would serve to illuminate how different institutional frameworks can be equally effective at depressing ethnic political violence.

It is through this approach that could show the benefits of the consociational model, since the results of the time-series only go so far as to suggest that over time certain parts of the institutional structure of the country affect the level and kind of political violence committed by ethnic and minority groups. Since a single institution will not solve ethnic conflict completely, an interconnected system approach must be taken, in which integrated institutional dynamics are taken into account and become the focus of further research.

## **Appendix A:**

### **Frequencies Table: Protest**

	Frequency	Percent
None reported	170	21.9
Verbal opposition	85	10.9
Symbolic acts of resistance	268	34.5
Demonstration: <10k	186	23.9
Demonstration: <100k	52	6.7
Demonstration: >100k	16	2.1
Total	777	100.0

### **Frequencies Table: Rebellion**

	Frequency	Percent
No rebellion reported	581	74.8
Political banditry	50	6.4
Campaigns of terrorism	38	4.9
Local rebellion	15	1.9
Small scale guerilla activity	53	6.8
Intermediate scale guerilla activity	22	2.8
Large scale guerilla activity	10	1.3
Protracted civil war	8	1.0
Total	777	100.0

## **Appendix B:**

### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Protest in a year	777	0	5	1.89	1.291
Rebellion in a year	777	0	7	.78	1.609
Parliamentary or presidential, ordinal	777	-1	2	1.13	.982
Presidential or Parliamentary, dich.	751	0	1	.53	.499
Number of Institutional veto players	751	1	5	2.66	1.219
PR including mixed member	745	0	1	.49	.500
Pure PR versus all other systems	770	0	1	.36	.481
Gallagher index of lower house	656	.000	.606	.08216	.062198
Is the country federal or not?	777	0	1	.39	.487
Freedom House Political Rights	773	1	7	2.83	1.630
Group concentration	777	0	3	1.88	1.184
Number of groups in the Country	777	1	11	4.03	3.079
GDP per Capita	777	-1	37202	7780.17	8973.650
Gov. Exp. (% of GDP)	756	2.976	29.734	15.05909	5.344576
Cultural differences index	777	1	4	2.94	1.077
Political differences index	770	-2	4	1.75	1.528
Economic differences index	756	-2	4	2.35	1.908
Religious Fractionalization	777	.016	.753	.39708	.226576
Ethnic Fractionalization	777	.004	.866	.44558	.216450
Africa region dummy	777	0	1	.03	.162
North America region dummy	777	0	1	.06	.243
Latin America region dummy	777	0	1	.15	.360
Western Europe region dummy	777	0	1	.17	.377
Central Europe region dummy	777	0	1	.20	.399
East Asia region dummy	777	0	1	.05	.208
Southeast Asia region dummy	777	0	1	.23	.424
Other region dummy	777	0	1	.11	.311
Valid N (listwise)	588				

## Appendix C:

### Bivariate Correlations

	Protest	Rebellion	Parliamentary or Presidential (ordinal)	Presidential or Parliamentary (dich.)	PR only	PR and Mixed Systems	Federalism	Institutional Veto Players	Gallagher Index
Protest	1 .000 777	<b>.289**</b> .000 777	.029 .418 777	<b>.127**</b> .001 751	<b>-.096**</b> .007 770	<b>-.078*</b> .034 745	.059 .102 777	<b>.106**</b> .004 751	.054 .169 656
Rebellion	<b>.289**</b> .000 777	1 .000 777	.027 .447 777	<b>.136**</b> .000 751	<b>-.103**</b> .004 770	<b>-.129**</b> .000 745	.056 .119 777	<b>.132**</b> .000 751	.022 .580 656
Parliamentary or Pres. (ordinal)	.029 .418 777	.027 .447 777	1 .000 777	<b>-.485**</b> .000 751	<b>-.103**</b> .004 770	<b>-.100**</b> .006 745	.005 .898 777	<b>-.287**</b> .000 751	<b>.198**</b> .000 656
Pres. or Parliamentary (dich.)	<b>.127**</b> .001 751	<b>.136**</b> .000 751	<b>-.485**</b> .000 751	1 .000 777	<b>-.192**</b> .000 744	<b>.150**</b> .000 745	<b>.297**</b> .000 745	<b>.752**</b> .000 751	.014 .713 656
PR Only	<b>-.096**</b> .007 770	<b>-.103**</b> .004 770	<b>-.103**</b> .004 770	<b>-.192**</b> .000 744	1 .000 777	<b>.617**</b> .000 738	<b>-.296**</b> .000 770	<b>-.095**</b> .010 744	<b>-.256**</b> .000 656
PR and Mixed Systems	<b>-.078*</b> .034 745	<b>-.129**</b> .000 745	<b>-.100**</b> .006 745	<b>.150**</b> .000 745	<b>.617**</b> .000 738	1 .000 777	-.028 .444 745	<b>.229**</b> .000 745	<b>-.090*</b> .022 656
Federalism	.059 .102 777	.056 .119 777	.005 .898 777	<b>.297**</b> .000 745	<b>-.296**</b> .000 770	-.028 .444 745	1 .000 777	<b>.483**</b> .000 751	<b>-.130**</b> .001 656
Institutional Veto Players	<b>.106**</b> .004 751	<b>.132**</b> .000 751	<b>-.287**</b> .000 751	<b>.752**</b> .000 751	<b>-.095**</b> .010 744	<b>.229**</b> .000 745	<b>.483**</b> .000 751	1 .000 777	<b>.104**</b> .007 656
Gallagher Index	.054 .169 656	.022 .580 656	<b>.198**</b> .000 656	.014 .713 656	<b>-.256**</b> .000 656	<b>-.090*</b> .022 656	<b>-.130**</b> .001 656	<b>.104**</b> .007 656	1 .000 777

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

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