Protesting Ethnic Minorities in Europe: A Fuzzy-Set Analysis

Victor Cebotari
v.cebotari@maastrichtuniversity.nl
Maastricht Graduate School of Governance &
Faculty of Arts and Social Sciences
Maastricht University

Abstract

This study analyzes the contextual nature of ethnogroup mobilization in Europe. The focus is on ethnopolitical protest, a form of group mobilization involving peaceful protest. The analysis is based on the “Minorities at Risk” dataset which consists of data on ethnic minorities that are most vulnerable to discrimination practices within European countries. The paper assesses the status of necessity and sufficiency for several conditions in relation to both the presence and the absence of strong ethnopolitical protest for 29 selected minority groups: democracy level, political discrimination, geographical concentration, ethnic fractionalization and the degree of national pride among members of the minority group. The fuzzy-set analysis highlights that minority groups are engaged in strong, but peaceful protest when they (1) are mobilized in a democratic environment, (2) live in a county with a high degree of ethnic fractionalization, and (3) either have weak feelings of national pride or are ethnically concentrated in compact territorial locations. On the other side of the outcome, minority groups without strong ethnopolitical protest (1) have strong feelings of national pride among members of the group, (2) face no political discrimination, and (3) reside in emerging democracies. These results demonstrate the utility of fuzzy set analysis for the investigation of causal complexity in the area of ethnic mobilization.
I. INTRODUCTION

Perhaps the most prominent issues of interest in social studies of the recent decades have been ethnicity and ethnic conflict. Generally, ethnic conflict poses a substantial risk to national stability worldwide and Europe is not immune to this threat. In the aftermath of the Cold War era, there was a domino effect in regime transitions of many if not all of the former communist countries. Following the ideological change, many scholars have predicted that democratization, conflict and ethnicity will become an important focus of the international politics. Various scenarios evolved of how ethnic conflict will be shaped: from “the clash of civilizations” (Huntington 1996) to the “continuing unending nature of conflicts.” (Haas 1990)

In this context, ethnopolitical protest is commonly believed to peacefully accommodate the challenging demands of ethnic diversity. The collapse of communism and the formation of the new democratic regimes in Europe opened a wide range of opportunities for ethnopolitical movements to manifest. According to Tedd Gurr, the peak in ethnic mobilization was achieved at the beginning of the 1990s, after which ethnic challenges continuously dropped (Gurr 2000: xvi). Moreover, all over Europe, a general shift can be observed in ethnopolitical activism, from violent rebellion to peaceful protest, which mainly converges with the increasing democratic governance (Gurr 2000: xiii). Scholars further believe that the change toward peaceful mobilisation is due to an increasing attention toward strategies of recognition and integration of ethnic minorities (Gurr 2000: xiv). Especially in Europe, these strategies have a longstanding value and reached the point when the border between assimilation and integration has almost disappeared (Modood 2005: 2).

An increasing attention should be therefore given to protesting actions, as being an important choice among all ethnic groups which are actively mobilized in Europe. This study builds on previous theoretical work which employs perrenialist, 1 primordialist 2 and constructivist 3 ideas and analyses the factual conditions under which ethnopolitical protest is more prone to manifest. Many engagements in protest or any other form of communal conflict result from an “ethnic security dilemma” — a concept and strategy reflecting the neo-realist tradition of the intergroup relations. Barry Posen would argue that “the condition of anarchy makes security the first concern of states” (Posen 1993: 104) and consequently, ethnic communities behave in the same manner as the sovereign states in the international system. When two or more ethnic groups coalesce, each of the actors tries to maximize its own security in relation to their neighbouring

---

1 Perrenialism explain ethnic mobilization from the perspective of the group ethnic continuity shaped by a set o values and beliefs. For more concise information regarding this debate see Smith (1986), Huntington (1996); Smith (1999: 5-27)

2 Primordialism sees ethnic mobilization from the lenses of groups’ primal features and their historical heritages. The primordial objects such as biological characteristics, religion, language, territory are powerful factors productive of conflict. The primordialist incentives of conflict were treated among others in: Horowitz (2000; 57); Horowitz (2004; 72-73); Grosby (1994; 168).

3 Constructivists consider mobilization as deriving from social and political practices, where a set of social instruments bust the intensity and direction of ethnic movements. See also: Anderson (1991: 16); Posner (2005).
communities. Any action taken by a communal group however, automatically triggers reactions from the opposing group which sees it as an affront to their own ethnic security. It could be a never ending process empowered by the idea of “what one does to enhance one’s own security causes reactions that, in the end, can make one less secure.” (Posen 1993: 104).

This paper employs a technique from the configurational comparative analysis to study which theoretically set conditions are necessary and sufficient to shape the consistency of ethnopolitical protest. The analyzed conditions are the following: democracy level, political discrimination, geographical concentration, ethnic fractionalization and the degree of national pride among members of the minority group. The core question is how these factors account for the status of necessity and sufficiency in relation with the strength of ethno-communal mobilization or on opposite, with its absence.

The utility of using the fuzzy sets approach stays in the nature of the analyzed outcome but also in the characteristics of the employed measurements. Ethnopolitical protest is believed to be a very diverse and volatile phenomenon, an aspect which the conventional quantitative analysis cannot fully grasp. Instead, the fuzzy-sets technique can integrate both quantitative and qualitative features by perfectly combining the assets of conventional interval variables and characteristics of set theoretic distinctions which are available to the researcher in the context of the conducted study. The final result is a comprehensive understanding of protest mobilization from the view of necessity and sufficiency - two ground pillars of the fuzzy sets technique. So far, there is no recorded study employing fuzzy sets measurements on the desire to protest among European ethnic minorities “at risk” for discrimination. While completing this study, evidences will be depicted in a dimension which cross-borders the traditional existing studies in the field of ethnopolitical mobilization.

The paper is structured as follows. First, we underline what conditions this study employs and what expectations can be predicted in terms of necessity and sufficiency. Data characteristics, fuzzy-sets methodology and operationalization will be explored in the second place. Third, in line with the established hypothesis, the results will be presented for both sides of the outcome. Finally, the study will be summed up by a concluding discussion.

II. CONDITIONS AND CAUSAL STATEMENTS

While defining ethnic mobilization, this study focuses on ethnopolitical protest as its outcome. Originating from Minority at Risk data, it records information on protest actions by ethnic groups directed against the majority or the dominant group(s) which might also represent the ruling authority in the state (see also section III). The base of the ethnopolitical protest is to assert and protect the group interests (Gurr 1993b: 162). In doing so, the protesting actions may vary in range and intensity from verbal opposition and symbolic resistance to large scale demonstrations. Five conditions are also included in the analysis. They represent the linkage to the explanatory side of the fuzzy-sets model. The employed conditions are listed below as follows:
A. Political Discrimination

Any form of discrimination is logically linked with an increased desire for mobilization. The presence of political discrimination against an ethnic community leads to dissatisfaction and grievance formation which are likely to be transformed into a chain of mobilization events. Previous empirical studies have shown that ethnic groups are more likely to rebel when their political status is threatened by the ruling authority (Gurr 1993b; Gurr and Moore 1997). Ethnic groups, additionally, feel deprived and disadvantaged when their political representation is considerably lower than those of other groups in the country. In such cases they tend to blame the state for their status by regarding their deprivation as a constructivist act of political injustice (Horowitz 2000; Gurr 1970; Marshall and Gurr 2003).

The practice of continuous discrimination is thus rationally linked with a possible threat for strong mobilization. The assumed relationship is that severe political discrimination poses a sufficient, yet not a necessary condition for the emergence of strong protest. The cause of sufficiency can be conceptualized in the following manner – if there are consistent political discrimination practices then ethnic groups mobilize in strong ethnopolitical protest. However, discrimination cannot sustain the cause for necessity that is; strong ethnopolitical protest occurs only if there is political discrimination. There is a straightforward reason why this is the case. In general, there are different modes to discriminate, and political disadvantages might influence only a marginal proportion of minority groups to become highly mobilized. When politically discriminated, ethnic groups might decide to go for powerful protest, or alternatively, might prefer avoiding it and not risking deepening further inequities. Commonly, apart from discrimination practices, there should be a cumulative set of conditions which added together might balance the group desire toward high level protest.

