Ethnofederalism
a slippery slope towards secessionist conflict?

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ETHNOFEDERALISM – A SLIPPERY SLOPE TOWARDS SECESSIONIST CONFLICT?

A dissertation submitted to
ETH ZURICH

for the degree of
Doctor of Sciences

presented by

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2011
Abstract

The scholarly debate on ethnofederalism as a suitable institutional tool to govern multi-ethnic societies is characterized by diametrically opposed positions. On the one hand, ethnofederalism is viewed as being able to accommodate ethnic groups and their needs for self-determination through the devolution of power. On the other hand, ethnofederalism is believed to promote violent secessionism through exactly the same factors that are meant to appease ethnic groups. This dissertation tackles this debate by clarifying the concept of ethnofederalism and providing a new operationalization of the term. In particular, it takes into account ethnofederalism’s continuous nature, an observation that has been neglected in the literature. By geographically analyzing substate boundaries in federal countries, the thesis shows that regional risk for secessionist conflict increases if the match between substate boundaries and ethnic groups settlements increases up to a medium degree. The risk decreases again if the boundaries approach a state of perfect congruence.

In order to shed more light on the mechanisms that produce the statistical findings, the dissertation proposes that means, motive and identity taken together should be used as explanations for violent conflict. First, means are available in ethnofederal regions in the form of organizational resources that facilitate collective action, but also in the form of tangible resources such as regional armies. Second, political life in ethnofederations evolves around ethnicity since this is the main organizational cleavage. Hence, elites are likely to use ethnicity for mobilization, which promotes nationalism and separatism. Both of these factors inherent to ethnofederal structures are assumed to contribute to collective action and ethnonational mobilization. Third, the role of motivations must not be underestimated. Regional grievances based on political and economic inequality are often triggers for ethnonationalist mobilization. Also, the region’s fear or real loss of autonomy is a frequent issue in conflicts between the region and the central government.

A case analysis of the Biafran War in Nigeria 1967 illustrates these mechanisms leading to ethnonationalist mobilization and secessionist violence. It can be shown that in Nigeria, ethnofederal systems perpetuated identity cleavages, while at the same time provided
regional governments with the power for secessionist mobilization. Political inequality and regional fear of losing power then triggered the declaration of independence of Biafra, which led to violent conflict with the government. Other case studies on regions in the former Yugoslavia, Ethiopia, Myanmar, and Russia provide additional evidence for the conflict-inducing effect of ethnofederalism, but also highlight shortcomings and the need for a motivation-based explanation. Based on these studies and data on non-violent secessions, the thesis offers a tentative explanation of why medium ethnofederal regions are most conflict-prone: Regions with imperfect congruence are likely to provide some but not enough power to ethnic groups. Because the devolution of power remains under contestation, conflict is more likely. On the other hand, the lack of violence in strongly ethnofederal regions may be due to the fact that an easily negotiated partition is possible in these cases, which prevents the occurrence of hostilities.
Zusammenfassung


Dieses statistische Resultat untermauert theoretische Erwartungen, die den Konflikt ursächlich erklären. Die Dissertation plädiert für einen Erklärungsansatz, der die Konzepte Mittel, Motiv und Identität vereint. Ethnoföderale Regionen stellen zuallererst einmal organisatorische Mittel bereit, mit denen kollektives Handeln wie Sezession einer Region leichter gesteuert werden kann. Darüber hinaus gibt es materielle und teilweise auch militärische Ressourcen auf regionaler Ebene, die einen gewalttäten Konflikt erst ermöglichen. Desweiteren spielt ethnische Identität in Ethnoföderationen eine zentrale politische Rolle, da die gesamte Struktur dieser Regierungsform auf Ethnizität basiert. Diese Tatsache schreibt es politischen Eliten fast vor, politische Macht durch ethnische Mobilisierung zu gewinnen, was Nationalismus und Separatismus fördert. Dadurch kann es zu kollektivem Handeln und Sezessionskonflikt kommen, aber möglicherweise auch zur Befriedung ethnischer Gruppen, wenn die ethnoföderale Idee konsequent umgesetzt wird. Die Rolle von Motiven, die Regionen dazu bringt, einen Sezessionskrieg zu führen,

Acknowledgements

I owe a great deal to colleagues, friends and members of my family, who have supported me throughout the writing of this dissertation, and who, through their own research, comments and questions have encouraged and enlightened me.

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Thomas Koblet was an indispensable help during the creation of the Federal Administrative Boundaries dataset and a patient source of information on anything related to GIS. I thank Megan Jackson for quickly but thoroughly weeding out language mistakes and increasing flow and readability of this thesis.

A huge thank you (and a hug) goes to my mother, Shu-Jyuan Deiwiks, for supporting me unconditionally throughout this entire academic enterprise. She relentlessly encouraged me to stick to it, and without her I probably would not have made it through the hard times. I am also extremely grateful to have a supportive companion in Jeffrey T. Outman, who encouraged me no matter what, especially in the last stages of this thesis when I must have been unbearable. The time we spent together always worked wonders in taking my mind off the thesis whenever necessary.

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— Christa Deiwiks
Zurich, June 2011
# Contents

1 Introduction ............................................. 1

2 Secessionist Conflict in Ethnofederations ............. 7
   2.1 Definitions ........................................ 7
   2.2 Ordering Concepts of Collective Action ............. 9
   2.3 Ethnofederal Mobilization .......................... 12
      2.3.1 Means: Resource Mobilization ............... 12
      2.3.2 Identity ....................................... 13
      2.3.3 The Ethnofederalism Debate: A Reconciliation Attempt .... 15
   2.4 Motives ............................................ 16
      2.4.1 Inequality ..................................... 16
      2.4.2 Loss of Autonomy .............................. 21
   2.5 Hypotheses ......................................... 22
   2.6 Chapter Summary .................................. 23

3 Spatial Data and Spatial Computations ................. 25
   3.1 Federal Administrative Boundaries (FAB) .......... 25
      3.1.1 Coding procedure ................................ 27
      3.1.2 Territorial Changes ............................ 28
   3.2 Linking Spatial Datasets ............................ 35
      3.2.1 Spatial Data on Ethnic Groups ................. 35
      3.2.2 Spatial GDP Data ............................... 36
      3.2.3 Spatial Population Data ......................... 37
      3.2.4 Spatial Computations ........................... 38
   3.3 Chapter Summary .................................. 40

4 Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict .......... 43
   4.1 Data ............................................... 44
      4.1.1 Unit of Analysis ................................ 44
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.2</td>
<td>45</td>
</tr>
<tr>
<td>4.1.3</td>
<td>46</td>
</tr>
<tr>
<td>4.1.4</td>
<td>54</td>
</tr>
<tr>
<td>4.2</td>
<td>55</td>
</tr>
<tr>
<td>4.2.1</td>
<td>59</td>
</tr>
<tr>
<td>4.3</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>67</td>
</tr>
<tr>
<td>5.1</td>
<td>68</td>
</tr>
<tr>
<td>5.2</td>
<td>68</td>
</tr>
<tr>
<td>5.3</td>
<td>69</td>
</tr>
<tr>
<td>5.4</td>
<td>71</td>
</tr>
<tr>
<td>5.5</td>
<td>74</td>
</tr>
<tr>
<td>5.6</td>
<td>80</td>
</tr>
<tr>
<td>5.7</td>
<td>84</td>
</tr>
<tr>
<td>6</td>
<td>87</td>
</tr>
<tr>
<td>6.1</td>
<td>88</td>
</tr>
<tr>
<td>6.2</td>
<td>91</td>
</tr>
<tr>
<td>6.3</td>
<td>93</td>
</tr>
<tr>
<td>6.4</td>
<td>95</td>
</tr>
<tr>
<td>6.5</td>
<td>97</td>
</tr>
<tr>
<td>7</td>
<td>99</td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

## 5 Ethnofederalism and Ethnic Conflict in Nigeria’s First Republic 1967

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Case Selection</td>
<td>68</td>
</tr>
<tr>
<td>5.2 Introduction</td>
<td>68</td>
</tr>
<tr>
<td>5.3 Background</td>
<td>69</td>
</tr>
<tr>
<td>5.4 Chronology</td>
<td>71</td>
</tr>
<tr>
<td>5.5 Analysis</td>
<td>74</td>
</tr>
<tr>
<td>5.6 Contemporary Nigeria</td>
<td>80</td>
</tr>
<tr>
<td>5.7 Conclusion</td>
<td>84</td>
</tr>
</tbody>
</table>

## 6 Ethnofederal Mobilization Beyond Nigeria

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Croatia and Slovenia in Yugoslavia 1991</td>
<td>88</td>
</tr>
<tr>
<td>6.2 Eritrea in Ethiopia 1964</td>
<td>91</td>
</tr>
<tr>
<td>6.3 Kayin in Myanmar 1948</td>
<td>93</td>
</tr>
<tr>
<td>6.4 Dagestan in Russia 1999</td>
<td>95</td>
</tr>
<tr>
<td>6.5 Conclusion</td>
<td>97</td>
</tr>
</tbody>
</table>

## 7 Conclusion

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>99</td>
</tr>
</tbody>
</table>

## Bibliography

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>104</td>
</tr>
</tbody>
</table>
List of Figures

2.1 Overview of theoretical framework ........................................... 22

3.1 Number of boundary changes in federations ................................... 29
3.2 Nigeria’s regions 1960-1963 .................................................... 30
3.3 Nigeria’s regions 1963-1976 .................................................... 31
3.4 Nigeria’s regions 1976-1996 .................................................... 32
3.5 Nigeria’s regions from 1996 to today .......................................... 33
3.6 Ethiopia’s regions from 1946 to today ........................................ 34
3.7 Ethnic groups in India in 2005 (FAB, GeoEPR) .............................. 36
3.8 Gross Cell Product (PPS) in India in 1990 according to G-Econ. Darker shadings correspond to higher GCP values. ......................... 37
3.9 Population in India in 1990 according GPW. Darker shadings correspond to higher population numbers ........................................... 38
3.10 Ethnic groups in Northern India in 1990 (FAB, GeoEPR) ............ 39
3.11 Grid cells used for raster aggregation of wealth in Punjab (white centroids) and Himachal Pradesh (black centroids) in Northern India. All spatial aggregations presented in this thesis use the centroid of the raster cell to determine whether or not it belongs to a particular region. ..................... 39
3.12 Correlation of non-spatial and computed regional population figures in Switzerland and the Soviet Union in 1989/1990. The gray line indicates perfect correlation ................................................................. 40
3.13 Correlation of non-spatial and computed regional GDP per capita (PPS) in Germany and Spain in 1990/1999. The gray line indicates perfect correlation ................................................................. 41

4.1 Nigeria 1960, southern regions and ethnic groups .......................... 49
4.2 Eastern Region in Nigeria 1960, Igbo settlement pattern .................. 49
4.3 Distribution of the Congruence variable ....................................... 50
4.4 Conflict regions and their Congruence values ................................ 51
List of Figures

4.5 Inequality in Yugoslavia (red = poor, blue = rich, data sources: FAB, G-Econ) ................. 52
4.6 Inequality in Yugoslavia (red = poor, blue = rich) ........................................ 52
4.7 Distribution of the economic inequality indicators ............................................. 53
4.8 Change in predicted probabilities when boundary congruence or political exclusion varies from 0 to 1 (upper row) and when a region gets comparably more or less wealthy (lower row; all other variables held at their mean, no prior war) ............ 57
4.9 ROC curves for the full model (Model 4 in Table 4.4) and a model with only control variables (Model 1 in Table 4.3) ................................................... 58
5.1 Ethnic groups in Nigeria in 1960 (FAB, GeoEPR) .............................................. 70
5.2 Average degree of ethnofederalism in Nigeria over time ....................................... 81
5.3 Administrative units in Nigeria and politically relevant ethnic groups between 1967 and today ................................................................. 82
6.1 Ethnic groups in Yugoslavia in 1990 (FAB, GeoEPR) ........................................ 89
6.2 Economic inequality in Yugoslavia in 1990 (FAB, G-Econ) ................................. 90
6.3 Ethnic groups in Ethiopia in 1963 (FAB, GeoEPR) ............................................. 92
6.4 Ethnic groups in Southern Myanmar in 1948 (FAB, GeoEPR) ............................ 94
6.5 Ethnic groups in Dagestan in 1998 (FAB, GeoEPR), Note that not all ethnic groups from GeoEPR are depicted here, for example I did not include Ukrainians and Georgians that are dispersed over whole Dagestan. .......................... 96
6.6 Economic inequality in Russia in 1990 (FAB, G-Econ) ...................................... 97
7.1 Ethnic groups in Switzerland in 2005 (FAB, GeoEPR) ....................................... 102
7.2 Ethnic groups in Canada in 2005 (FAB, GeoEPR) ............................................ 103
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Variables in the <em>FAB</em> dataset</td>
<td>27</td>
</tr>
<tr>
<td>3.2</td>
<td>Regions and territorial changes</td>
<td>29</td>
</tr>
<tr>
<td>4.1</td>
<td>Secessionist regions in federations, 1946-2006</td>
<td>47</td>
</tr>
<tr>
<td>4.2</td>
<td>Summary statistics</td>
<td>54</td>
</tr>
<tr>
<td>4.3</td>
<td>Regression results</td>
<td>56</td>
</tr>
<tr>
<td>4.4</td>
<td>Instrumental Variable analysis</td>
<td>61</td>
</tr>
<tr>
<td>4.5</td>
<td>Sensitivity analysis (temporal controls are left out for convenience)</td>
<td>63</td>
</tr>
<tr>
<td>6.1</td>
<td>Conflict regions discussed in this chapter</td>
<td>88</td>
</tr>
</tbody>
</table>
# List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPR</td>
<td>Ethnic Power Relations</td>
</tr>
<tr>
<td>FAB</td>
<td>Federal Administrative Boundaries</td>
</tr>
<tr>
<td>GCP</td>
<td>Gross Cell Product</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>G-Econ</td>
<td>Geographically based Economic data</td>
</tr>
<tr>
<td>GeoEPR</td>
<td>Geographically based EPR</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information Systems</td>
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<tr>
<td>GPW</td>
<td>Gridded Population of the World</td>
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<tr>
<td>NCNC</td>
<td>National Council of Nigeria &amp; Cameroons</td>
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<tr>
<td>NNPD</td>
<td>Nigerian National Democratic Party</td>
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<tr>
<td>NPC</td>
<td>Northern People’s Congress</td>
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<tr>
<td>PPS</td>
<td>Power Purchasing Standard</td>
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<tr>
<td>PRIO</td>
<td>International Peace Research Institute Oslo</td>
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<tr>
<td>ROC</td>
<td>Receiver Operating Characteristic</td>
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<tr>
<td>UCDP</td>
<td>Uppsala Conflict Database Project</td>
</tr>
</tbody>
</table>
1 Introduction

Secessionist movements are a frequent source of violent conflict in the international system today. According to the conflict list provided by Uppsala/PRIO, around two thirds of the ongoing intrastate conflicts as of early 2010 – 18 out of 29 – were secessionist in nature, among them conflicts involving the Assamese, Kashmiri Muslims, and Manipuris in India; the Karens and Shan in Myanmar; the Baluchis in Pakistan; the Chechens in Russia; the Kurds in Turkey; and the Palestinians in Israel (Gleditsch et al. 2002). Many of these conflicts have lasted for several decades, such as the rebellions in Myanmar that first broke out in the late 1940s. These intractable clashes produce thousands of casualties; for example the Kayin conflict in Myanmar alone has claimed over 15,000 lives so far (Lacina and Gleditsch 2005). But also short-lived secessionist conflicts, which have ended, have proven destructive. The ethnonationalist struggle of the Eastern Region in Nigeria between 1967 and 1970 resulted in an estimated 75,000 deaths, while the conflicts in Croatia and Slovenia in Yugoslavia in 1991 have produced at least 1,500 casualties in only one year (Lacina and Gleditsch 2005). Obviously, these observations demonstrate the urgent need for an inquiry into the causes of these conflicts and an evaluation of appropriate conflict prevention and management measures.

The role of the central government is central in responding to minorities that demand more autonomy and potentially their own state. However, the questions when and how governments should do so is difficult to answer. When facing secessionist threats, traditional policy advice for governments has been to respond positively to the demands of rebellious minorities (Lustick, Miodownik and Eidelson 2004, 209f). The emergence of international norms on the treatment of minority populations and expectations of quick appeasement when granting minorities their demands encourages the application of self-governance regimes (Wolff 2005). Decentralization and ethnofederalism have been used as a response to violent struggle and as a conflict management tool to appease self-conscious minorities with demands for more autonomy.

Yet, higher levels of autonomy may also provide a group with the logistical and political means to push its nationalist agenda even further, which may result in violent separatist
1 Introduction

Ethnofederal states in particular seem to be most prone to this pitfall. In ethnofederations, administrative boundaries coincide with ethnic group boundaries to a large extent, creating latent states for groups. While ethnofederalism might allow the accommodation of various ethnic groups through the regional distribution of power, within these arrangements ethnic groups may find exactly those conditions that are conducive to secession. Clearly, this observation points to a dilemma for policy makers that is nurtured by the fact that 13 of the 18 secessionist conflicts in the Uppsala/PRIO conflict list took place in countries that were or are federations.

While a great deal of attention has been devoted to the question whether ethnofederalism is a suitable institutional tool to govern multiethnic societies, the scholarly debate is characterized by directly opposing views. On the one hand, ethnofederalism is viewed as being able to peacefully accommodate diverse interests, and, hence, to reduce conflict (see, e.g., Lijphart [1977], Hechter [2000b], Gurr [2000a], Lustick, Miodownik and Eidelson [2004], Lijphart [1977]), as one of the best-known proponents of group autonomy, suggest to delegate rule-making and rule-application, in other words legislative and executive power, to lower levels. In his view, federal institutions are an “excellent opportunity” to establish group autonomy (Lijphart [2002], 51). Ethnofederal arrangements with provisions on educational autonomy, for example, may protect a group’s identity, control over judiciary and law enforcement even can protect a group’s physical survival, and last but not least economic self-determination can preserve a group’s prosperity. If minority groups do not fear to be dominated or even suppressed by a national majority, the commitment problem is eased (Fearon [1998], Hartzell, Hoddie and Rothchild [2001]). In fact, it could be shown that decentralization, in particular in combination with proportional representation, increases the likelihood of protest but decreases the likelihood of violent rebellion (Hechter [2000a], Cohen [1997], Saideman et al. [2002]). Other empirical evidence comes from Hoddie and Hartzell (2005), who find that territorial autonomy provisions increase the length of time that the parties remain at peace. Others (e.g., Stepan [2001]) point to the federal nature of long-standing multinational and multilingual democracies, and Bermeo (2002, 108) states that “no violent separatist movement has ever succeeded in a federal democracy”. Simply looking at countries such as Belgium and Canada show that the territorial devolution of power in the form of ethnic regions can lead to interethnic peace.

On the other hand, conflicts in ethnofederations such as Yugoslavia cast doubt on the assumption that ethnofederalism is a perfect tool to govern multi-national countries. To the contrary, there are intuitive reasons to expect a conflict-fueling effect of ethnofederal
structures. First, regional autonomy arrangements short of partitioning may not only leave identity incompatibilities in place (Chapman and Roeder 2007), but will ‘harden’ them. The administrative setting enhances a group’s legitimacy to claim or receive its own state, ethnic identities are being forged and ‘politicized’, and growing demands and secessionist conflict are likely (Nordlinger 1972, Snyder 2000, Brubaker 1996, Roeder 2007, Bunce 2004, Gorenburg 2000). Second, Brancati (2006) argues that decentralization may strengthen regional parties, which increases the mobilization capacity for secessionist agendas in the future. Hence, the mere existence of state institutions on the regional level provides ethnic groups with the resources to make a secession feasible and also legitimate for the international community (see, e.g. Bunce 2004, McGarry and O’Leary 2003, Roeder 2007). Roeder (2007) finds that so-called ‘segmented states’, which are states where ethnic group boundaries and administrative boundaries coincide to a large degree, have an increased propensity to experience secessionist conflict. Third, territorial decentralization will entail the creation of new minorities since segmented states are never completely homogeneous, and these, in turn, may fear being disadvantaged and suppressed (Duchacek 1975). On a more abstract level, autonomy means an improvement of the bargaining position of the minority, which can give rise to increased demands (Treisman 1997). Empirical evidence that ethnofederal institutions may be more conflict-prone comes, for example, from Hale (2004) and Christin and Hug (2006).

As this brief outline shows (see also Brancati 2006, Hale 2004, Bakke and Wibbels 2006, Hechter and Okamoto 2001), the debate is far from resolved. Both sides can provide sound and intuitive theoretical arguments and empirical evidence that support their view. The research conducted in this thesis is motivated by the lack of consensus that characterizes this debate. Also, the degree of conceptual confusion in the debate is worrying. First, as the brief sketch shows, the discussion sometimes evolves around non-violent rebellion, sometimes around violent secessionist conflict, and sometimes around state crisis, state break-up and successful secession.

Second, scholars have frequently equated federalism with ethnofederalism, which has led to some conceptual confusion. Federalism is most commonly defined in a way that denotes structures (rather than processes) of government. Its main characteristic is the territorial division of power, i.e. the combination of self-rule and shared rule of government and regional subunits (see e.g. Riker 1964, Elazar 1987, Bednar 2009). Important here is that power is divided on the basis of territory rather than societal characteristics such as ethnic cleavages. Crucially, none of the structural definitions of federalism require that ethnic group boundaries coincide with regional boundaries. In contrast, the
1 Introduction

essential characteristic of ethnofederalism, which is a special case of federalism, is that
subnational unit boundaries do coincide with ethnic group boundaries: the federal struc-
ture is designed in such a way that the territorial devolution of power is at the same
time a group-empowering measure. Unfortunately, the ethnofederal aspect of federalism
generally is a black box in studies on federalism (e.g. Brancati 2006), and, possibly as a
result, its effect on ethnic or secessionist conflict remains unclear.

Third, it seems that ethnofederalism is generally understood dichotomously; most
studies on ethnofederalism assume that a state is either ethnofederal or not. For example,
Hale’s (2004 167) definition, which understands ethnofederal countries as constructs
where “at least one constituent territorial governance unit is intentionally associated
with a specific ethnic category”, encompasses greatly different countries and institutions
under one label. Hale’s definition is concerned with whether or not a unit is designated to
a particular ethnic group. What it does not refer to is whether ethnic group boundaries
and administrative boundaries do, in fact, overlap and to what degree. Likewise, Roeder’s
(2009 204) definition of ethnofederalism as a “specific type of federalism [...] in which at
least some, if not all, constituent units of the federation are homelands controlled by their
respective group” acknowledges the fact that ethnofederalism is a subset of federalism
but suffers from the same fuzzy understanding of the ethnofederalism concept.

In order to address this criticism, I argue that a resolution of the contradictions in the
ethnofederalism debate requires a new way of conceptualizing and operationalizing eth-
ofederalism. Hence, I clearly make the conceptual distinction between federalism and
ethnofederalism, which helps focusing on specific constellations of factors that promote
conflict. I also assume that countries and regions can be ethnofederal to varying degrees.

To reify these ideas, I collected a new geographical dataset on federal substate boundaries
during the years 1946-2008 (see Chapter 3). Together with ethnic group settlements, the
thesis freshly addresses the question of whether ethnofederal institutions promote seces-
sionist conflict by proposing a new measurement strategy that overlays the boundaries of
administrative units and ethnic group settlement yielding a continuous measure for the
match between the two. This operationalization allows differences in the degree to which
a region is ethnofederal and can, hence, better portray various institutional arrangements.
As a result, generalizations over federal countries and time periods are possible. Further,
linking regional boundary information with additional spatial datasets produces regional

1 The idea that federalism in general – and in particular its quality – is a matter of degree is highlighted
by Livingston (1952 87): “The institutional patterns reflect the federal quality of the societies in
varying degrees; they may be more or less ‘federal’ in the way in which they manifest the degree to
which the political society behind the institutional facade is integrated or diversified.”
information on population and relative or absolute economic activity. These procedures are particularly useful for generating indicators such as economic inequality for large-N analyses.