B. Geographical Concentration

When considering the ethnic security dilemma, Barry Posen (1993) stipulates that minorities in ethnically homogenous regions are more advantaged to start ethnic strikes against opposing groups. The territorial configuration leading to the warfare events between Serbian, Croat and Muslim communities in Bosnia, practically underlines the security dilemma argument. Steven Grosby (1994) further emphasizes that “ethnic groups and nationalities exist because there are traditions of belief and action towards primordial objects such as territorial location. In such perspective, it is not surprising that geographical distribution of minority groups is seen as an important explanatory condition when observing ethnic mobilization. In a study based on Minorities at Risk data, Ted Gurr (1993b: 179-180) has found that geographical concentration had no relevant effect on protest mobilization. Monica Toft (1996; 2003) also, conducted an extensive research on how the geographical factor impact on the inter-ethnic violence. Her studies reveal the feasibility of this predictor—concentrated or “pocket” minorities are most likely to enter violent strike while the dispersed, especially urban minorities are the least predisposed to rebel. Also, most countries with more than two regionally-compact minorities are more likely to be exposed for ethnic rebellion. Further studies, also based on Minority at Risk data, validate Toft’s findings and reconfirm the argument that regional dominating minorities have higher tendencies for violent actions (Gurr 2000: 75; Fearon and Laitin 1999).
Even though the greatest number of empirical work focuses exclusively on the emergence of inter-ethnic violence, we consider territorial concentration as having an explanatory power for ethnopolitical protest as well. Geographically compressed minorities have better intergroup communication and stronger shared identity and are therefore easier to become mobilized in accommodating their ethnic demands (Gurr 2000; Gurr 1993b; Smith 1991; Saideman 2002).

We thus deduct that an ethnically compact territory is a sufficient condition for the emergence of strong protesting actions. The existing literature constantly underlines the fact that if a minority is concentrated in a certain territory then strong ethnopolitical protest occurs more often. This condition makes sense given that mass protest can be materialized only in the presence of a substantial number of ethnically mobilized protesters. Ethnically compact territories have the potential for that activating quantity which can be exploited with minimum of efforts by the mobilizing elites.

Therefore, it is not surprising that a convincing majority of scholars believe that compact concentrated minorities are mostly those who are predisposed to intensely mobilize. Given that condition, we might expect that geographical factor should also be a necessary condition for the emergence of ethnopolitical protest. The logic of necessity involving the geographical concentration might be expressed as follows: strong ethnopolitical protest emerge if and only if there are territorial compact concentrated minorities. In other words, the status of necessity implies that strong ethnopolitical protest cannot take place without ethnic groups being geographically packed in distinct territorial locations. This statement is based on the idea that in any circumstances, dense territorial minorities will raise constant grievances to the ruling authorities. Even though the logic of necessity is making sense for the emergence of strong protest, we cannot hold this rule as generally applicable. Given certain circumstances, dispersed or urban minorities might be highly mobilized as well – as it is the case for Catholics in Northern Ireland or Russians in the Baltic States.

**C. Democracy Level**

The literature constantly underlines the direct influence which democracy has on the intensity to which ethnic conflict is manifesting. The way democracy impact on conflict, however, is still widely disputed among scholars. Many argue that strong democracies are better in handling ethnic strife and consequently, are less likely to experience violent conflict. The argument is based on the fact that well-established democracies have the necessarily instruments to manage pluralism peacefully (Gurr 1993b; Guibernau 1999; Saideman and Ayres 2000). As we have stated before, democracies are better off in handling ethnic demands which may decrease violent conflict while at the same time, peaceful protest might replace it and flourish. Others, think the opposite and argue that democracies provide the tools but also the potential incentives for political actions to manifest (Horowitz 2000; Snyder 1999). It might be a challenging process which can endanger the democratic system by producing more ethnic conflict (Rabushka and Shepsle 1972; Pfaffenerberger 1991; Kaufman 1996).

It the literature, the relationship between ethnic mobilization and democratization is more alleged rather than fully demonstrated. Because of this ambiguous status, we reject from the start any assumption of necessity for this particular condition. Strong ethnopolitical protest regularly
occurs in democratic, transition, and authoritarian states and thus, the logical link of necessity “Y only if X” cannot be applied for any of “democracy” levels.

However, for the reasons described above, we do believe that peaceful protesting actions arise more often in advanced democracies. Therefore, a democratic environment can be regarded as being sufficient for the emergence of strong protest. To be in line with the assumption of sufficiency, we consider that a given level of (advanced) democracy is associated with a certain (strong) level of ethnopolitical protest. However, more contradictions of how ethnic strife might evolve can be expected in those countries which face democratic transitions or who still have a certain amount of authoritarian rule in their everyday politics. If states lack democratic tools then they will probably use repression to annihilate contention which will make ethnopolitical protest less powerful.

\[ \text{D. Ethnic Fractionalization} \]

Ethnic diversity is seen in the literature as one of the main predictors for ethnic mobilization. Research suggests that ethnic diversity is the main generator of political instability and conflict (Horowitz 2000; Gurr 1970; Sigelman and Simpson 1977; Boswell and Dixon 1990), yet this statement is negated by some scholar work (Fearon and Laitin 2003: 75). One popular measure of ethnic diversity is country’s ethnic fractionalization score. It reflects the degree to which all ethnic units divide the national population of a particular state.

There are several reasons that explain the need for this explanatory indicator. First of all, ethnic fractionalization is associated with a negative effect on the economic growth, especially in the less democratic countries (Alesina, Devleeschauwer et al. 2003). This in turn generates instability which may lead to ethnic mobilization. Secondly, many scholars argued that plural societies are more exposed to the internal inter-ethnic conflict (Rabushka and Shepsle 1972, Horowitz 2000). This connection comes from a constant competition between groups, where each actor demands rights and privileges which can be seen as a struggle for resources and power. The conflicting actions further sustain ethnic divisions within the state and make inter-communal strife a probable phenomenon.

Following the logical deduction from the literature, we assume that highly fractionalized communities are more prone for strong protesting actions. Given this statement, the condition of ethnic fractionalization can serve as a sufficient cause for the emergence of ethnopolitical protest. Ceteris paribus, if a society is highly fractionalized across ethnic lines then protest can reach substantive strength. At the same time, a highly fractionalized ethnic community is hardly ever the sole cause for powerful mobilization, which makes the assumption of necessity less plausible in the context of this analysis. A consistent number of European countries are very diverse in their ethnic composition which force them to constantly come up with considerable efforts for accommodating the demands of ethnic diversity. This in turn reduces interethnic frictions and moderates the active incentives for strong protest.
E. National Pride

National pride defines those feelings which boost the desire for interethnic cohesion. This value is especially important when studying ethnic mobilization in a highly heterogeneous ethnic environment. Many scholars have asked the question whether the positive feelings in one’s nation do exacerbate the negative feelings toward the others. A wide array of sociologists and political psychologists have proved the link between feelings of national pride and the resulting nationalist behavior (see for instance Feshbach 1987; Kosterman and Feshbach 1989; Feshbach 1991; Bar-Tal 1993; Druckman 1994; Schatz, Staub et al. 1999). One of the main targets of building a cohesive nation is to give its citizens, irrespective of their ethnic belonging, a reason to be proud of their carrying nationality. This was, and it is still, one of the major desires of many nation-states because it gives a cohesive value which can be shared across ethnic lines.

Exactly for these reasons, the positive feelings of patriotism are expected to decrease the willingness for ethnopolitical mobilization. The presence of high senses of national pride among ethnically diverse individuals denotes strength and confidence in the national project which in turn decreases the desire for strong protest actions. In this sense, strong (or weak) national pride attitudes can be considered to fulfill the condition of sufficiency for the presence (or absence) of mass protest.

This study also relies on the idea that conditions underlying individuals' behavior can be regarded as dominant in relation to other classical causal conditions for protest mobilization. This is because people’s feelings and beliefs are highly boosted by sporadic appearing events which greatly influence the intensity to protest within specific ethnic communities. For that reason, we might assume that different feelings of national pride are also part of the status for necessity when analyzing the emergence of ethnopolitical protest. Ethnic minorities adopt strong feelings of national belonging only if there is a constant support for accommodating their posted needs. It also means that all other factors boosting the desire for strong mobilization are either absent or overshadowed by strong pride values. Typically, high feelings of national pride and those conditions flaming interethnic tensions are generally mutually exclusive in the context of ethnopolitical mobilization. Given this rationale, we assume that the presence (or absence) of strong pride feelings will necessarily result in intense (less intense) protesting events.

III. DATA, METHODOLOGY AND OPERATIONALIZATION

A. Source of Data

This study will use data from three sources: Minorities at Risk (MAR), the Quality of Government dataset (QoG) and the European Values Survey (EVS). These data sources are widely employed in the scholar work and thus, provide reliable indicators for our descriptive and empirical models. Their characteristics are summarized as follow:

Minorities at Risk data (MAR) is the most comprehensive set in the field which targets the most discriminated minority groups. MAR is computed by consulting various sources, including human rights reports, governmental and expert opinion, journalistic accounts, and reports from
international organizations. A substantial effort is made to control the coding bias and to minimize the subjective bias resulting from using many qualitative sources.

The sampled population in MAR is composed by those communal ethnies which are hurt by discriminatory treatment compared to other groups in the state. Group discrimination is regarded as the base for political mobilisation for the promotion of their communal interests. This data records the minority “at risk” status in contrast with the majority group(s). Only those ethnic minorities are included in the dataset which have an inferior collective status than the relative condition of others in the country.