Many studies on the effect of federalism and ethnofederalism on conflict use the country as the unit of analysis (e.g. [Bakke and Wibbels 2006; Christin and Hug 2006]). However, since secessionist conflict is usually restricted to a specific region of the country, analyzing countries prevents an assessment of which region may be particularly conflict-prone. Even if the ethnic makeup of the country as a whole is taken into account, interactions of country-level indicators (Bakke and Wibbels 2004) or the number of subunits where the national majority group is not in a majority (Christin and Hug 2006) conceal important details about, for example, which ethnic group lives in which administrative unit. In contrast, the approach taken in this thesis centers around the region as the unit of analysis and uses the relation between regional boundaries and ethnic group settlements to assess the risk of a particular region to become involved in secessionist conflict.

The empirical findings of my analyses confirm the usefulness of this approach. The large-N study presented in Chapter 4 provides evidence that ethnofederalism may increase or decrease conflict risk depending on its extent. The effect of boundary congruence on secessionist conflict follows an inverted U-shaped curve. Regions whose boundaries do not match with boundaries of ethnic group settlement have a low risk of becoming involved in conflict. This risk increases with increasing boundary congruence; however, it decreases again after a certain threshold of congruence is exceeded. In other words, regions whose boundaries almost completely coincide with ethnic group boundaries have a comparably low risk to experience conflict. These results suggest that arguments of both proponents and opponents of ethnofederalism should be taken seriously in assessing the prospects of ethnofederalism as a suitable tool to govern divided societies.

The results of the statistical analysis leave important questions unanswered. How exactly do ethnofederal institutions translate into increased conflict risk? How do they manage to decrease the risk, if at all? What role do resources and ethnic identity play for ethnonationalist mobilization and secessionist conflict? The findings of the case study of the Biafran conflict in Nigeria in 1967 in Chapter 5 reveal details on conflict mechanisms that are concealed in the correlational analysis. The case study shows how means and organizational capacities available in ethnofederal institutions can promote mobilization and conflict and how the political salience of ethnicity influences collective action. Contrasting Nigeria’s political system in 1967 with the federal structure forty or so years later, changes in substate boundaries gives clues of how Nigeria’s governments, so far,
1 Introduction

has managed to prevent the recurrence of large-scale ethnonationalist violence.

Institutional factors such as the boundary congruence of a region and ethnic group are likely not the only determinants of secessionist conflict. Realizing the limitations of a resource- and identity-based explanation for collective behavior, this thesis also investigates the role of motivations in the outbreak of secessionist conflict. What reasons does a region have to want to leave the state? This thesis assumes that ethnofederal systems promote conflict to some degree but that grievances, for example triggered by economic and political inequality, have a large role to play as well. Relative poverty and relative wealth are often used by regional leaders to justify their quest for an independent state. Indeed, the large-N analysis in Chapter 4 provides empirical evidence that large deviations between the economic development of the region and the federation as a whole lead to an increased conflict risk. This finding concerns both relatively deprived and wealthy regions. Deprived regions in federations may blame the government by claiming that interregional transfers are insufficient. In contrast, wealthy regions, may point to overproportional contributions to federal funds. In both cases, secession is used as a way to address economic grievances.

The statistical analysis also shows that political exclusion is robustly correlated with secessionist conflict. Even if ethnic groups enjoy autonomy in a region, the fact that they do not have executive power on the national level may have explosive consequences, for example in the case when the distribution of power between the center and the region is unilaterally altered. The Nigerian case study in Chapter 5 illustrates the role of political exclusion and loss of autonomy in the emergence of ethnonationalist mobilization, and points to economic inequality as a factor that indirectly contributed to conflict. The importance of political and economic grievances are also highlighted in Chapter 6, where selected conflict regions at extreme ends of the ethnofederalism dimension are discussed.

To sum up, this thesis examines how means, motives and identity operate together in ethnofederations to bring about secessionist conflict. Bringing clarity to this puzzle is highly relevant for increasing the understanding of why some ethnofederal regions experience conflict while others remain peaceful. It may also inform the set up and specification of ethnofederal institutions in post-war countries and similar territorial arrangements throughout the world.
2 Secessionist Conflict in Ethnofederations

This chapter introduces the reader to the theoretical framework and arguments put forward in this thesis. Starting point is clarification of central concepts such as the distinction between federalism and ethnofederalism, which is an attempt to improve on some conceptual confusion in the ethnofederalism debate. Further, the concepts of means, motive and identity are used to order explanations for secessionist conflict. With regard to means, I argue that ethnofederal regions allow collective behavior through providing organizational and tangible resources. Further, ethnic identity is likely to have political salience in ethnofederal regions and facilitate ethnonationalist mobilization. Finally, motives based on political and economic inequality or the loss of autonomy are assumed to contribute to conflict as well. These three aspects of collective behavior are assumed to be crucial for the outbreak of conflict. Based on the theoretical considerations, eight hypotheses are put forward that will be tested in the subsequent chapters.

2.1 Definitions

The lack of a common terminological ground among those scholars who would propose ethnofederalism as a conflict-reducing institutional tool and those who would advise against it seems one of the obstacles to progress in the ethnofederalism debate. In other words, clarity about central concepts is of paramount importance, which is why I provide the following definitions that serve as basis for the theoretical discussion.

With regard to a definition of a federation, this thesis relies on Bednar (2009) who focuses on a structural understanding of federalism.\footnote{A government is federal if it meets the following three structural criteria: 1. Geopolitical division: The territory is divided into mutually exclusive states (or provinces, lander, etc.). The existence of each state is constitutionally recognized and may not be unilaterally abolished.} First, a federation consists of...
terритори subunits, which are the primary political divisions. Second, in a federation these regions are electorally independent. Third, the central government and the regions have mutually exclusive powers. Moreover, her definition maintains that a federation is not necessarily a democracy. Finally, if one of the three criteria does not apply, we speak of quasi-federations.

This definition of a federation does not include any provisions related to the territorial distribution of ethnic minorities, which a definition of an ethnofederation, however, must incorporate. Hence, this thesis builds on the suggestion of Christin and Hug (2006, 2), who propose that an *ethnofederation* is “a federal system where regional borders follow as closely as possible settlement patterns of minorities.” Yet, on closer inspection this definition is difficult to apply since it is inherently tricky to estimate what “as closely as possible” means in reality. Hence, this definition can be refined by emphasizing that a country or region can be ethnofederal to a degree, and that this degree increases with a higher territorial congruence of regional and ethnic boundaries.

These considerations raise the question of to what the term *ethnicity* refers. The literature on ethnicity distinguishes between primordialist approaches and instrumentalist/constructivist approaches. Primordialists (e.g. Geertz 1973) maintain that identities are fixed and that an individual has only one identity. Constructivists, in contrast, suggest that identities are fluid, or respectively, that individuals have several ethnic identities that can be ‘activated’ depending on social, economic and political processes. This distinction, of course, describes the extreme ends of a scale, but compromises between these opposite standpoints are possible. I position myself on the constructivist side since I consider ethnicity a category that may be based on real as well as imagined common descent (Anderson 1991, Horowitz 1985, 52). This means that ethnic groups may define themselves by observable characteristics such as physical features and behavior (culture, religion, etc), but also with regard to their ideas and beliefs of a shared past. This belief, however, may be susceptible to social and political influence.

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2. Independence: The state and national governments have independent bases of authority. In general, this independence is established constitutionally through electoral independence, where each government is held accountable to its constituents, although nondemocratic forms of independence may be available.

3. Direct governance: Authority is shared between the state and the national governments: each governs its citizens directly, so that each citizen is governed by at least two authorities. Each level of government is sovereign in at least one policy realm. This policy sovereignty is constitutionally declared.

Decentralized unions that fail to meet one of the three criteria are quasi-federations.” Bednar 2009, 18f)

2Certainly, another problem is how to identify minorities or ethnic groups in general.
2.2 Ordering Concepts of Collective Action

Finally, *secessionism* means the “demand for formal withdrawal from a central political authority by a member unit or units on the basis of a claim to independent sovereign status” (Wood 1981 110). As Brancati (2006) points out, secessionism is not necessarily associated with either violence or ethnic conflict. *Secessionist conflict*, in contrast, is used to denote violent territorial struggle between a secessionist group and the government.

2.2 Ordering Concepts of Collective Action

Fundamentally, a group conflict such as secessionist and civil war is a form of collective behavior. However, the question arises, whose collective behavior is being referenced? Tilly’s polity model (1978) offers a framework describing the state structure that suggests important actors. The model presupposes that a state consists of a population and a government. The government, also called the polity, exerts control over the population, which lives in its jurisdiction. Members within the government as well as outside contenders are assumed to apply resources to influence the government. Hence, in the model, competition for executive power can occur between members of government themselves, as well as between members of government and challengers from outside. Contenders who are not represented in government may not try to gain access to the polity, but try to leave the state by seceding. This is a deviation from Tilly’s model, but a necessary addendum based on the range of conflicts observed throughout the world.

Based on this model, on the side of the state the actor is the government: a few leaders, their subordinates, and a military force, that usually claim to represent the whole nation. On the side of the challenger, the actor is usually a rebel group that claims to fight for a certain cause in the name of a certain ethnic group or region. Especially in secessionist conflicts, the war is often fought in the name of a region (Bakke 2008), and the rebel group consists of regional government officials.

*Collective action* can be defined as “coordinating efforts on behalf of shared interests or programs” (Tilly and Tarrow 2007 5). Tilly (1978) also offers propositions about collective action by outside contenders that helps one understand the conditions under which individual behavior turns into contentious action that might result in violent conflict with the state:

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3The latter is in line with standard civil war definitions, where one party to the conflict must be the government (Sambanis 2004).
4Information on which rebel group represents which ethnicity can be found in a new dataset that links non-state actors to data on ethnic groups (Wucherpfennig et al. 2012).
The extent of a group’s collective action is a function of (1) the extent of its shared interests (advantages and disadvantages likely to result from interactions with other groups), (2) the intensity of its organization (the extent of common identity and unifying structure among its members) and (3) its mobilization (the amount of resources under collective control) \(Tilly\) (1978, 84, italics in original).

In addition, according to Tilly, it is not only the capacity of the group that affects the occurrence of collective action, but also whether the relationship with its opponent, i.e. the state, allows for it. This component or determinant of collective action is described as opportunity.

Based on these propositions, collective behavior of a group is determined by four factors: Shared motives, means, opportunity, and a common identity. There are only slight differences between this conceptualization and Tilly’s, which mostly concern semantic nuances. Motives can be defined as desires that lead to a specific course of action and are based on shared interests of a group. Means are mobilized resources for action. Further, opportunity is defined along the lines of Tilly’s definition as denoting factors outside the group and largely determined by the state. Finally, with regard to Tilly’s aspect of organization, ethnic identity is a central component of ethnonationalist conflict. A common identity serves as a “unifying structure” among the members of a group with a common identity, for example through facilitated communication.

The concepts of motive, means, opportunity and identity are a fairly generic and intuitive way of structuring explanations of individual and group behavior. While they are usually used to determine whether or not a crime has been committed by an individual, motive, means and opportunity seem to be necessary conditions for other actions as well. In theoretical works on conflict and nationalism, this insight has been taken up. For example, \(Sart\) (1978) used opportunity and willingness as “ordering concepts” in the study of war. \(Hirshleifer\) (1995) uses the terms motive, opportunity and perception for an economic model of conflict, \(Collier\ and\ Hoeffer\) (2004) hone in on motives based on grievances such as political exclusion or economic inequality and opportunities that allow the financing of rebellion. Further, \(Gurr\) (2000b) also identifies these four factors, which he specifies as collective incentives, capacities for collective action, the availability of opportunities, and the salience of ethnocultural identity in the emergence of ethnopoli- tical conflict. Finally, \(Saxton\ and\ Benson\) (2008) directly speak of means, motives and opportunities in ethnonationalist mobilization.

\(^{5}\text{However, even though these contributions use similar terms, it is far from obvious that they are directly}\)
2.2 Ordering Concepts of Collective Action

These ‘integrated’ approaches of domestic and nationalist conflict seem to be more applicable to social behavior than, for example, either a motive or resource-based approach alone. The difficulties of the ‘relative deprivation’ school of thought (e.g., Gurr 1970) and the ‘resource mobilization’ approach (e.g., McCarthy and Zald 1977) to explain collective violence illustrates this matter; both approaches have significant flaws (see Snyder 1978 for a comprehensive overview). For example, grievance theories can be criticized on two grounds: First, they do not explain the mismatch between the omnipresence of group grievances but the relative scarcity of groups that act on these grievances; and second they do not address the causal chain between grievances and the eventual organization of collective behavior (McCarthy and Zald 1987). On the other hand, purely resource-based accounts do not provide satisfactory explanations of the occurrence of collective action in the apparent absence of organizational resources (Snyder 1978).