There are a series of critiques based on the selection of minorities “at risk”. One limitation can be raised, that MAR dataset only includes groups that are discriminated -- i.e. groups with a high tendency to be dissatisfied with their political status. Put another way, it excludes other politically active groups that are currently not to be considered at risk - e.g. for Switzerland, the only groups listed are Jurassians (Swiss citizens living in the Canton of Jura) and foreign workers. On the other hand, the Romansh speaking minority, or for that matter the entire Italian and French speaking populations (outside of Jura), who are also in the minority, are not listed. The same sampling problem arises in the case of Walloon and Flemish communities in Belgium, Galicians in Spain or Sami minority in Scandinavia.

An ethnopolitical group is considered “at risk” when it fulfils one of the following two criteria:

1. The group “collectively suffers, or benefits from, systematic discriminatory treatment vis-à-vis other groups in a society” and/or
2. “Collectively mobilizes in defense or promotion of its self-defined interests.”

Additionally, for each minority case which is included in the MAR data, two more operational guidelines are established. Endangered communal groups are counted only in those countries in which the population exceeds 500,000. Furthermore, the group itself should count at least 100,000 members or to represent at least 1% from the total country population. In order to minimize the danger of the subjective mobilization bias, we excluded some initial groups from the dataset. This study focuses only on those “at risk” groups which have a longstanding historical presence in a specific country location. Thus, the recent migrant ethnic groups are not listed in our sample even though they comply with the criteria “at risk” established by the MAR project. Examples of groups which were excluded from the analysis are: foreign workers in Switzerland, British Afro-Caribbean, British Asians, Muslims in France etc. The final result is a population of 29 disadvantaged ethnic minorities in 16 European countries (see Table 1).

---

4 For more information see www.cidcm.umd.edu/inscr/mar

The **Quality of Government data** (QoG)\(^6\) is the second empirical base for our analysis. It is a compilation of different types of smaller datasets and was built on the basis of expert coded indicators, aggregated individual level survey data, international organizations’ expert data or different demographic, social and political measures. In general, QoG aims at performing research on the causes, impact, quality, and the nature of political governance. The indicators provided for our analysis are coded at the country level and provide reliable information close to the cases under analysis. Finally, the timeframe of this analysis is set in such a way as to capture the mobilization pattern experienced by European minorities after the termination of the cold war era. Our sampled time therefore, comprise the period between 1991 and 2003.

The European Values Survey (EVS) is a dataset which is composed from the individual level surveys gathered from all around Europe. The information provided by this large scale survey project comprises data on personal values and attitudes in a unique and innovative setting. This survey data will help us to focus our attention on the impact of personal beliefs on the outburst of ethnic mobilization. It comprises information gathered in two extensive waves, from 1993 to 2004.

The EVS data will provide this analysis with the national pride indicator. Since, the analyzed data comes at the individual level we succeeded in clustering respondents in ethnic clusters. The following available criteria were used in the process of group-coding: declared ethnicity (x051), language spoken at home (g016) and the region where the interview was conducted (x048). In line with the MAR guidelines identifying minorities at risk, we spotted the 29 ethnic minorities in EVS which match the MAR sample for Europe. These ethnic groups can be visualized in Table 1 below. The score of national pride is taking as a pooled mean value at the group level.

### B. Methods: The Fuzzy-Set Technique

This study will employ a relatively new empirical technique in comparative social science, namely the fuzzy set approach. Starting with the seminal work of Charles Ragin (1987; 2000) this approach was set to transcend the borders between the case and variable oriented research in a manner which is superior to the traditional Boolean technique. Conventionally, the variable oriented approach seeks to identify empirical connections between certain meaningful indicators and make relevant conclusions in social science. Alternatively, the case oriented approach regards each specific case as different in the analysis and thus it remain chained in the reality of that particular investigation. The fuzzy-set approach however, sees all cases in a parsimonious way, by identifying and analyzing clusters of cases while at the same time accounting for the richness and specificity of each analyzed study (Ragin 1987). This is particularly the case of this analysis, where the existing empirical data is modeled in a way to reflect the theoretical and qualitative substance of each employed condition. By using the qualitative anchors on an empirical baseline, we can choose to refine the context separating the relevant and irrelevant variation among cases under analysis.

---

\(^6\) This is a database coded by researchers at the Quality of Government Institute, Goteborg University. For more information regarding this dataset see Jan Teorell, Sören Holmberg and Bo Rothstein, “The Quality of Government Dataset”, University of Gothenburg: The Quality of Government Institute, version 15 May 2008, http://www.qog.pol.gu.se
Therefore, by going back to the fuzzy sets theory (Zadeh 1965; Zadeh 1968) we can label this technique as being both qualitatively and quantitatively oriented, because it models the calibration perceptions of set membership from these two empirical fields (Ragin 2008:89). One of the powerful characteristics of fuzzy sets is that it addresses the partial membership score by applying a consistent mathematical system which allows an intermediary placement on the interval between 0 (fully out) and 1 (fully in).

The fuzzy sets approach is suitable for our analysis since it captures the complexity of ethnic mobilisation in a prudent way. The conditions employed in our study exhibit diverse information which is well grounded in the dataset and to a large extent cannot be fully dichotomized for a ‘crisp set’ analysis. It is vital for our research to be as precise as possible and thus, in line with the calibration guidelines given by (Ragin 2008, 91) the fuzzy membership is constructed by closely considering the original empirical information in the mentioned datasets. We further describe the way the partial membership is assign for the outcome and the selected conditions.

As presented in Table 1, apart from the outcome, there are 5 explanatory conditions to be employed in testing the emergence of protest mobilization. The outcome variable, *ethnic protest mobilisation* is defined from the initial “Prot” indicator of the MAR dataset. For a complete visualization of the original protest hierarchy see Table 4 in the Annex section. The score range from 0 to 5, with higher score resulting in a more intense and large protest mobilization. The initial scores were taken as a mean value of protest activities undertaken by every group in the analyzed period (1991-2003).

Starting from an initial score of 0 (no protest) the fuzzy membership is assigned progressively as the mean value of protest is getting higher. The cross-over point was established at a value of 1.5 (an average of verbal opposition and symbolic resistance). The initial scores of protest which were positioned higher than 1.5 were assigned a fuzzy membership above 0.5 (more in than out) while the initial protest values scoring below 1.5 are considered with scores below 0.5 (more out than in). The reason behind using this breakpoint is straightforward. The average score of 1.5 in protest means that over years ethnic groups rarely overpass the border of symbolic protest which is considered to be the softer and the least intense version of ethnopoltical strife. When the mean value of protest is higher than 1.5 over time, it indicates a clear pattern toward more intense versions of protest. Generally, an average protest score of 3 or higher (mobilization for demonstrations) is considered to be high enough for a fuzzy membership of 1.

---

7 This numerical scaling should not be confounded to an ordinal scaling. The membership score do not rank the analysed cases hierarchically across each other but assign a relative degree of membership in relation to the two extreme part of the interval: 1 (full inclusion) and 0 (full exclusion).
Table 1. The Raw Values and the Fuzzy-set Partial Membership Scores of the Outcome and Conditions

<table>
<thead>
<tr>
<th>Ethnic Groups</th>
<th>Group ID</th>
<th>Protest (Outcome)</th>
<th>Political Discrimination</th>
<th>Geographical Concentration</th>
<th>Democracy Level</th>
<th>Ethnic Fractionalization</th>
<th>National Pride</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw</td>
<td>FZ</td>
<td>Raw</td>
<td>FZ</td>
<td>Raw</td>
<td>FZ</td>
<td>Raw</td>
</tr>
<tr>
<td>Greeks Albania</td>
<td>GA</td>
<td>1.46</td>
<td>0.47</td>
<td>2.23</td>
<td>0.86</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Lezgins Azerbaijan</td>
<td>LAZ</td>
<td>1.92</td>
<td>0.7</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Russians Azerbaijan</td>
<td>RAZ</td>
<td>0.38</td>
<td>0.03</td>
<td>0.46</td>
<td>0.17</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Poles Belarus</td>
<td>PBE</td>
<td>0.3</td>
<td>0.03</td>
<td>0.61</td>
<td>0.24</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Russians Belarus</td>
<td>RBE</td>
<td>0.3</td>
<td>0.03</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Croats Bosnia</td>
<td>CBH</td>
<td>1.16</td>
<td>0.27</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Muslims Bosnia</td>
<td>MBH</td>
<td>0.91</td>
<td>0.15</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Serbs Bosnia</td>
<td>SBH</td>
<td>1.41</td>
<td>0.43</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Turks Bulgaria</td>
<td>TBG</td>
<td>1.46</td>
<td>0.47</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Roma Bulgaria</td>
<td>RBG</td>
<td>1.3</td>
<td>0.35</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Russians Estonia</td>
<td>REE</td>
<td>2.15</td>
<td>0.79</td>
<td>1.76</td>
<td>0.76</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Russians Georgia</td>
<td>RGG</td>
<td>1.27</td>
<td>0.33</td>
<td>0.23</td>
<td>0.09</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Sardinians Italy</td>
<td>SIT</td>
<td>0.23</td>
<td>0.02</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>South Tyroleans</td>
<td>TIT</td>
<td>1.3</td>
<td>0.35</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Russians Latvia</td>
<td>RLT</td>
<td>2.38</td>
<td>0.85</td>
<td>2.61</td>
<td>0.92</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Albanians FYROM</td>
<td>AM</td>
<td>2.27</td>
<td>0.82</td>
<td>1</td>
<td>0.51</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Serbs FYROM</td>
<td>SM</td>
<td>1.63</td>
<td>0.56</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Roma FYROM</td>
<td>RM</td>
<td>0.72</td>
<td>0.09</td>
<td>1.3</td>
<td>0.61</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Gagauz Moldova</td>
<td>GMD</td>
<td>2</td>
<td>0.73</td>
<td>1.23</td>
<td>0.59</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Slavs Moldova</td>
<td>SMD</td>
<td>1.61</td>
<td>0.55</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Hungarians Romania</td>
<td>HRO</td>
<td>1.69</td>
<td>0.59</td>
<td>1.92</td>
<td>0.8</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Basques Spain</td>
<td>BS</td>
<td>2.76</td>
<td>0.93</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Catalans Spain</td>
<td>CS</td>
<td>1.61</td>
<td>0.55</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Catholics in N.Ireland</td>
<td>IUK</td>
<td>2.53</td>
<td>0.89</td>
<td>1</td>
<td>0.51</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Scots United Kingdom</td>
<td>SUK</td>
<td>1.3</td>
<td>0.35</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>Crimean Russians</td>
<td>CRU</td>
<td>2.53</td>
<td>0.89</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Russians Ukraine</td>
<td>RUU</td>
<td>1.53</td>
<td>0.51</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.66</td>
</tr>
<tr>
<td>Hungarians Yugoslavia</td>
<td>HY</td>
<td>2.38</td>
<td>0.85</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Kosovar Albanians</td>
<td>KAY</td>
<td>3.38</td>
<td>1</td>
<td>2.61</td>
<td>0.92</td>
<td>2</td>
<td>0.66</td>
</tr>
</tbody>
</table>

Note to Table 1: Protest: the higher the score, the more powerful are the protest activities. Political discrimination: the higher the score, the more discriminated status of an ethnic group. Geographical concentration: Higher scores denote more compact territorial concentration. Democracy level: The higher the score, the more advanced the democratic standards of the country are. Ethnic fractionalization: Higher scores show highly fractionalized societies. National Pride: higher scores denote stronger pride values.
The five conditions employed in this study are used closely interrelated with the theory and previously done scholar work. Political discrimination originates from the “poldis” indicator in the MAR dataset. The contained information registers the discrimination practices which vary from no discrimination (0) to restrictive and social exclusion actions (4) (see Table 3 in the Annex). The fuzzy sets scores are established in order to capture the range of political discrimination over years, assigned to each ethnic minority. The fuzzy sets are created by dividing the scores in several levels, where the highest value (1) reflects the severe policies of social exclusion while the lowest score shows the absence of the discrimination treatment. The reference point is set at a value of political neglect with remedial policies (cut off point = 1). The reason behind this choice stays in the characteristics of the recorded discrimination policies. Up to the value of 1, the “poldis” indicator registers those discrimination practices which have some remedial policies to correct for the gained status of inequity. Above that threshold, all discrimination practices are beyond any remedial balance and therefore, are considered to be more severe.

The geographical dimension reflects one of the main primordialist incentives leading to ethnic conflict. Regional concentration is thus suitable to be an explanatory condition for protest mobilisation. It originates from the “groupcon” variable in the MAR dataset and measures the extent to which an ethnic group forms a compact regional community or on opposite, has an urban or countrywide dispersion (see Table 4 in the Annex). The fuzzy scores are divided in 4 groups, one for each initial value of the “groupcon” variable. Thus, widely dispersed minorities have a membership score of 0; mainly urban groups have a partial membership score of 0.33; those which are majority in one region and otherwise dispersed have a score of 0.66, while compact concentrated minorities have a full membership of 1.

Level of democracy on the other hand has a multi-value structure which measures the democratic performance and the annual democracy scores calculated in terms of civil liberties and political rights. This condition comes from the combined Freedom house/Imputed Polity measure which according to Hadenius and Teorell (2005), outperforms all rival indices of democracy in both reliability and validity. This index ranks the level of democracy on a scale from 0 (strong autocracies) to 10 (strong democracies). The established fuzzy scores are established in accordance to the official recommendation provided by the Freedom House and POLITY guidelines. The democracy measurement is designed as such that a score above 7 indicates a country with a strong democratic structure while a score below 4 means more an autocratic environment. We took into account these recommendations and set up the scores in the way that a value of 9.5 would qualify for a “fully in = 1” democracy membership, 7 was set as the crossover point, while a score of 2 or less in the set would qualify the cases as “fully out = 0”.

Observing for ethnic diversity in a country, this study uses Fearon’s (2003) index of ethnic fractionalization constructed from the CIA World Factbook combined with a measure of linguistic fractionalization. Employed from QoG data, it records the probability that two

---

8 For more information of the Freedom House/Imputed Polity data see http://www.freedomhouse.org
randomly selected individuals in a state will belong to different ethnic groups (Fearon 2003, 208). The original data scores range within the interval of 0—perfectly homogenized society (full non-membership) and 1—highly fragmented communities (full membership). In our sample, the highest degree of ethnic fractionalization is for Serbia & Montenegro (0.80), which can be seen as reaching the maximum range as ethnically fractionalized society in Europe. Considering this particularity, the fuzzy set coding allows cases with an ethnic fractionalization value of 0.80 to be integrated as 1 (fully in). Consequently, the reference cutoff point was set at 0.50.

The condition measuring *national pride* was taken from the European Values Survey and accounts for one’s attachment with the hosting nation. The national pride values are coded for each ethnic group present in our sample based on the responses given by individuals with those declared ethnicities. The initial pride indicator had four values ranging from “not at all proud” = 0 to “very proud” =3 (see Table 7 in the Annex). The cutoff membership score is assigned to an initial pride value of 1.5, which is a cross-border score between the negative and positive pride feelings. An overall mean score of 2.5 is regarded by the fuzzy scale as (fully in = 1) while a value of 1 as (fully out = 0).

The calibration measures for all conditions employed in this study can be viewed in Table 8 in the Annex section.

**IV. RESULTS FOR STRONG ETHNOPOLITICAL PROTEST**

**A. Necessary Conditions for Ethnopolitical Protest**

Fuzzy sets techniques allow us to have a larger variation in the analyzed context of protest actions than a dichotomized approach would account for. In this study, we employ five causal conditions and thus we expect that ethnopolitical protest will reveal its conjunctural and multicausal facet represented by multiple combinations leading to varying solutions for our outcome.

In QCA analysis, there are two types of conditions which might be relevant for explaining ethnopolitical protest. These are the *necessary* and *sufficient* conditions and are analyzed by means of a “sub-set principle”. When the outcome is proving to be a subset of a condition (the score of the condition is higher than the outcome: \( Y_i \leq X_i \)), than the respective condition is a necessary one in order for outcome to occur. Inversely, when the condition is the subset of the outcome (its score is lower than the outcome: \( Y_i \geq X_i \)), than the condition is regarded as sufficient in the fuzzy-sets equation. The necessity principle implies that every time when ethnopolitical protest occurs, it should involve the presence of a relevant condition while vice versa is not always the case since a condition can be necessary without being always sufficient (Braumoeller and Goertz 2000). The sufficiency means that when ethnic protest occur, there can be a multiple conjunctural causation (Ragin 1987), or in other words, a combination of different conditions which are present. Each condition in the combination could be equally sufficient for the outcome to be present.
According to Ragin (2008: 108) however, there hardly can be found scenarios where strictly necessary or sufficient conditions are present. An extensive analysis usually implies many diverse cases with assorted connections where the necessity and sufficiency cannot match perfectly the standard ideal pattern. The fuzzy logic is set up to copy with these situations by invoking the ‘quasi-necessity’ and ‘quasi-sufficiency’ (Ragin 2000). The quasiness of both necessary and sufficient conditions is taking into account by applying a consistency threshold (Pennings 2003: 555). The consistency threshold is set in concordance with benchmark proportions and reflects the total sums of fuzzy membership scores which are consistent with the relevant condition being tested. In general, it can vary according to the needs of each particular study. However, the lower the established benchmark the larger inconsistencies and applied penalties to the analyzed combinations. In our analysis, a benchmark of ‘0.8’ is specified, meaning that a certain combination is sufficient in the presence of 80% of the tested cases. According to Ragin (2008; 108) this benchmark represents an acceptable threshold for the consistency of a fuzzy-sets model.