In the words of Saxton and Benson (2008: 56),

> There is ample evidence that the grievances and incentives of the deprivation school, the community-level mobilizational capacity of the resource mobilization approach, the opportunities of structural political opportunity theory, and the identity and “structural pre-determinants” of the nationalism literature all play a critical part in the generation of ethno-political conflict.

Consequently, this thesis does not exclusively focus on either deprivation or resource mobilization, but considers constellations of factors that must be present to produce conflict (see e.g., Lichbach 1998, Gurr 2000).

Yet, so far these four components only serve as place-holders or “ordering concepts” in the analysis of collective behavior. Now, these place-holders need to be set in relation to each other and filled with content. It is necessary to clarify what kind of motivations, means, opportunities, and identities are crucial for the emergence of ethnonationalist mobilization and how they affect each other. In this thesis, I deliberately do not broach the issue of opportunity that highlights the role of the state, but focus on characteristics of the region; it seems justified to assume that states are interested in maintaining the status quo and react to any secessionist challenges with force.

The next sections will illustrate how means, motives, and identities operate in eth-

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Comparable. For example, Starr defines opportunity as “possibility of interaction,” while Saxton and Benson use it with reference to institutional opportunity structures such as regime type, stability and repression, and Collier and Hoeffler consider opportunity dependent on financial capabilities to finance rebellion and the inability of the central government to repress.
nofederations to bring about secessionist conflict. First, the Ethnofederal Mobilization theory will be introduced, which highlights the effect of existing resources and ethnic identities on secessionist conflict in ethnofederations. Second, the significance of grievances resulting from economic and political inequality and the loss of existing autonomy for ethnonational mobilization will be highlighted. While there may be other grievances and conflict issues triggering a conflict, these factors are central in a great deal of secessionist conflicts.

2.3 Ethnofederal Mobilization

2.3.1 Means: Resource Mobilization

Resource mobilization theories stress the “significance of organizational bases, resource accumulation, and collective coordination for popular political actors” (McAdam, Tarrow and Tilly 2001 15). Taken from the social movement literature (see e.g. McCarthy and Zald 1977), mobilization processes and the formal organizational manifestations of these processes are at the center of these theories (McAdam, McCarthy and Zald 1996 3). Resource mobilization can be defined as a "process by which a unit gains significantly in the control of assets it previously did not control" (Etzioni 1968 388-89 as cited in Tilly 1978). Assets, or resources, may be as diverse as weapons, armed forces, manipulative technologies, goods, information services, money, and loyalties and obligations.

The central proposition of this thesis is that an ethnofederal region is in this sense already mobilized. Regions in ethnofederal states are often equipped with decision-making institutions and may hold substantial power even if their population is excluded from central state power. These latent states with a more or less homogeneous population can be used to challenge the central government’s authority by demanding either more political autonomy or complete secession. A large part of the literature on ethnofederalism concurs that such institutional arrangements provide the necessary organizational resources to fight a civil war (Hale 2000, Roeder 2007, Bunce 2003, McGarry and O’Leary 2003) and can lead to secessionism in the long run since costs that a region would incur to have a functioning state apparatus in case of secession are low (Carter and Goemans 2011).

Not only organizational resources may be present, but more tangible resources as well. For example, while the military is usually under the control of the federal government, it
can be the case that part of it comes under regional control, as happened in the Nigerian First Republic. In this case, of course, military conflict is a real possibility. Further, territorial concentration of ethnic groups, as is the case in ethnofederal subunits, also increases mobilization capability because intragroup communication and interaction is simply easier and, hence, fosters the emergence of collective action and ethnic violence in particular (Toft 2002, 2003).

In contrast to most resource mobilization approaches, I also consider a common identity as increasing mobilization capabilities. A common identity leads to cohesion in the group because communication and interaction is dense (Gurr 2000b). As section 2.3.2 indicates, ethnofederal structures support the emergence or hardening of a common identity. In other words, they indirectly influence resource mobilization in this way. Additionally, shared motives can reinforce the sense of group identity through a common destiny and common goals. Depending on differences in policies affecting the federal subunits, their population may be more united with regard to the conflict issue. Also, the simple fact that an ethnic group is not segregated by administrative boundaries means a lack of obstacles to coordination, collaboration and, as a result, collective action.

2.3.2 Identity

Clearly, ethnofederations are institutional structures that internalize the importance of ethnicity by creating ethnic regions (Knight 1982, Chapman and Roeder 2007). Ethnicity becomes entrenched in the constitution, which defines the main political organization of a country and cannot be changed easily – in contrast to ethnic parties, for example, which are more fluid in their existence. Whether or not the importance of ethnic categories emerges or is just reinforced is a matter of degree. I do not argue that ethnofederations create ethnic groups from scratch, even if some literature on identity formation claims that the strength and even existence of group boundaries can be shaped by institutions (Nagel 1994). Often, ethnic groups may already have a political identity even before the introduction of an ethnofederal system. In fact, the very existence of an ethnofederation may even be the result of a highly ethnicized political conflict. In any case, ethnofederations ensure that ethnic cleavages are the only relevant political cleavage lines. Center-region relationships in ethnofederations involve ethnic categories simply because regions are organized along ethnic identities.

While strong ethnic identities may not be a sufficient condition for ethnic conflict, as many peaceful multiethnic societies illustrate, the fear of exploitation is likely to be
larger in the presence of ethnic cleavages:

Ethnic divides, then, can be seen as introducing a sense of separation from control among non-dominant groups. And psychological research has found that people tend to underestimate dangers that they can take steps to manage and to overestimate dangers that they cannot control. [...] When members of a minority nation possess a strong sense of national distinctiveness (thick identification with their nation) relative to the dominant group in the union, it is likely to lead members of this nation to attach a higher probability to the potential for exploitation than they would have had there been no such ethnic division. (Hale 2008, 79)

Mistrust towards the group in power is the result. Resentment can get easily turned into support for nationalist parties by regional leaders. In other words, ethnic regions do not only affect the behavior of the masses, but also, possibly predominantly, the behavior of elites. Ethnic regions may increase the likelihood of “political-identity hegemony” (Roeder 2007): Democratic competition might push leaders to seek power by stressing the regional agenda in opposition to the host state, hence “politicians with stronger objections to remaining within the common-state are likely to come to dominate political life” (Roeder 2007, 19). Mayer (1970, 796) maintains that “congruent federal systems [where] the political sub-system boundaries are roughly coterminous with cultural or economic sub-system boundaries [...] result] in the creation of parochial elites who have a vested interest in the perpetuation of those diversities they purport to represent”. If this is the case, the strengthening of regional parties is the result, and ethnic outbidding, i.e. increased and often excessive use of an ethnicity-related agenda to recruit voters, becomes more likely (Brubaker 2002; Gorenburg 2000; Horowitz 1985), which may lead to conflict (Devotta 2005).

In this view, elites influence the strength of ethnic identity or nationality. They “select aspects of the group’s culture, attach new value and meaning to them, and use them as symbols to mobilize the group” (Brass 1979, 41). Similarly, other scholars argue that territorial autonomy arrangements short of partitioning will reinforce or “harden” identity incompatibilities so that growing demands and secessionist conflict are more likely (Nordlinger 1972; Snyder 2000; Brubaker 1996). Also, the overlap between unit and group boundaries associates the ethnic identity with a specific territory, which may boost “sons-of-the-soil” dynamics (Weiner 1978) and give rise to a group’s claim to its own state.
2.3 Ethnofederal Mobilization

2.3.3 The Ethnofederalism Debate: A Reconciliation Attempt

The relationship between ethnofederalism and secessionist violence may not be as straightforward as these considerations on resources and identity might indicate. From a certain threshold on, more resources may even prevent the occurrence of violence. Two outcomes are conceivable. First, it may just be the case that ethnic groups are appeased by territorial autonomy arrangements. This line of thought follows what is suggested by proponents of ethnofederalism as indicated in the introduction: Ethnofederalism and territorial autonomy agreements may provide groups with enough autonomy to satisfy self-determination demands and reduce conflict (Lijphart 1977, Hechter 2000b, Gurr 2000a, Lustick, Miodownik and Eidelson 2004). Hence, if ethnofederalism both facilitates and prevents violent conflict depending on its extent, a reconciliation between proponents and opponents of ethnofederalism is possible. Hechter (2000b, 320, italics in original) neatly summarizes this insight:

Whereas decentralization may provide cultural minorities with greater resources to engage in collective action, leading to a rise in protest events, at the same time it may erode the demand for sovereignty.

It may be the case that both proponents and opponents provide correct assessments—at least to some degree—but that their predictions should take into account insights of the respective other camp.

Second, if resources increase a region’s bargaining power vis-à-vis the state (Treisman 1997), then in theory an ethnofederal region may as well gain enough power that it can secede without fearing repercussions. Also, the lack of other minorities in the region may readily suggest a partition and the creation of a viable new state that would be considered legitimate by the international community. Hence, in highly ethnofederal states, peaceful partitions may be more likely, as the secessions of Soviet republics from the Soviet Union in 1991 indicate. This line of thought denotes a second way to reconcile the two camps. In other words, the apparent contradiction between opponents and proponents may be due to confusion with regard to the dependent variable.

Based on these considerations, a curvilinear relationship between ethnic regions and secessionist conflict as described by an inverted U-curve is likely. To conclude, while the trivial rule holds that mobilization is only possible if there are resources that allow

\[ \text{Hechter 2000b, 326} \] also proposes a non-linear relationship between decentralization and secessionist conflict, yet he rather suggests a (normal) U-curve relationship based on the idea that “[if] too little decentralization causes rebellion, then too much is likely to engender fragmentation”.

15
for them, the risk of violence may decrease once a certain degree of control has been achieved. Instead, violence may be most likely if an ethnic group has some but not complete control over a region.

To sum up, the means available to ethnofederal regions can facilitate the organization of ethnonationalist projects. Ethnicity is likely to play a central role in the center-region relationship because of the ethnofederal setup, which may even deepen ethnic divides. The fear of exploitation may be higher across ethnic cleavages, which makes ethnofederal regions particularly prone to conflict. Both factors together are assumed to promote ethnonationalist and secessionist mobilization. However, from a certain point on, ethnofederalism may have an appeasing effect on ethnic groups, or lead to peaceful secession. From here, these propositions will be subsumed under the term Ethnofederal Mobilization theory.

2.4 Motives

Political and economic inequality and the loss of regional autonomy often motivate a region to consider secession. These factors are crucial for the outbreak of ethnonationalist mobilization because they are based on a fundamental human drive to maximize “life chances”, i.e. to increase wealth, security, and power (Hale [2008]). Being aggravating by themselves, these factors may become even more conflict-inducing in ethnofederations where regional boundaries are congruent with ethnic boundaries. In this constellation, political and economic inequality and loss of regional autonomy is likely to nourish an ethnic group’s fears of exploitation. For example, relative regional poverty may be seen by the affected ethnic group as ethnic discrimination by the central government. Thus, ethnicity subjectively, and possibly also objectively, determines life chances, which increases the salience of ethnicity (Hale [2008]). The results are ethnicized conflict issues where the borders between purely regional issues and ethnic grievances are blurred.

2.4.1 Inequality

Inequality plays a prominent role in the literature on the causes of civil wars. Classical contributions include important studies of peasant uprisings, viewed as a response to rural poverty (e.g. Scott [1976] Moore [1966]). Other scholars have linked conflict to various types of inequality in terms of structural social imbalances such as uneven income
or land distributions (Russett 1964, Muller 1985, Muller and Seligson 1987). Closely related, relative deprivation theories stress the discrepancy between what people think they deserve, and what they actually get (Gurr 1970). If this discrepancy is high, the probability for collective violence is assumed to increase. This literature has attracted sustained criticism from scholars who emphasize resource mobilization (Snyder 1978, Lichbach 1989). This skepticism over inequality-based explanations of conflict has been reinforced by the more recent wave of quantitative studies of civil war pioneered by Paul Collier at the World Bank from the late 1990s. Linking inequalities directly to grievances, these authors typically operationalize inequality by the Gini coefficient of the income distribution among individuals or households. Collier and Hoeffler (2004), for example, dismiss inequality as a cause of civil wars since they find no relationship between individual income inequality and conflict. In another important study, Fearon and Laitin (2003) also reject both ethnic and political grievances as explanations of civil war, based on measures of individual-level income inequality as well as a purely demographic indicators of ethnic diversity such as the ethno-linguistic fractionalization index. Based on this operationalization, the authors conclude that neither economic inequality nor ethnic grievances increase the risk of conflict.

However, since these empirical results are based on individual level measures, disregarding the relationship between inequality and other social cleavages, it is still possible that there may be important relationships between inequality and conflict. In fact, there are good reasons to believe that civil-war violence arises from interaction involving collective actors, such political organizations or ethnic groups, rather than being a primarily individual-level phenomenon.

Although limited data availability has made it difficult to evaluate the relationship between horizontal inequalities and conflict in cross-national comparative studies, there are several case studies that show that relatively deprived ethnic groups seem more likely to engage in violent challenges of governmental authority (Stewart 2009a). More recently, statistical evidence based on selective, cross-national samples has been presented (Østby, 2008; Østby, 2009; Østby, Nordås & Rød, 2009).

Stewart (2009b) defines horizontal inequalities as “inequalities in economic, social or political dimensions or cultural status between culturally defined groups”, and asserts that the recent quantitative literature (e.g. Fearon and Laitin 2003, Collier and Hoeffler 2004) has largely overlooked inequality’s conflict-inducing impact due to its tendency to rely on individualist, rather than group-based, indicators of wealth differences:
2 Secessionist Conflict in Ethnofederations

But the majority of internal conflicts are organized group conflicts—they are neither exclusively nor primarily a matter of individuals committing acts of violence against others. What is most often involved is group mobilization of people with particular shared identities or goals to attack others in the name of the group.

In other words, inequality between groups is likely to lead to collective violence and in particular ethnonationalist mobilization. The following sections discuss economic and political inequality and the link to secessionist violence.

Economic Inequality

The theoretical literature suggests that interregional economic inequality will directly affect nationalist mobilization and secessionist conflict, and also will be linked indirectly to conflict depending on the ethnic composition of the region. To illustrate the direct effect, scholars investigating the former Soviet Union point to how rich regions are more likely to mobilize for secession. For example, [Roeder (1991)] claims that secessionist nationalism can be viewed as a reaction to redistributive policies in comparably wealthy regions of the former Soviet Union, such as the Baltic region and parts of the Caucasus, which contributed disproportionately to the federal government and national economy. In an attempt to escape these burdens, these regions tried to shift them to local minorities, while at the same time giving preferential access to educational, political and economic opportunities to the titular ethnic group. As a result, nationalism and separatism were rife in these parts of the country. [Hale (2000)] supports this view, stressing the fear of exploitation of those residing in comparably rich Soviet regions. His quantitative analysis of former Soviet republics demonstrates that the developed regions tried to break away sooner than less developed parts of the country. Furthermore, he provides statistical evidence that individual nationalist attitudes tend to be higher in wealthier republics. In the former Yugoslavia, many Slovenes expressed resentment over the region’s disproportionate contribution to the federal budget[^1]. Other regions rich in natural resources, such as Punjab in India and Bougainville in Papua New Guinea, complain that they receive too little from central funds given their contributions to the overall economy [Bookman 1992].

[^1]: This type of resentment is nicely captured by the Basque saying that Spain is a “cow with its muzzle in the Basque country and its udder in Madrid”; likewise Katanga is considered the “milk cow for the whole Congo” [Horowitz 1985: 250, 257]
Based on a different conception of economic grievances, many researchers argue that poor regions are more likely to seek secession. Some of these accounts follow the logic of Gellner (1969) and Hechter (1975), who suggest that differences in regional economic development to the detriment of peripheral regions fuels nationalism. Hechter’s (1975) ‘internal colonialism’ thesis asserts that exploitation of peripheral regions breeds secessionist grievances. In his study of regional nationalism, Gourevitch (1979) notes that after 1945, banking, manufacturing, resource extraction and agribusiness moved from Quebec to the neighboring province Ontario. This declining economic investment by Anglophone regions in the former region was the cause, rather than the effect, of nationalism in Quebec, accompanied by accusations against the capital for allegedly exploiting the province and undermining its economic development. Moreover, Quebec’s secessionist sentiment was marked by discontent with the central government’s macroeconomic policies (Bookman 1992). While this conflict has not turned violent (yet), many others have. Violent conflict may result if ethnic groups lack avenues for non-violent political participation (see next section on political exclusion).

A recent statistical study by Østby et al. (2009) on regional inequality in 22 sub-Saharan African states helps us understand the mechanisms behind inequality and violence more generally. Based on geo-coded survey data, the study finds that relatively deprived regions are most likely to experience civil war onset. The authors argue that in these regions, elites can easily draw on welfare differences and create a common enemy to unify the population and motivate them to rebel. Similarly, Cederman, Weidmann and Gleditsch (2011) find that ethnic groups that deviate from the country average in terms of wealth have a higher propensity to enter into conflict.

Few scholars have considered the possibility that both rich and poor regions may have reasons to fight secessionist wars. In his analysis of regional economic development, Gourevitch (1979) identifies inequality as an important, though not unique, factor influencing the emergence of nationalism. He argues that underdeveloped regions and developed, politically excluded regions tend to develop nationalism, finding that both rich and poor regions in several Western countries have developed strong peripheral nationalism. Similarly, Horowitz (1985) stresses that both “advanced” and “backward” regions can develop grievances over revenue imbalances. According to Horowitz, more advanced regions, i.e. regions that are superior in education, employment, and per capita income, are likely to see themselves as subsidizing poorer regions, while backward regions may not receive the per capita proportionate spending they would need to catch up economically with the rest of the country. Bookman reports similar results based on a study of
2 Secessionist Conflict in Ethnofederations

37 secessionist regions all over the world, and asserts that “all regions may claim that they are giving too much or that they are getting too little from the center, so that both relatively low- and relatively high-income states have a basis for complaint” (Bookman 1992: 115).

To conclude, common to most of these cases is regional disagreement with central economic policies that leaves regions and their populations economically worse off than they aspire to be. The affluent regions feel they contribute too much to the federal budget and the less wealthy provinces feel they receive too little to catch up with the rest of the country. This evokes dissatisfaction with the status quo and may lead to secessionist mobilization and war.

Political Inequality

Nationalism is an inherent part of almost all violent secessionist conflict processes. Explicitly introduced by the French Revolution, the principle of nationalism dictates that political legitimacy depends on self-determination in the name of the nation. Under such conditions, foreign domination can be expected to generate political grievances among dominated groups denied sovereignty (Gellner 1983: 1). These grievances can be shown to generate collective violence in turn. In particular, recent quantitative studies indicate that if groups are deprived of access to state power, conflict becomes more likely (Gurr 2000b; Cederman, Wimmer and Min 2008, 2010). By confirming similar findings in the qualitative literature on nationalism (e.g. Mann 2005; Brass 1991), these studies go a long way toward overturning the earlier conventional wisdom that tended to dismiss the role of ethnic grievances in the recent quantitative research on civil wars. Moreover, these results add credence to Stewart’s (2009b) multi-dimensional notion of horizontal inequality, as political exclusion of ethnic groups can be seen as a form of political horizontal inequality.

In some ways, political and economic grievances are closely related. First, they are related in the sense that these motives tend to coincide – it is often difficult to disentangle the exact conflict dynamics and identify the core conflict issue. In his work on nationalism and secessionism, Hechter (2000a) argues that economic interests and cultural claims often go together in conflicts. Second, as already mentioned, they are related in the sense that both economic and political grievances are an expression of the need to increase “life chances” (Hale 2008: 62). However, economic and political power increase life chances in different ways. While the former can be directly translated into tangible goods, political
2.4 Motives

Power and representation is a way to express demands and start processes that eventually lead to an increase in life chances. If this form of expression is blocked, other ways have to be found, and the path to demanding recognition through violence is short. Distinguishing between these factors can shed light on different conflict mechanisms and, hence, allow detailed theoretical explanations. Also, approaching the fundamental conflict issue is the precondition for suitable conflict management.

2.4.2 Loss of Autonomy

Gurr (2000b) and Gurr and Moore (1997) consider loss of existing political autonomy to be a central grievance that plays a role in ethnonationalist conflict. Gurr (1993) found that this factor is one of the strongest correlates of minorities’ political grievances, protests, and rebellions in the 1980s. Gurr (2000b) also mentions that the more recently the loss occurred, the greater the likely effect of such appeals. This is in line with occurrences of ethnonationalist conflict in countries that had just emerged from colonial rule. A prime example includes India in the 1950s and 1960s where peripheral groups such as the Nagas, who largely had been left in peace by the British colonists, resisted Indian claims to rule over them. Cederman, Wimmer and Min (2010) highlight the importance of negative emotions that are likely to be induced by recent losses of relative power. The resulting anger and resentment may increase the probability of conflict and the willingness for individuals to fight (Petersen 2002).

Generally, in federations, the question of which powers the regions have and which remain at the center is answered in the constitution. However, the description of tasks may be too unspecific and the actual implementation may leave a lot to desire so that regions revolt against government provisions. More importantly, if the central government can make unilateral amendments to the constitution, the encroachment on regional rights always lures. Power can be withdrawn from a region by centralizing measures or even abolishing the region itself. In the end, state encroachment is always possible since, in military terms, the region is usually disadvantaged. This situation could create a security dilemma between the state and the region that may result in a preemptive revolt of the latter (Posen 1993). Whether or not a loss of autonomy has occurred or will occur is also a matter of trust between a region or group and the center. However, as section 2.3.2 has shown, mistrust and fear of exploitation is likely to be higher across ethnic divisions than within ethnic groups. In ethnofederations, these divisions are essentially the only active political fault lines.
2 Secessionist Conflict in Ethnofederations

Summing up the main arguments of this thesis, \textit{ethnofederal structures provide the means for collective action and encourages identity politics}. Economic and political grievances, including fear of losing autonomy, \textit{may provide the motivation for secession, especially if the conflict pits two ethnic groups against each other}. The schematic diagram in Figure 2.1 summarizes the relevant factors in the occurrence of secessionist conflict in ethnofederations.

2.5 Hypotheses

The theoretical considerations above lead to the following hypotheses, which will be tested empirically using large-N and small-N analyses.

\textbf{Ethnofederal Mobilization}

- \textbf{H1}: Ethnofederalism increases the risk of secessionist conflict.

- \textbf{H2}: The relationship between ethnofederalism and the risk of secessionist conflict is curvilinear.
2.6 Chapter Summary

- **H3**: Ethnofederalism increases the salience of ethnicity in political conflicts and provides the means for mobilization.

**Inequality**

- **H4**: Economic inequality increases the risk of secessionist conflict.
  
  - **H4a**: Relative deprivation increases the risk of secessionist conflict.
  
  - **H4b**: Relative wealth increases the risk of secessionist conflict.

- **H5**: Political exclusion increases the risk of secessionist conflict.

**Loss of Autonomy**

- **H6**: The loss of autonomy or the fear thereof increases the risk of secessionist conflict.

Hypotheses H1, H2, H4, H4a, H4b, and H5 will be tested by large-N regression analysis using a global dataset on federal administrative units in Chapter 4. An illustration of the mechanisms described in hypothesis H3 will be given by a case study on the Biafran war in Nigeria in 1967 in Chapter 5. This case also exemplifies the importance of loss of autonomy as a conflict producing factor (H6). The case studies in Chapter 6 serve to critically assess hypotheses H1 and H2 and provide evidence for H4, H5, and H6. They also provide insight into how conflicts in ethnofederal regions erupt and show how the Ethnofederal Mobilization theory can be extended.

2.6 Chapter Summary

This chapter has outlined a theory on the relationship between ethnofederal institutions, inequality, the loss of autonomy and secessionist conflict. Starting from ordering concepts of collective action, the theory combines means, motives and identity to explain secessionist conflict. Ethnofederal institutions are assumed to provide resources and increase the salience of ethnic identity, which both facilitate successful mobilization. Most importantly, taking into account the continuous nature of ethnofederalism and its mobilizing effect may reconcile diverging views in the literature on ethnofederal institutions.
In addition to resources and ethnic identity, grievances based on political and economic inequality and the loss of autonomy are hypothesized to play a large role in the outbreak of secessionist conflict. Relative deprivation or relative wealth as well as political exclusion and downgrading may provide the motives for a region to break away. The next chapter will give an overview of the data that will be used to test the hypotheses empirically.
3 Spatial Data and Spatial Computations

The previous chapter has introduced the main components of the Ethnofederal Mobilization theory and provided information on how the risk of secessionist conflict may increase if ethnofederal regions, a common identity and conflict motives based on political and economic inequality are present. This chapter gives an overview of the spatial datasets that are used to test some of the hypotheses presented in Chapter 2. Geographical Information Systems are introduced along with a newly collected global dataset on federal administrative regions. Spatial data on ethnic group settlements is used to link boundary information to ethnic group location. Moreover, this chapter will briefly introduce the reader to the spatial aggregation procedure that is central to the calculation of regional economic inequality and regional population.