In this study, we use the FS/QCA 2.0 software in order to identify the necessary and sufficient conditions needed for final combinations leading to strong or not-strong ethnopolitical protest. When considering the necessary conditions, we established the cut-off consistency point at 0.80 meaning that a specific condition is almost always necessary for the outcome to occur. All conditions that prove to pass the established consistency test will be always part of the logical combinations underlying the formula of sufficiency.

From the 5 conditions tested, a strong territorial concentration proved to be a necessary condition for high levels of protesting actions (see Figure 1). This means that compact territorial location is a necessary condition for ethnic minorities to engage in strong ethnic protest. However, being concentrated in an ethnically compact geographical area does not ensure that a protest event will certainly occur. This particular condition makes sense since regional concentrated minorities are more efficiently organized by the elites and thus more prone to be mobilized in high protesting actions. At the same time, the territorial concentration is not obligatory sufficient since strong ethnic mobilization is a complex process built upon other complementary conditional factors and can occur among dispersed minorities as well.

Both the necessary and sufficient conditions can be visualized in scatter plot figures which show the alignment of cases along the value of the outcome. In an ideal plotted figure, we expect that all cases in the lower part of the diagonal to show the status of necessity while those above the diagonal, the status of sufficiency.

Figure 1 shows the distribution of cases alongside two dimensions: on the Y axis we plotted the outcome – strong protesting actions while on the X axis we align geographical compactness as a necessary condition. The right-lower diagonal part shows that territorial concentration is indeed a quasi-necessary condition for the high scores of ethnopolitical protest. There are however several cases where the outcome scores are higher than the values of the established necessity. Five ethnic groups are especially discordant with the established condition of necessity (Yi≤Xi): Lezgins in Azerbaijan, Russians in Latvia, Catholics in Northern Ireland, Hungarians in Romania and Rroma in Bulgaria. These cases combine an urban or dispersed location with higher levels of ethnopolitical protest. The values plotted in the lower-triangular part of the figure represent those
ethnic minorities which have their territorial concentration status always ahead compared with their protesting intensity. This particular trend however shows that geographical compactness is a quasi-necessary although not a sufficient condition for strong protesting activities.

Figure 1 **Compact Geographical Concentration** as a Necessary Condition for Strong Protest Actions (Consistency = 0.80, Coverage = 0.64)

![Graph showing Compact Geographical Concentration as a Necessary Condition for Strong Protest Actions](image)

Note: LAZ – Lezgins in Azerbaijan, RLT – Russians in Latvia, IUK-Catholics in Northern Ireland, UK, HRO – Hungarians in Romania, RBG – Rroma in Bulgaria

The outlier-cases combine a dispersed territorial status with high levels of protest. With the exception of Catholics in Northern Ireland (which are traditionally urban and long-term actively mobilized), all these minorities are coming from the former communist East European block. Taking into account the aftermath of the Cold War era, we can suspect that the transition environment served as a boosting factor for dispersed minority groups to enter an active mobilization status. According to Donald Horowitz (2000), many ethnic groups try to explore the transitional chaos into their own advantage by engaging in political mobilization in order to achieve more collective rights. Thus, the identified necessary condition negates Ted Gurr’s (1993b: 179-180) findings and reconfirms Monica Toft’s (1996, 2003) arguments that geographical compactness produce more ethnic mobilization. However, this conclusion is a relative one, since as we can see from Figure 1, there are always exceptions which easily can make this statement less absolute.

**B. Truth Table and Sufficient Conditions**

Boolean algebra is used at the core of our fuzzy sets model to report and reach solutions about particular sets of conditions leading toward protest mobilization. This method applies logical thinking to determine the sufficient conditions for the analyzed outcome. An important step in fuzzy set analysis is to build a truth table which compresses all logical combination which might be used to explain the outcome. After assigning the fuzzy membership scores for both conditions
and the outcome we proceed with the minimization of data by using the Quine algorithm of the FS/QCA 2.0 software.

It is very important to utilize a truth table as the starting point for the analysis of sufficiency. Truth tables offer guidance for exploring the status of limited diversity and also help to properly visualize different subsets of the logical remainders and use them to reach efficient simplifying assumptions. A truth table is an essential measure for reducing complexity while offering a simplifying picture of the overall gradation in the set membership. More exactly, it takes advantage of the fuzzy-set coding while showing a codified structure in terms of 0 and 1.

However, when the initial fuzzy-set scores are transformed into a truth table by the fsQCA software, the original variation of the data remains hidden in the truth table to be used for further analysis. When proceeding toward the minimization procedure, it will be this original fuzzy membership scores which will complete the analysis and will compute the solutions based on which the status of sufficiency will be assessed.

As shown in Table 2, the number of rows stipulates the total combinations of the 5 conditions in which at least one case (ethnic group) has an outcome value. At the same time, each column of the truth table underlines the obtained minimized value of each condition. A value of 1 represents a fuzzy membership score of 0.5 and above while a value of 0 indicates a fuzzy score below 0.5. To be complete, each row also includes a column showing the number of cases (ethnic groups) which are part of the listed configurations.

Table 2. Distribution of Cases across Causal Combinations and Set-Theoretic Consistency of Causal Combination as Subsets of Strong Ethnopolitical Protest.

<table>
<thead>
<tr>
<th></th>
<th>Political Discrimination</th>
<th>Democracy level</th>
<th>Ethnic Fractionalization</th>
<th>National Pride</th>
<th>Geographical Concentration</th>
<th>Number of cases</th>
<th>Protest (outcome)</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.97</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.96</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.96</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0.94</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0.92</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0/1</td>
<td>0.92</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.83</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1/0</td>
<td>0.80</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.75</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.75</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0.75</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0.75</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0.73</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.71</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.65</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0.62</td>
</tr>
</tbody>
</table>

The consistency column gives a crucial measure for the next step in analyzing the status of sufficiency. The measure of consistency means that the minimum fuzzy score of the 5 conditions
in each of the tested combination should be consistently lower than the membership score of the outcome. In our model, the consistency score below 0.80 means that there is a considerable amount of irregularity in the combination of conditions of that particular row which cannot sustain the full membership of the outcome. Only those configurations with a consistency score of 0.80 and above are considered sufficient for the occurrence of strong protesting actions (outcome = 1).

From the truth table one can observe that there is a considerable gap between the consistency of 0.80 and 0.92. Since the discrepancy between the two consistency scores is substantial, we decide to run separate minimizations procedures for the two consistency points. In doing so, we can observe the difference in analyzing configurations that are consistent subsets (0.80) but also those combinations which are very consistent subsets (0.92). The analysis based on the second consistency score will provide additional weight to the overall analysis by allowing to directly specify the difference between the two analyzed thresholds.

The outcome is explained while considering different causal mixture of the selected conditions. Some combinations may not have an empirical coverage in the data (neither 0 nor 1) and thus are recorded as logical remainders. The final simplifying solution could take these logical remainders into account only if strongly theoretically justified. Therefore an advance caution is required when using combinations of conditions which are not empirically covered (Ragin 2000: 139).

C. The Truth Table Minimization at a Consistency Score of 0.80

There are several sets of causal conditions which may lead to high levels of ethnopolitical protest. The initial fuzzy membership is assigned by taking into account the minimum score in the selected combination of sets. Apart from the quasi-necessary condition of strong geographical concentration, there are several combinations of conditions which are highly sufficient in order for stronger protest to occur. First, we consider the most parsimonious solution obtained as result of the truth table minimization at a consistency score of 0.80. The parsimonious solution allows the incorporation of logical remainders which yet, does not evaluate their plausibility into the equation (Ragin 2008: 114). We obtained two combinations of conditions as part of the parsimonious solution. The two formulas are as follows:

Formula 1

\[
\text{national pride} \\
(\text{Consistency} - 0.89, \text{Coverage} - 0.64) \\
\text{Cases with strong membership (CRU, RLT, KAY, BS, AM, RUU, HY)}
\]

9 Please note that in accordance with the Boolean techniques, uppercase characters indicates a positive value while the lowercase characters represents a negative sense of the tested conditions. In the same context ‘*’ indicates the meaning of ‘and’ while ‘+’ stands for logical condition ‘or’.
The good practice in describing the solutions resulting from fuzzy-sets analysis is to evaluate the consistency and the coverage scores of the resulting formulas. The two parameters assess the fit of the obtained solutions which comprise those combinations of conditions which are consistent enough to be regarded as sufficient for the occurrence of the outcome. The consistency score of the first parsimonious solution is 0.89 which denotes a significant yet not a perfect match with the observed cases. The second formula shows an improved consistency score of 0.92. Since perfectly consistent set relations are hardly ever the case in a medium N sample (Ragin 2006: 292), it is reasonable to assume that this score represent a solid base for analysis.