3.1 Federal Administrative Boundaries (FAB)

As the previous theoretical chapter on ethnofederalism and secessionist conflict has shown, territoriality is central to many ethnonationalist mobilization efforts. Most importantly, ethnofederalism itself is essentially a territorial structure, and any operationalization of ethnofederalism must take this into account. Consequently, testing the relationship between ethnofederalism and secessionist conflict (H1, H2) relies on geographic data on administrative boundaries. Geographic Information Systems (GIS) are helpful for this enterprise because they can manage and analyze geographic location data. For example, they can easily calculate the size of a region or country in square kilometers. Further, GIS allow the combination of different geographical datasets so that relations between them can be explored and values of interest can be computed. Section 3.2 on spatial aggregations will describe how the population in an administrative region, for example, can be calculated automatically.
3 Spatial Data and Spatial Computations

There are several electronic datasets available through the Internet that provide spatial information on first-level administrative boundaries. However, all of these datasets have limitations either with regard to the time period covered or geographical scope. Most datasets are limited to a single year. The ESRI Data & Map Administrative Units dataset (ESRI 1998) provides global information only for the year 1998. The GADM database of Global Administrative Areas compiled by Robert Hijmans contains current information on administrative boundaries. This information is also available in Admin 1 provided by the Natural Earth project. Shapefiles of administrative boundaries in Europe are available from the Centers for Disease Control and Prevention. The Global Administrative Unit Layers dataset (GAUL) covers a period of twenty years (1990-2009).

Due to the limitations in these datasets, I collected data on first-level administrative boundaries in federal countries in the post-Cold War period. The resulting Federal Administrative Boundaries (FAB) dataset contains data on the lifetime and geographical extension of administrative units. It includes 31 countries and covers the years 1946 to 2008.

The definition of a first-level administrative unit is based on the Federal Information Processing Standard, Publication 10-4 (FIPS PUB 10-4). Since this standard was introduced only in 1970, other sources such as the Administrative Divisions of Countries project, the CIA World Factbook, and the World Statesmen Encyclopedia also assisted in the coding. The countries included in the dataset are selected by following, who lists governments that have been federal or "quasi-federal" for at least one year between 1990 and 2000. Based on her definition of federation and quasi-federation (see section 2.1), the final list of 31 countries represents an inclusive selection.

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1First-level administrative boundaries are boundaries one level below the country level.
2http://www.gadm.org/, last accessed 2011-05-31
4http://www.cdc.gov/epiinfo/europe.htm, last accessed 2011-05-31
6This standard defines "Countries, Dependencies, Areas of Special Sovereignty, and Their Principal Administrative Divisions" (http://www.itl.nist.gov/fipspubs/fip10-4.htm, last accessed 2011-05-31). The only case where I substantially deviated from the FIPS standard is the United Kingdom since here the first level beneath the national level is not the counties as listed in FIPS, but indeed the four constituting countries England, Scotland, Northern Ireland, and Wales.
8http://www.worldstatesmen.org/, last accessed 2011-05-31
9Argentina, Australia, Austria, Belgium, Bosnia and Herzegovina, Brazil, Cameroon, Canada, Czechoslovakia, Ethiopia, Germany, India, Italy, Malaysia, Mali, Mexico, Myanmar, Nigeria, Pakistan, South Africa, Spain, Sudan, Switzerland, Tanzania, Ukraine, United Arab Emirates, United Kingdom, United States of America, USSR/Russia, Venezuela, and Yugoslavia/Serbia and Montenegro.
3.1 Federal Administrative Boundaries (FAB)

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMIN_NAME</td>
<td>The (most recent) English name of the administrative unit</td>
</tr>
<tr>
<td>SHAPE</td>
<td>The polygon</td>
</tr>
<tr>
<td>OLDNAMES</td>
<td>Previous or alternative name(s) of the administrative unit</td>
</tr>
<tr>
<td>GMI_CNTRY</td>
<td>The 3-letter GMI country code (provided by ESRI)</td>
</tr>
<tr>
<td>CNTRY_NAME</td>
<td>The English name of the country</td>
</tr>
<tr>
<td>COW</td>
<td>Correlates-of-War country code</td>
</tr>
<tr>
<td>UID</td>
<td>Unique ID (since not every administrative unit has a FIPS code)</td>
</tr>
<tr>
<td>FIPS</td>
<td>The 4-letter FIPS code consisting of two letters denoting the country and two digits denoting the unit</td>
</tr>
<tr>
<td>STARTDATE</td>
<td>“Birth” date of the unit, without preceding zeros (yyyy-mm-dd)</td>
</tr>
<tr>
<td>ENDDATE</td>
<td>End date of the unit, without preceding zeros (yyyy-mm-dd, NULL for still existing on Dec 31, 2008)</td>
</tr>
</tbody>
</table>

Table 3.1: Variables in the FAB dataset

of countries with federal or decentralized governments. Comoros, Micronesia, St. Kitts and Nevis, and the European Union from Bednar’s original list are not included since those federations either have very small populations or do not constitute sovereign states. However, Cameroon, Mali, and Myanmar, which became federal before 1990, were added (see Roeder 1991). Since not all countries existed throughout the entire period under examination (1946 to 2008), the ‘birth’ and ‘death’ dates of the subnational units were adjusted accordingly. The dataset is available as an ESRI shapefile. Table 3.1 gives an overview of the variables.

3.1.1 Coding procedure

In order to collect geographical data on administrative units, geo-referencing of electronic country maps was necessary. The usual procedure consisted of beginning with an extant global GIS shapefile of first-level administrative units from the year 1998 (ESRI 1998) and adding polygons from time periods before and after. To create GIS region polygons, electronic maps, for example from the map collection of the University of Texas and other online sources, were geo-referenced. This procedure essentially traces border lines of electronic images and stores them according to a geographical reference system.
Whenever substantial boundary changes occur, a new geographical ‘region-period’ was coded. A substantial change in this coding is the creation of a new region out of one or several existing regions, either by a clean merger or by combining parts of existing regions, or the complete break-up of a region into new regions. Also, the loss of territory in the case of successful secession or the annexation of new regions such as Eritrea was coded. Minor changes such as district transfers between two subnational units were usually not coded, in part because there are no electronic maps available that are detailed enough to reflect small changes. The main source, the Administrative Divisions of Countries, codes the “effective date of the law that makes the change” rather than the publication in the media, the effective implementation, or the first meeting of the legislature of the new unit. If an exact date can be found when these changes occurred, year, month and day are listed, otherwise only the year, or the year and the month is given.

If a region experienced a name change but did not change territorially, no new region-period was coded. Of all the names a region may have had, the most recent name of this region defines its identity, yet alternative names are recorded as well, even if not exhaustively. However, if together with the name change there was a change in territory, I code this as the ‘death’ of the region. There are cases where the name of a region stays the same but its geographical extension changes, sometimes completely, for example the “Federal District” in Brazil, which moved from one location of the country to another. In this case, I also kept the identity of the region but, of course, entered a new spatial region-period.

3.1.2 Territorial Changes

In version 1.0 used in this thesis, FAB contains information on 739 individual regions. The maximum number of administrative units per country is 104 (USSR/Russia) and the minimum number is 2 (Czechoslovakia, Bosnia and Herzegovina). One of the main contributions of FAB is the fact that it codes boundary changes during a time span of up to 63 years. This means, it provides yearly information on the border lines in each

\[^{10}\text{In the current version 1.1, the } FAB \text{ dataset includes spatial information on a handful of district transfers, simply for the reason that geographic information was available in these cases. Two regions in India, Karnataka and Kerala, experienced changes in 1956 during the States Reorganization Act, and 10 years later, Punjab lost some districts to Himachal Pradesh and Chandigarh. In Nigeria, Kwara state lost areas to Niger State in 1991. Finally, in 1954 the Crimea island was transferred from the Russian Soviet Socialist Republic to the Ukrainian Soviet Socialist Republic.}\]

\[^{11}\text{See online database } \text{http://www.statoids.com/info.html, last accessed 2011-05-31}\]
3.1 Federal Administrative Boundaries (FAB)

<table>
<thead>
<tr>
<th>Created at independence / existing in 1946</th>
<th>Created after independence</th>
<th>Boundary change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of regions</td>
<td>425</td>
<td>92</td>
</tr>
</tbody>
</table>

Table 3.2: Regions and territorial changes

of the 31 countries. Table 3.2 gives an overview of the number of regions that existed at times of independence (or in 1946, the start year of the dataset), those that experienced boundary changes at some points, and those that were newly created by governments after independence. Territorial changes are, in fact, numerous. 314 regions (42%) either change their boundaries during their existence or are newly created. At the country level, only nine countries do not experience any territorial change during their existence.

Figure 3.1: Number of boundary changes in federations

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12 This number does not include the new Russian states after 1991 or Serbia and Montenegro’s divisions after 1992. Note that a boundary change and the creation of a new region can occur at the same time, for example, if a new region is carved out of an old one that continues to exist.

13 These countries are Australia, Austria, Bosnia and Herzegovina, Czechoslovakia, Italy, Ukraine, the United States, and the United Kingdom.
In contrast, relatively frequent boundary changes can be observed in Nigeria, India, Sudan, and Tanzania (see Figure 3.1).

Figures 3.2, 3.3, 3.4, and 3.5 show boundary changes in Nigeria from independence until today. At independence, Nigeria consisted of three regions that were intended to give autonomy to its three major ethnic groups (Suberu 2001). In 1963, regional minorities demanded their own state, so the Mid-Western Region was created. In 1967, the old three- or four-region structure was completely fragmented and twelve new regions came into existence. Since then, more and more regions have been created out of old ones, totaling 36 regions today.

Figure 3.2: Nigeria’s regions 1960-1963
3.1 Federal Administrative Boundaries (FAB)

Figure 3.3: Nigeria’s regions 1963-1976
Figure 3.4: Nigeria’s regions 1976-1996
3.1 Federal Administrative Boundaries (FAB)

Figure 3.5: Nigeria’s regions from 1996 to today

Figure 3.6 illustrates boundary changes in Ethiopia. In 1946, Ethiopia consisted of twelve states. In 1963, the Bale region was created from parts of Hararghe. Eritrea, which had been part of a federation with Ethiopia since 1952, was annexed in 1963 as well [Law 1999]. In 1981, the capital district Addis Ababa split from Shewa. In 1993, Eritrea separated from Ethiopia again after a secessionist war that had been going on for around 30 years. In 1995, Ethiopia reorganized into nine administrative regions in an attempt to provide autonomy to its various ethno-linguistic groups [Fischa 2006]. Dire-Dawa and Addis Ababa became charter cities.

14Similar objectives were pursued in India, when in 1956 states were reorganized along linguistic lines [Law 1999].
Figure 3.6: Ethiopia’s regions from 1946 to today

The examples of Nigeria and Ethiopia illustrate that border changes can be numerous. Time-varying information on regional boundaries is necessary for investigating the effect of institutions and regional boundaries on secessionist conflict in the past. Different boundary constellations at different points in time may be crucial for explaining the lack or the occurrence of conflict.
3.2 Linking Spatial Datasets

The geographical information about the boundaries of administrative units is not only useful in itself, for example for illustration, but even more so when combined with other datasets. Spatial data on ethnic groups, economic wealth, and population can provide additional information about regions if they are linked to regional boundary information.

3.2.1 Spatial Data on Ethnic Groups

The Ethnic Power Relations (EPR) dataset [Cederman, Wimmer and Min, 2010] identifies politically relevant ethnic groups in 155 sovereign states between 1946 and 2005. The EPR dataset provides yearly data on ethnic groups including their population share and, in particular, their level of access to central state power. The authors define ethnicity as “any subjectively experienced sense of commonality based on the belief in common ancestry and shared culture” (Cederman, Wimmer and Min, 2010, 13), which corresponds to my definition of ethnicity presented in Chapter 2.

An ethnic group is considered politically relevant “if at least one political organization claims to represent it in national politics or if its members are subjected to state-led political discrimination” (ibid. 13f). All ethnic groups are categorized according to whether they are included in or excluded from the central government. An ethnic group is coded as included if its representatives either hold a monopoly or dominant power in the executive, or participate as a senior or junior partner in some form of power sharing arrangement. An ethnic group is coded as excluded from executive power if elite members of the group only control the first-level administrative unit, have excluded themselves from power by declaring their territory independent, or are completely powerless or even discriminated against.

The spatial dataset GeoEPR, an extension to EPR, provides the geographical location of regionally-based ethnic groups in GIS format [Wucherpfennig et al., 2011] Group settlements are explicitly allowed to overlap, indicating shared territory. Each of these groups is assigned “geographic periods”, in which the geographical location of the group does not change. When it does change, for example when group members migrate to

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15Criteria for state inclusion was a population of at least one million and a surface area of at least five thousand square kilometers.

16EPR groups can have one of five geographical patterns, Regional, Urban, Regional and urban, Migrant, and Dispersed. A sixth category, Aggregate, contains groups that are made up of smaller groups, and so do not need to be geo-coded separated.
locations, a new geographic period is introduced. This setup allows for a geographically dynamic coding of group settlements. Around 6% of the groups have more than one geographic period. Figure 3.7 shows ethnic groups living in India in 2005.

3.2.2 Spatial GDP Data

G-Econ (Geographically based Economic data) is a global and geographically disaggregated grid dataset on economic activity (Nordhaus et al. 2006, Nordhaus 2008). It is available at a resolution of 1 degree grid cell, which corresponds to quadrants with roughly 111 kilometer side length, for the year 1990. The information on Gross-Cell-Product (GCP) in G-Econ was collected using estimates of gross product developed by national statistical agencies on the national, regional and sometimes even subregional, e.g. district, level; however, the collection procedure varies with different countries. Ac-

\footnote{Note that the overlap of ethnic groups’ settlements are not depicted in this figure. Also, two groups are left out for simplicity reasons, the “Scheduled Castes & Tribes” and “Other Backward Classes/Castes”.

36
3.2 Linking Spatial Datasets

3.2.3 Spatial Population Data

The Gridded Population of the World (GPW) dataset released by CIESIN & CIAT (2005) contains global population data. It is available as a latitude-longitude grid dataset at a resolution of 2.5 arc minutes, which corresponds to quadrants of 4.6 km side length. The data has been collected primarily from censuses in administrative units of varying levels and available for the year 1990.\footnote{The most recent version of GPW (v3) also contains population data for 1995 and 2000 as well as extrapolations for 2015.} Figure 3.8 shows the population map of India in 1990.

Figure 3.8: Gross Cell Product (PPS) in India in 1990 according to G-Econ. Darker shadings correspond to higher GCP values.

According to Nordhaus et al. (2006), sources for data in high-income countries were usually regional estimates, while in low-income countries, only national estimates were available. In the latter case, the likelihood for measurement error is obviously higher as well. From the information available in G-Econ, my analysis uses the GCP values expressed in terms of purchasing power standards (PPS) and oil-based GCP data for the sensitivity analysis.
3 Spatial Data and Spatial Computations

Figure 3.9: Population in India in 1990 according GPW. Darker shadings correspond to higher population numbers.

3.2.4 Spatial Computations

Linking data on administrative boundaries with spatial data on group settlements, population or economic activity generates interesting new information. For example, overlaying regions with group settlements reveals where ethnic groups live in relation to substate boundaries. In Figure 3.10, the distribution of the Hindi, Muslim and Punjab-Sikh ethnic groups are depicted. For example, the Punjab-Sikh mostly inhabit the Punjab region, but to a small extent also Jammu & Kashmir, Rajasthan, Haryana and Himachal Pradesh. Using this boundary information, one can for example calculate the number of regions an ethnic group inhabits, or the number of ethnic groups ‘hosted’ by a particular region.
3.2 Linking Spatial Datasets

Figure 3.10: Ethnic groups in Northern India in 1990 (FAB, GeoEPR)

Another application is to calculate aggregate measures of wealth or population for a particular administrative unit. This procedure uses the boundaries of the region as ‘cookie cutter’, a method that Buhang, Cederman and Rod (2008) pioneered. After selecting those raster cells that lie within the region, their values (on population or wealth) are summed up (see Figure 3.11).

Figure 3.12 compares population figures of Swiss cantons and Soviet republics in 1989/1990 computed through spatial aggregation with non-spatial population data taken from Law (1999). Even though some deviations, especially for smaller regions, are inevitable, Pearson’s correlation coefficient is between 0.98 and 0.99 for both countries, which indicates a close to perfect approximation.\(^{19}\)

Figure 3.11: Grid cells used for raster aggregation of wealth in Punjab (white centroids) and Himachal Pradesh (black centroids) in Northern India. All spatial aggregations presented in this thesis use the centroid of the raster cell to determine whether or not it belongs to a particular region.

\(^{19}\)At this point, I do not have an explanation for the large deviation between the computed and the non-spatial population value in the case of Thurgau, Switzerland.
3 Spatial Data and Spatial Computations

Figure 3.12: Correlation of non-spatial and computed regional population figures in Switzerland and the Soviet Union in 1989/1990. The gray line indicates perfect correlation.

Figure 3.13 shows the corresponding GDP per capita values (PPS) for German Bundesländer and provinces in Spain. The fit between GDP data from 1999 provided by Eurostat [2003] and the computed GDP data is less perfect due to the lower resolution of the G-Econ data compared to the GPW data. As expected, particularly small regions like Hamburg and Bremen in Germany suffer from aggregation errors. Nevertheless, the overall correlation is 0.90 for Germany and 0.97 for Spain, indicating a good fit. These data also indicate that GDP data is fairly stable over time; the G-Econ data is from 1990 while the Eurostat data is from 1999.

3.3 Chapter Summary

This chapter has given an overview of the datasets that will be used in the empirical analysis carried out in the following chapter. I rely heavily on Geographical Information Systems which allows the handling of geographical data central to answering my research questions. The newly collected Federal Administrative Boundary (FAB) dataset provides geographical information on federal regions since 1946 and in particular codes regional boundary changes. This dataset can be combined with other spatial datasets on ethnic
3.3 Chapter Summary

Figure 3.13: Correlation of non-spatial and computed regional GDP per capita (PPS) in Germany and Spain in 1990/1999. The gray line indicates perfect correlation.

group settlements (GeoEPR), economic activity (G-Econ), and population (GPW). Using spatial aggregation procedures (‘cookie cutters’), variables of interest can conveniently be computed for use in regressions analyses. The validation of computed population and wealth numbers in selected regions shows that the cookie cutters procedure yields fairly reliable results in comparison with data from other sources. I now turn to the empirical analysis that uses these datasets to test the hypotheses presented in Chapter 2.
4 Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

In the theoretical part of this dissertation, I have argued that ethnofederal regions are particularly prone to secessionist conflict because they provide the means for collective action and encourage identity politics, which in turn increases the risk of a secessionist war. Further, I have argued that political and economic grievances can provide the motivation for actors to engage in a secessionist war. In this chapter, I provide statistical evidence for these propositions. Using the dataset on administrative units presented in Chapter 3, I show that the more congruent the regional and ethnic group boundaries, the more federal regions are at risk to opt out and engage in violent secessionist conflict. However, this relationship reverses once a certain threshold of boundary congruence is achieved. Regional economic inequality data also show that relative regional poverty, relative regional wealth, and political exclusion increases that risk as well. If the regional majority ethnic group is politically excluded from central state power, regions are more prone to become involved in secessionist conflict. What exactly links boundary congruence or inequality with secessionist conflict cannot be determined through a correlational analysis so will be addressed in the qualitative analysis in Chapter 5. I begin this chapter with a specification of the research design. I present the unit of analysis, the dependent variable (secessionist conflict) and the construction of the main independent variables (boundary congruence, economic inequality and political exclusion). The results of the regression analysis are then discussed and subjected to a series of robustness checks. Finally, I end the chapter with a short conclusion.
4 Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

4.1 Data

4.1.1 Unit of Analysis

The unit of analysis is the first-level administrative unit per year. The data used in the regression includes 739 administrative units in 26 countries between 1946 and 2005 with a total of 53 secessionist conflict onsets. I choose federal administrative regions as units of analysis because these regions have a particularly important status in federations. A main characteristic of federal countries is that their territories are geo-politically divided, and that this division has some constitutional or formal recognition (Bednar [2009]). In other words, the main organizing principle in a federation is its center-region divide, and Feeley and Rubin [2008, 81] go as far as ascribing “a personality” to the subunits, and “an existence independent of their function”. This characteristic makes a first-level administrative unit in a federation a meaningful unit of analysis, and a great deal of the literature on the effect of ethnofederations focuses on regions as the primary agents (see e.g. Roeder [2007], Hale [2008]).

Other approaches to violent conflict have chosen ethnic groups as units of analysis (see e.g. Cederman, Wimmer and Min [2008, 2010]). However, there are problems with claiming that an ethnic group fights a separatist conflict: First of all, homogeneity of this actor is assumed but hardly ever holds true in reality. For example, in the secessionist conflicts in Myanmar since the late 1940s several different rebel organizations claim to represent a single ethnic group (Thomson [1995]), but these have at times fought against each other, as the case of the conflict between Democratic Kayin Buddhist Army and the Karen National Union shows (Uppsala Conflict Data Program [2011]).

The second problematic aspect is the assumption that ethnic conflict, and its subcategories ethnonationalist and secessionist conflict, is a matter of ethnic groups, which often implicitly puts ethnicity at the heart of the explanation of conflict. This assumption may simply not be valid. As the theoretical section on economic inequality has shown, socioeconomic issues may be equally important motivations for secessionist conflict.

Also, strictly speaking, conflictual ethnicity – or ethnic groups in conflict – is a phenomenon that should be explained rather than something that one can “explain things

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Footnote: Five countries (Australia, Germany, Italy, Tanzania, United Arab Emirates) drop out of the analysis because EPR GeoEPR has missing data in these cases (these countries are coded as not containing politically relevant groups). Also, the EPR dataset in its current form ends in 2005, which also prevents the boundary congruence calculation for the years between 2006 and 2008.
4.1 Data

with” (Brubaker 2002, 165). As indicated in the remarks about ethnicity and ethnic identity in the theoretical chapter, I assume ethnic group boundaries and ethnic salience are to some degree flexible and susceptible to manipulation by political entrepreneurs or subtle social and economic processes – at least much more so than administrative regions.

As a result, on a methodological level, determining the membership of ethnic groups and their settlement patterns is more difficult and prone to error, especially in instances where multiple and potentially overlapping relevant religious, linguistic and/or caste cleavages exist, as in the case of India (Laitin and Posner 2001). In contrast, border lines of administrative regions and border changes, should they occur, tend to be officially documented.

Hence, even if this chapter does not completely avoid these problematic aspects of the endogenous nature of ethnicity since it partly relies on a global list of ethnic groups and their settlement patterns (see below), by focusing on regions as the unit of analysis the matter of ethnicity can vary at least to some degree. Relatedly, secessionist claims “can be made by groups that are not recognized as ‘ethnic’ on the basis of linguistic or religious differences” (Sambanis and Milanovic 2009, 4-5). Another reason for focusing on regions is that the explanandum is secessionist conflict. Hence, regions as units of analysis are particularly useful because most secessionist demands are made with a geographical referent in mind that is most often an extant administrative unit (Bookman 1992).

4.1.2 Dependent Variable

The dependent variable is the dichotomous variable secessionist conflict onset. I rely on conflict information in the Uppsala/PRIO list of internal armed conflict (Gleditsch et al. 2002, version 4-2008). Compared to other commonly used quantitative datasets on civil war such as the Correlates-of-War dataset (Small and Singer 1982) and the datasets compiled by Fearon and Laitin (2003) and Sambanis (2004), the Uppsala/PRIO list requires only 25 battle deaths annually. In contrast, the Fearon and Laitin list requires 1,000 battle deaths over the course of the conflict, while the Correlates-of-War dataset requires the same amount in a single year. Sambanis’ definition requires 500 battle deaths in the first year, but a conflict can also count as civil war if over the following 3 years the cumulative number of deaths reaches 1,000. Therefore, the Uppsala/PRIO list...
Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

is more inclusive, which has advantages both statistically and substantively. The higher number of conflicts avoids the problem of there being “too few wars” for the statistical analysis (Gleditsch et al. 2002, 617). Additionally, high profile conflicts like Northern Ireland that would be excluded in the Correlates-of-War list because they failed to reach the yearly battle death threshold of 1,000 are included.