Accordingly, the fit between the solution and the observations is shown by coverage. Charles Ragin (2003) define coverage as the extent to which the causal formula is empirically represented by a consistent amount of sums of fuzzy membership scores. In our case, the first parsimonious solution has a coverage score of 0.64 while the second formula has a coverage value of 0.52. A coverage value of 0.64 indicates that almost two-thirds of the membership scores in the outcome have been accounted for, by the first formula. Accordingly, the second solution covers only half of the sum of the membership scores. The coverage scores suggest that the causal solutions have a substantial yet still a limited inclusion of cases in the outcome membership.

Generally, these can be considered as acceptable scores in the coverage scheme. According to Ragin (2006: 292) when the result of the minimization process shows several combinations of conditions for the same outcome, the coverage for each causal combination may be small. Moreover, usually the degrees of consistency and coverage work against each other, where high consistency score may result in low coverage values (Ragin 2006: 299).

The first parsimonious solution shows that the absence of strong pride can alone be sufficient for causing strong protesting actions. Alternatively, the second formula indicates that a highly fractionalized society and advanced democracies seem to sufficiently influence the emergence of high level protest. The parsimonious solutions however, can be considered as incomplete since they exclude the explanatory power contained by logical remainders.

Thus, we further reanalyze the sufficient conditions by considering those logical remainders which are consistent with our substantive case selection knowledge. According to Ragin (2008: 119) this so called intermediate solution is preferred in an extensive fuzzy sets analysis to both complex and parsimonious solutions.

By using the ‘intermediate solution’, one major benefit is that it allows and justifies the incorporation of the necessary conditions. The reason is that any logical condition which makes
sense in the context of necessity can be incorporated here for explaining the outcome. By considering only those remainders which are most plausible in relation to the established hypotheses, we obtain a more logical combination of conditions which is usually sufficient for predicting the emergence of stronger levels of protest. Therefore, only the combinations of conditions resulting from the intermediate formulas will be considered as having the explanatory power. Formulas of the *intermediate solution* are presented as follows:

Formula 3

ETHNIC FRACTIONALISATION * GEOGRAPHICAL CONCENTRATION * DEMOCRACY

(Consistency 0.92, Coverage 0.46)

Cases with strong membership (AM, SM, RM, REE, BS, CS)

Formula 4

DEMOCRACY * national pride * ETHNIC FRACTIONALISATION

(Consistency 0.97, Coverage 0.42)

Cases with strong membership (KAY, RLT, AM, BS)

Both combinations of solutions have a substantial high consistency scores (0.92 and 0.97 respectively) with a general coverage propensity score of 0.46 and 0.42 respectively. Thus, the causal path of each term seems to have a fairly equal amount of explanatory weight. There are also a number of shown cases which perfectly match with the membership sets represented by each formula. They are also numerically represented in the truth table in the column showing the number of cases consistent with the combination of conditions leading to an outcome of 1.

The two underlined intermediate solutions can be factored to form a more logical intermediate expression:

Formula 5

DEMOCRACY * ETHNIC FRACTIONALISATION *

(national pride + GEOGRAPHICAL CONCENTRATION)

The scores showing weak ‘national pride values’ and ‘compact geographical location’ have a value added to the logical ‘or’ arrangement. Fuzzy sets analysis underlines the idea that (1) a highly fractionalized society and (2) an advanced democratic environment may lead to high levels of protest in combination with (3) either a compact geographical location or the negative patriotism feelings among members of an ethnic minority.
Figure 2 further shows the plot of the combination of conditions which are sufficient for the emergence of strong ethnopolitical protest. The upper diagonal part accommodates those cases for which the combined conditions are sufficient for the occurrence of the outcome. There is one exception - Roma in Macedonia, which occupies a distant outlier position outside the sufficiency area. Its pooled values of sufficiency are higher than the outcome score and thus this case is not covered by the presented solution. The Former Yugoslav Republic of Macedonia (FYROM) has undertaken major reforms during the 1990s which were intended to accommodate the ethnic diversity in the country. It included extensive political rights and governmental representation for all ethnic minorities, including Roma. These factual conditions at the political level correlated with the traditional weak desire for mobilization at the group level, makes this minority to overpass all conditions for sufficiency employed in this study.

Figure 2 Sufficient Conditions for Ethnopolitical Protest (Formula 5)

Note: RM – Roma in Macedonia

D. The Truth Table Minimization at a Consistency Score of 0.92

From the plot of sufficiency presented in Figure 2, there is a clear pattern which shows that the obtained formula is highly relevant for assessing the emergence of strong ethnopolitical protest. However, an inspection of the consistency values presented in Table 2 shows that there is a significant gap between the reported consistency threshold of 0.80 and a possible cutoff point over 0.90. Usually, when considering the consistency thresholds one should take into account several influencing factors such as the total number of cases and the nature and quality of the evidence present in the sample (Ragin 2008, 118).

When the analyzed $N$ is relatively large, as it is in our case, then a good practice is to establish a higher frequency threshold which will allow distinguishing among configurations that are very consistent subsets. Giving the nature of our data and the way consistency scores appear in the
truth table, the choice of a higher consistency threshold, closer to 1.0, seems very appropriate. The following analysis will use a cutoff point for consistency established at 0.92 (see Table 2).

In the process of truth table minimization, if the consistency of the combination as a subset of the outcome is equal or above 0.92, it is coded as fully in (protest=1, the top 6 rows of Table 2), otherwise it is considered as contradictory (protest=0, the last 10 rows of Table 2). The truth table is first minimized by allowing the inclusion of all logical remainders without testing for their plausibility. The obtained parsimonious solution is identical with the one found in the previous analysis. For the sake of simplicity we ignore the resulting parsimonious solution and focus exclusively on the obtained intermediate solutions. The intermediate formulas are computed by using the theoretical and substantive assumptions based on which the incorporation of the logical remainders is taking place. The following two intermediate solutions can be distinguished:

Formula 6

**GEOGRAPHICAL CONCENTRATION * national pride * ETHNIC FRACTIONALISATION**

(Consistency - 0.95, Coverage - 0.44)

Cases with strong membership (KAY, HY, AM, BS)

Formula 7 +

**DEMOCRACY * national pride * ETHNIC FRACTIONALISATION**

(Consistency - 0.97, Coverage - 0.42)

Cases with strong membership (RLT, AM, BS)

Given the nature and the size of our sample, each intermediate formula presented has a high consistency score and a reasonable coverage value. The two solutions can be factored to obtain a more inclusive formula, which is:

Formula 8

**national pride * ETHNIC FRACTIONALISATION * (DEMOCRACY + GEOGRAPHICAL CONCENTRATION)**

The minimization at high consistency scores usually produces more narrowly circumscribed solutions which supposedly, must result in a better fit of all cases in the sufficiency plot. The cutoff value of 0.92 for the fuzzy sets theoretic consistency, on which Formula 8 is based, provides the similar framework of conditions for the status of sufficiency as did Formula 5 in the previous minimization procedure. The only difference is the combination delimitating the fuzzy “and” from the fuzzy “or” when placing conditions in the sufficiency formula assessing the emergence of strong ethnopolitical protest. The factored intermediate solution stipulates that strong protest can emerge in the presence of the following combination of conditions: (1) weaker standards of national pride, (2) a highly ethnically fractionized society, and (3) either the group is
mobilized in an established democracy or it is concentrated in a compact territorial location. The presented formula for sufficiency can be visualized in the Figure 3 below.

Figure 3 Sufficient Conditions for Strong Ethnopolitical Protest (Formula 8)

Note: PBE – Poles in Belarus

The plotted intermediate formula shows an almost perfect fit for the sufficiency status \( (Y \geq X) \). From the picture there can be seen that a convincing majority of cases have a good inclusion in the upper triangular area of sufficiency. Only one case seems to make a trivial distinction from the line delimiting the sufficiency spot.

By summing up the two minimization procedures we deduct that four of the five employed conditions seem to be relevant for assessing the emergence of strong protesting actions. At the same time, none of individual conditions have a satisfactory explanatory power over the outcome. The result of this analysis can be seen as having a quasi clarifying power since it involves a causality pattern implied by four of the five explanatory conditions. However, in the context of our study, the obtained findings do confirm the expectations rose in the posted assumptions. Ethnic diversity has a strong causal link with the occurrence of strong protest which confirms the earlier findings from Horowitz (2000) and Gurr (1970) but are contrary with some other scholar studies (e.g. Fearon and Laitin 2003).

The positive effects of ethnic fractionalization are amplified by an advanced democratic environment which is influential but not fully decisive for ethnopolitical strife. In this respect, the role played by stronger democracies in the emergence of protest is sustained by Horowitz (2000) and Snyder (1999) while negated by scholars like Gurr (1993b) and Guibernau (1999). Apart from being a necessary condition, the geographical concentration has also proved to be a sufficient condition which in many cases leads to group mobilization. It thus reconfirms previous findings from Toft (1996, 2003) and Gurr (2000).

Finally, the low levels of patriotism hold an expected causality leading to high protest. The fuzzy sets analysis has proved that conditions at the level of individual beliefs can be sustainable and influential when analyzing the status of ethnic mobilization. This analysis shows that under
specific circumstances, nations which fail in providing their citizens with a reason to be proud in their nationality may face higher levels of ethnic unrest.

Political discrimination was also expected to influence the active mobilization and yet, it is missing from the final solution. Discrimination is usually regarded as one of the main factors involving ethnic unrest. Giving its powerful base for mobilization, it is usually the case that discriminated minorities are inclined to go for violent rebellion and not less. This causality is suggested by Gurr (1993b) and Gurr and Moore (1997). Therefore, we believe that political discrimination can be of a more support in explaining violent mobilization and less useful when analyzing the active forms of peaceful protest.

V. RESULTS FOR THE ABSENCE OF STRONG ETHNOPOLITICAL PROTEST

In a fuzzy sets analysis, a causal condition, or a set of causal condition may have different membership scores calculated for both the outcome and the negation of the outcome. This is why it is highly recommended to conduct the fuzzy sets analysis for the negation of protest separately from the other side of the outcome (Ragin 2008: 115). Through this specific characteristic of the fuzzy sets analysis, we will evaluate the causal asymmetry between the two faces of the outcome.

As in the previous model, we make first an analysis of the necessity to identify those conditions which are necessary for the absence of strong protesting actions. Since, strictly necessary conditions are very rare in reality (Ragin 2000) we use again, a benchmark of 0.80 consistency rate to assign the status of necessity. From the five conditions tested, the positive values of national pride and the absence of political discrimination proved to comply with the established consistency threshold.

A standardized scatter plot is employed to graphically examine the distribution of the 29 cases along the values of the necessary conditions and the outcome. With a consistency score of 0.92 and a coverage rate of 0.72, the strong values of national pride proves to be almost always necessary for the occurrence of no protesting actions (Figure 4). Similarly, the condition summarizing the absence of discrimination has a fair consistency score of 0.84 and coverage of 0.60. Logically, both conditions should be also part of the theoretical set summarizing further the patterns of sufficiency.

Strong national pride attitudes show a consistent match with the absence of strong ethnic mobilization. It is a condition measuring the interethnic harmony within society which proves to provide low incentives for ethnic strife. Also, it can represent those ethnic groups which have higher degrees of integration or assimilation in the host societies as stated by multiculturalists such as Tariq Modood (2005).
Figure 4 Strong National Pride as a Necessary Condition for the Absence of Strong Ethnopolitical Protest (Consistency = 0.92, Coverage = 0.72)

Note: RUU – Russians in Ukraine, RBE – Russians in Belarus

Figure 5 No or Limited Political Discrimination as a Necessary Condition for the Absence of Strong Ethnopolitical Protest (Consistency = 0.84, Coverage = 0.60)

Note: RM – Rroma in Macedonia, RBG – Rroma in Bulgaria, GA – Greeks in Albania
In the same way, a low degree of political discrimination seems to be a plausible condition for necessity because it limits the pressure of ethnic diversity which in turn weakens the conflicting demands of minority groups. However, the absence of discrimination does not automatically mean sufficiency for the frail protest because there can be easily imagined scenarios when stronger protesting events may occur in the absence of discriminatory policies (see the distribution of outlier cases in Figure 5).

It is however surprising that limited political discrimination fulfills the status of necessity for the absence of strong protest at the same time when strong political discrimination did not have any impact on the positive side of the outcome. This means that the absence of strong political discrimination have a more sizable impact on moderating ethnopolitical unrest than vice versa. Actually, the practice of discrimination only exacerbates the power of some latent conditions which pushes minority groups at the edge for mobilization. This statement is also supported by the condition of being “at risk” for discrimination which labels the status of all ethnic groups in the analyzed sample. It means that always, when a circumstance exacerbating the status of discrimination appears (e.g. political discrimination), the condition “at risk” becomes active and probably triggers some other factors which become visible in the mobilizing equation. Therefore, there will be constantly a clusters of factors which will result from the practice of discrimination which added together will influence the desire for protest. At the same time, no discrimination means few triggering motives for protest as it annihilates the counter effects resulting from the discrimination itself.

When having two conditions meeting the established criteria for necessity, both of them should be found later on in the final solution for sufficiency. More specifically, both necessary conditions should be connected in the sufficiency formula via the logical operator “and” (Goertz & Starr 2003, 6). Figure 5 shows that some cases have the membership value in the outcome higher than the score of necessity. In these particular instances, the rule of necessity is biased since the official employed formula \( Y_i \leq X_i \) cannot be empirically covered. These cases are presented in the upper triangular corner, and reveal limited protesting actions in the presence of political discrimination. It is worth observing that the status of necessity is particularly not respected by ethnic minorities in Balkans. Two of these cases are represented by Roma in FYROM and Bulgaria – minorities which are traditionally discriminated and softly mobilized.

The identification of the necessary conditions prompts us to consider a handful of other factors which can explain the outcome from the perspective of sufficiency. The analysis presented below uses the same five causal conditions which have been employed in the model for active ethnopolitical protest. A first step toward the analysis of sufficiency is done by creating a truth table which reflects the distribution of cases across the causal combinations (see Table 3). From the table we can see those causal combinations having at least one case in the row formula. The causal combinations with no case-coverage (logical remainders) are not presented in Table 3 but are employed and further analyzed as possible counterfactual cases while producing the causal solutions for the status of sufficiency.
Table 3 Distribution of Cases across Causal Combinations and Set-Theoretic Consistency of Causal Combination as Subsets for the Absence of Strong Protest.

<table>
<thead>
<tr>
<th>Political Discrimination</th>
<th>Democracy level</th>
<th>Ethnic Fractionalization</th>
<th>National Pride</th>
<th>Geographical Concentration</th>
<th>Number of cases</th>
<th>Protest (outcome)</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.97</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.95</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0.92</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0.92</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.89</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0.88</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0.86</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0.79</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.74</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0.71</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0.71</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.70</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.60</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.55</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0.50</td>
</tr>
</tbody>
</table>
solution, we obtain a more solid and complete set of formulas leading to the status of sufficiency for the outcome. For that reason, the interpretation of results should always consider those combinations resulting from the intermediate solution. The resulting formulas show that both parsimonious and intermediate solutions are represented by the same configuration of conditions, as follows:

**Formula 9**

\[
\text{NATIONAL PRIDE} \times \text{political discrimination} \times \text{democracy}
\]

(Consistency - 0.87, Coverage – 0.55)

Cases with strong membership (LAZ, MBH, RAZ, SBH, PBE, CBH, RGG, RBE, SMD)

The set theoretical consistency of this solution is 0.87 with a coverage score of 0.55. The degree of consistency reveals the accuracy of the solution while the coverage denotes the degree to which a particular combination of conditions accounts for the absence of strong protesting actions. The consistency score can be considered as relatively high, with the solution covering more than half of the total number of cases. The formula indicates a straightforward path toward the absence of strong protest, where both the necessary conditions are present: strong national pride feelings, the absence of political discrimination, and weak democratic standards.

The resulting formula reveals the conjunctural structure of our model. For the absence of strong protesting actions, ethnic groups must experience strong pride feelings with no political discrimination and additionally, living in an emerging democracy. As it was mentioned above in the description of the necessity, strong national pride and the absence of any form of discrimination practices are logically linked with low levels of group mobilization. This supposition is very much supported by the analysis of sufficiency as well.

We should however keep in mind that any of these specific conditions lead to the described outcome only in conjunction with each others. The influence of democracy values on ethnic mobilization is widely disputed in the literature. Depending on specific circumstances, weak democracies may inhibit the desire for powerful ethnic mobilization (see for instance Horowitz 2000; Snyder 1999). This reality is especially stringent in authoritarian regimes where any form of group mobilization is hard to be achieved. Considering our data, the described path of sufficiency is mainly represented by ethnic groups living in Central and Eastern European countries. The status of emerging democracies provides weak legal frameworks for many ethnic groups for being actively mobilized. Alternatively, in the aftermath of regimes transitions, many ethnic minorities become violently mobilized which consequently reduce their score in peaceful protest.

The presented formula is graphically plotted in Figure 6. In order to meet the criteria for sufficiency (X ≤ Y), a high number of cases should be in the upper triangle side of the x-y plot. This means that those cases should have the membership in the outcome higher than the membership in the combination of conditions meeting the sufficiency criteria.
As we can see in the Figure 6, a convincing majority of cases comply with the status of sufficiency, although few cases gravitate around the diagonal line splitting the quadrant. There are however, some instances visible in the plot, where the rule of sufficiency is not applicable. These cases are ethnic groups in transition countries (Serbs in Bosnia and Lezghins in Azerbaijan) with a consistent record of strong ethnic mobilization. These cases may be considered as outliers for the sufficiency rule but we cannot guarantee the rigidity of their shown status in protest. We might further speculate that ethnopolitical protest is a deeply volatile phenomenon, especially when correlated with the ethnic factor. Many minority groups may only temporary choose the status of protest mobilization across time. It is possible that with the advance of the democratization process in Eastern Europe, many of the outlier groups plotted in Figure 6 will move their mobilization status up to the sufficiency area. Similarly, the absence of strong protest may equally signify the involvement in other types of interethnic mobilization, such as violent rebellion. Therefore, treating this aspect in future research is highly recommendable.
VI. CONCLUSIONS

In this study we have assessed the status of necessity and sufficiency for several conditions in relation to both the emergence and the absence of strong ethnopolitical protest. The fuzzy-set logic has been employed in testing the established assumptions. The results show that the conditions leading to strong ethnopolitical protest are quite different than those leading to its absence. The patterns of causality for the two poles of the outcome are straightforward. Minority groups choose to engage in extensive protest when the following conditions are present: (1) are mobilized in a democratic environment (2) live in a county with a high degree of ethnic fractionalization and (3) either have weak feelings of national pride or are ethnically concentrated in compact territorial locations. On the other side of the outcome, the results have shown that the absence of strong protest is possible when (1) there are strong feelings of national pride among members of the group (2) there is no political discrimination and (3) the minority groups reside in emerging democracies.

The two concluding solutions are complementary with the analytical substance being analyzed. Strong protest is more present in the advanced democratic systems and more absent in the emerging democracies. Various degrees of national pride feelings do influence the willingness to protest as it was stipulated by the posted hypothesis. At the same time, political discrimination proved its meaning only in relation to the absence of strong ethnopolitical protest. According to the mobilization rationale, any practice leading to discrimination is more of a triggering condition for the “at risk” status. The absence of political discrimination has proved to reduce the conflicting demands among “at risk” minorities which in turn annihilate the influence of those conditions which are traditionally recognized to lead the desire for strong protest. These conditions - ethnic fractionalization together with compact geographical location, are sufficient and to a certain extent necessary, in the mobilization equation only when activated for pursuing strong protesting actions.

Generally, the obtained causal combinations support the established assumptions and strengthen the overall analysis on ethnopolitical protest. The results also widely demonstrate the utility of the fuzzy sets method for the investigation of causal complexity in the area of ethnic mobilization. The analysis of ethnopolitical protest has been assesses from the perspective of subset relation, that is, each case was investigated according to its consistency in the subset of the causal combinations being tested. The flexibility of choosing particular thresholds of consistency allows the mobility to assess the strength of the causal complexity at different levels.

This aspect was widely demonstrated while implementing two distinct consistency thresholds for the emergence of strong ethnopolitical protest: one for a truth table analysis of the configurations that are relatively consistent subsets (0.80) and another with configurations that are very consistent subsets (0.92). The obtained results were similar in terms of the intermediate solutions presented (Formula 5 & 8) which provide just an additional argument for the strength of the overall analysis. With regard to the analytical substance of the fuzzy-set analysis, this study widely supports the argument of using higher consistency thresholds, especially when employing
a medium to large N into the analysis. The formula of sufficiency obtained from using very consistent subsets (0.92) has a better fit of all cases in the plotted diagram (Figure 2), as compared with the factored formula (Figure 3) resulting from the minimization of the truth table while using only relative consistent subsets (0.80).

However, the fuzzy sets analysis does not remain without ongoing problems. One of the main disadvantages when using the fuzzy-set technique is mainly linked with the temporal dimension. Since ethnic mobilization widely varies across time, we cannot integrate temporal variations in the fuzzy-set model. Therefore, the provided explanations should be strictly considered within the timeframe in which ethnic groups and their status in mobilization have been analyzed.

The main achievement of this study is nevertheless the identification of the causal conditions leading to necessity and sufficiency. Especially the assessment of sufficiency was very stringent in our fuzzy sets models, as it involves a very precise standard of connecting all analyzed cases in the appraisal of each combination of conditions. This particularity of fuzzy sets analysis would be hardly accomplished through conventional quantitative or qualitative analysis. Particularly, when it comes to the detection of the outlier cases, most of the conventional techniques would be less effective (Braumoeller and Goertz 2000). These exceptions add a substantial value to the analysis of ethnic-group mobilization, since they provide incentives to rearrange older theoretical debates; a characteristic which the conventional quantitative correlations but also the classical case studies could not easily do.
References


ANNEXES

Table 4 The Outcome: Ethnopolitical Protest (prior to fuzzy set coding)

<table>
<thead>
<tr>
<th>Coded Values</th>
<th>Labels in the original MAR variable (PROT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No protest r</td>
</tr>
<tr>
<td>1</td>
<td>Verbal Opposition (Public letters, petitions, posters, publications, agitation, etc.)</td>
</tr>
<tr>
<td>2</td>
<td>Symbolic Resistance Scattered acts of symbolic resistance (E.g. sit-ins, blockage of traffic, sabotage, symbolic destruction of property)</td>
</tr>
<tr>
<td>3</td>
<td>Small Demonstrations (Demonstrations, rallies, strikes, and/or riots &lt; 10,000)</td>
</tr>
<tr>
<td>4</td>
<td>Medium Demonstrations (Demonstrations, rallies, strikes, and/or riots &lt;100,000)</td>
</tr>
<tr>
<td>5</td>
<td>Large Demonstrations (Mass demonstrations, rallies, strikes, and/or riots, total participation &gt; 100,000)</td>
</tr>
</tbody>
</table>

Table 5 Political Discrimination: Original Coding in MAR Prior to Fuzzy set Coding

<table>
<thead>
<tr>
<th>Coded Values</th>
<th>Labels in the original MAR variable (POLDIS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No political discrimination</td>
</tr>
<tr>
<td>1</td>
<td>Neglect/Remedial policies Due to historical neglect. There is substantial underrepresentation in the political office. There are public policies meant to improve this status</td>
</tr>
<tr>
<td>2</td>
<td>Neglect/No remedial policies Similar to (1), yet, there are no protective or remedial policies.</td>
</tr>
<tr>
<td>3</td>
<td>Social exclusion/Neutral policy Substantial social practices undermining the group access in political and social arena. There are inadequate policies to offset the discrimination practices.</td>
</tr>
<tr>
<td>4</td>
<td>Exclusion/Repressive policy The group is heavily restricted in terms of political participation. No remedial policies.</td>
</tr>
</tbody>
</table>

Table 6 Geographical Concentration: Original Coding in MAR Prior to Fuzzy set Coding

<table>
<thead>
<tr>
<th>Coded Values</th>
<th>Labels in the original MAR variable (GROUPCON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Widely dispersed</td>
</tr>
<tr>
<td>1</td>
<td>Primarily urban or minority in one region</td>
</tr>
<tr>
<td>2</td>
<td>Majority in one region, others dispersed</td>
</tr>
<tr>
<td>3</td>
<td>Concentrated in one region</td>
</tr>
</tbody>
</table>

Table 7 National Pride: Original Coding in EVS Prior to Fuzzy set Coding

<table>
<thead>
<tr>
<th>Coded Values</th>
<th>Labels in the original EVS variable – National pride</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not at all proud</td>
</tr>
<tr>
<td>1</td>
<td>Not proud</td>
</tr>
<tr>
<td>2</td>
<td>Quite proud</td>
</tr>
<tr>
<td>3</td>
<td>Very proud</td>
</tr>
</tbody>
</table>

Table 8 Calibration Syntax of the Outcome and Conditions

<table>
<thead>
<tr>
<th>Outcome &amp; Conditions</th>
<th>Calibration syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protest - outcome</td>
<td>calibrate(protest,3,1,5,0.5)</td>
</tr>
<tr>
<td>Political discrimination</td>
<td>calibrate(poldis,3,1,0)</td>
</tr>
<tr>
<td>Democracy level</td>
<td>calibrate(demscore,9,5,7,2)</td>
</tr>
<tr>
<td>Geographical concentration</td>
<td>calibrate(groupcon,3,2,1,0)</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>calibrate(ethfract,0.8,0.5,0)</td>
</tr>
<tr>
<td>National Pride</td>
<td>calibrate(pride,2.5,1.5,1)</td>
</tr>
</tbody>
</table>