From the internal conflicts listed in the Uppsala/PRIO conflict dataset, only secessionist conflicts are of relevance here. Relying on this dataset and conflict narratives from the UCDP Armed Conflict Database, I determined whether the secessionist territory constitutes an administrative region, or refers to an ethnic group location or natural boundaries. An administrative unit is coded as experiencing secessionist conflict in the first case only.

If the boundaries of the secessionist region are unclear – sometimes the boundaries of the geographical area in question are never defined or agreed upon by the secessionist rebel group – this case is not included as an onset. Table 4.1 gives an overview of the cases I code as conflict onsets. Three fairly prominent cases of secessionist conflict are not contained by this list because two or more federal administrative regions constitute the secessionist region: the Basque conflict in Spain, the Niger delta conflict in Southern Nigeria, and the secessionist conflict in Southern Sudan.

A region-year is coded as experiencing a conflict onset if the secessionist region is that particular administrative unit. This coding allows for estimating the risk that a federal region will be used as a geographical referent in a secessionist conflict. The following section gives an overview of the variables that are assumed to influence this risk.

4.1.3 Independent Variables

Ethnofederalism. The main independent variable Congruence is the maximal degree of congruence between the administrative unit and ethnic group settlement areas. Data on ethnic group settlements comes from the EPR dataset and its extension GeoEPR.

\[ \text{Congruent federalism} \] is a central notion in the federalism literature but has been defined in diametrically opposed ways. Mayer (1970, 795) calls ‘congruent federal systems’ systems “where the legal institutions of federalism may be congruent with a cultural or economic environment reflecting or perceived geographically defined diversities”. For Lipshart (1977, 195) congruent federations “are composed of territorial units with a social and cultural character that is similar in each of the units and in the federation as a whole”. The use of the word congruence in this thesis relies on Mayer’s definition since this thesis centers around the relationship, more specifically the congruence, of substate and ethnic group boundaries.
4.1 Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Secessionist conflict onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>Afar</td>
<td>1996</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Eritrea</td>
<td>1964</td>
</tr>
<tr>
<td>India</td>
<td>Assam</td>
<td>1990, 1994</td>
</tr>
<tr>
<td>India</td>
<td>Jammu &amp; Kashmir</td>
<td>1989</td>
</tr>
<tr>
<td>India</td>
<td>Nagaland</td>
<td>1992, 2000, 2005</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Sabah</td>
<td>1963</td>
</tr>
<tr>
<td>Myanmar</td>
<td>Kachin</td>
<td>1949, 1961</td>
</tr>
<tr>
<td>Myanmar</td>
<td>Mon</td>
<td>1990, 1996</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Eastern Region</td>
<td>1967</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Baluchistan</td>
<td>1974, 2004</td>
</tr>
<tr>
<td>Pakistan</td>
<td>East Pakistan</td>
<td>1971</td>
</tr>
<tr>
<td>Russia</td>
<td>Chechnya</td>
<td>1994, 1999</td>
</tr>
<tr>
<td>Russia</td>
<td>Dagestan</td>
<td>1999</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Northern Ireland</td>
<td>1971, 1998</td>
</tr>
<tr>
<td>USSR</td>
<td>Azerbaijan</td>
<td>1990</td>
</tr>
<tr>
<td>USSR</td>
<td>Estonia</td>
<td>1946</td>
</tr>
<tr>
<td>USSR</td>
<td>Latvia</td>
<td>1946</td>
</tr>
<tr>
<td>USSR</td>
<td>Ukraine</td>
<td>1946</td>
</tr>
<tr>
<td>USSR</td>
<td>Lithuania</td>
<td>1946</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>Croatia</td>
<td>1991</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>Slovenia</td>
<td>1991</td>
</tr>
</tbody>
</table>

Table 4.1: Secessionist regions in federations, 1946-2006
First, I measure boundary congruence dyadically: For every group living in a given administrative unit, I determine the ratio between the overlapping area in relation to the sum of the unit area and the group area. The total areas of both the ethnic group and the administrative region are important for the reference. For example, a measure that would set the intersection area only in relation to the group settlement would be maximal if the group, however small, lived completely within the boundaries of an ethnofederal unit. This measurement would not appropriately reflect the nature of ethnofederalism.

Let \( R \) be a given region and \( G_i \) a group living in that region. \( R \cap G_i \) is the overlapping area of \( R \) and \( G_i \). Then the dyadic congruence measure of the region and the group is

\[
Dyadic \ Congruence_i(R) = \frac{\text{Area}(R \cap G_i)}{\text{Area}(R) + \text{Area}(G_i) - \text{Area}(R \cap G_i)}
\]

The final \( Congruence \) variable uses the maximum of all dyadic congruence values in order not to underestimate the effect of boundary congruence on conflict:

\[
Congruence(R) = \max(Dyadic \ Congruence_i(R)),
\]

\( i \in N = \) number of ethnic groups living in region \( R \).

This measure is close to 0 when there is almost no overlap between the administrative unit and the group area – in this case the denominator is relatively large compared to the intersection area – and close to 1 if the boundaries match.

The construction of this measure is illustrated in the case of Nigeria. Figure 4.1 shows the southern regions of Nigeria in 1960 (thick black borders) as well as ethnic group locations in color (please note that group areas can be overlapping but these overlaps are not shown, e.g. the Ijaw share some of their settlement areas with the Ogoni).

\(^*\)I subtract the area of the intersection in the denominator so the measure varies between 0 and 1. This measure is described in [Maruca and Jacquez (2002)](https://example.com), who develop techniques for the probabilistic assessment of polygon overlap. While I am not concerned with whether or not the overlap between two sets of polygons is statistically different from a random constellation – I am only interested in the variation itself – I use the same operationalizations of dyadic and maximum congruence.
The *Congruence* value for the Eastern Region example uses dyadic congruence measures of all four ethnic groups living in this region, Ijaw, Ogoni, Igbo and Tiv. For example, take the group areas of the Igbos. The dyadic congruence measure is calculated by dividing the area of intersection by the sum of all involved areas as shown in Figure 4.2. In the Nigerian example, the dyadic congruence measure of the Igbo is 0.39, the Ijaw 0.16, the Ogoni 0.14, and the Tiv a mere 0.002. The maximum of these congruence measures is 0.39, so this value enters the regression for the Eastern Region in 1960.
4 Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

Figure 4.3: Distribution of the Congruence variable

Figure 4.3 gives the distributions of the Congruence variable for the full set of regions while Figure 4.4 shows the number of onsets plotted against the Congruence values of all the conflict regions. One can see that most of the conflict onsets occur in regions that are ethnofederal to a medium degree. Very low values and very high values are comparably rare. Among the regions that have a fairly low value of Congruence are Dagestan in Russia, Kayah in Myanmar, and Jammu & Kashmir in India. While Dagestan’s low value stems from a fairly high ethnic heterogeneity – Ware and Kisriev (2001) speak of 34 ethnic groups –, the Congruence value in the Kayah region is low because EPR does not code the Karenni ethnic group, which is involved in the conflict and which was granted some autonomy in Kayah (Uppsala Conflict Data Program 2011).

Further, the very low value of Muslims in Jammu & Kashmir is caused by the fact that Muslims, while indeed partly concentrated in the Kashmir region, have other population clusters in distant parts of India. It is noteworthy that four out of five of the regions that have a Congruence value of 0.7 and higher have successfully seceded, that is, Azerbaijan in the former Soviet Union, Eritrea in Ethiopia, and Slovenia and Croatia in the former Yugoslavia.6

---

6Seven conflict onsets drop out of the analysis because Congruence is undefined in these cases, either because of its lag (Estonia, Lithuania, Latvia, and the Ukraine in the Soviet Union in 1946, Sabah in Malaysia in 1963, and Rakhine in Myanmar in 1948) or because GeoEPR does not provide information on any concentrated ethnic group in that region (East Pakistan in Pakistan in 1971).
4.1 Data

**Economic Inequality.** The *G-Econ* dataset ([Nordhaus 2008](#)) is used to measure regional economic inequality. As indicated in Chapter 3, this data is available as raster data of 1 degree grid cell resolution, for the year 1990. Using 1990 values as representative for the whole time period 1946-2005 can be defended since relative inequalities do not tend to change quickly over time ([Tilly 1999](#), [Stewart and Langer 2009](#)). To arrive at regional inequality measures, I apply the spatial aggregation procedure introduced in Chapter 3 using regional boundaries as cookie cutters on the *G-Econ* dataset. The resulting sum is divided by the size of the regional population, which is also computed by spatial aggregation. This process yields a measure for regional GDP per capita.

I measure regional economic inequality in two ways: First, if $g$ is a region’s GDP per capita and $G$ is the average GDP per capita of all regions in a country, then

\[
\text{Economic inequality} = \left[ \log \left( \frac{g}{G} \right) \right]^2
\]

This measure is constructed so that it is positive if the region’s wealth deviates from the country’s average wealth level in either direction, and 0 if it does not deviate.  

---

7The *G-Econ* dataset provides spatial estimates of GDP for five year periods starting with 1990, but since the subsequent data points are adjustments based on natural resource and changes in commodity prices and do not constitute new information on economic activities, I use only the original data from 1990.

8The same measure, but using ethnic group boundaries as cookie cutters, has been used by [Cederman, Weidmann and Gleditsch 2011](#).
4 Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

Figures 4.5 and 4.6 illustrate economic inequality measured by the \( g/G \) ratio for regions in Yugoslavia and the United Kingdom in 1990. Slovenia, Croatia, and Macedonia in Yugoslavia are relatively wealthy, while Bosnia and Herzegovina, Montenegro and Serbia are relatively poor. In the United Kingdom, only Scotland and England are at the country average, while Wales and Northern Ireland – the poorest region – are below the country average.

Figure 4.5: Inequality in Yugoslavia (red = poor, blue = rich, data sources: FAB, G-Econ)

Figure 4.6: Inequality in Yugoslavia (red = poor, blue = rich)
4.1 Data

While *Economic inequality* assumes a symmetric effect of poor and rich regions on secessionist conflict risk and is appropriate for testing H4, I also need indicators allowing for the asymmetrical effect indicated by H4a and H4b. Accordingly, I split up *Economic inequality* into two variables measuring the wealth of rich and poor regions separately:

\[
Rich = \frac{g}{G} \text{ if } g > G, \ 0 \text{ otherwise}
\]

\[
Poor = \frac{G}{g} \text{ if } G > g, \ 0 \text{ otherwise}
\]

*Rich* and *Poor* provide independent measures of the deviation of a region in terms of wealth compared to the country’s average. For example, if a region is three times poorer than the country’s average, its *Poor* value is 3, while its *Rich* value is 0. Conversely, if a region is twice as rich as the country’s average, its *Poor* value is 0, while its *Rich* value is 2. Like *Economic inequality*, both *Rich* and *Poor* are always positive or 0.

Figure 4.7 gives the distributions of the inequality variables for the full set of regions that are rich or poor, respectively, and the conflict regions. Among the rich conflict regions, Croatia leads the list being twice as rich as the country average in 1991, followed

![Distribution of the economic inequality indicators](image-url)

**Figure 4.7:** Distribution of the economic inequality indicators
4 Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

closely by Slovenia, which is 1.9 times as wealthy. Among the poor conflict regions, the Russian and Soviet regions Chechnya (7.2), Dagestan (5) and Azerbaijan (4) stand out.

Political Inequality. To measure the degree of political exclusion (H3), I again use the data on ethnic groups in the EPR dataset and its extension GeoEPR. After having determined which ethnic groups reside in a given administrative unit through an overlay of geographical data of ethnic groups and FAB, I determine whether the group with the largest regional population is politically excluded from executive power at the center (see Chapter 3). The group share living in this administrative unit is computed by aggregating raster cells of the GPW dataset. 32% of regional majority groups are excluded from central state power; however, when only looking at conflict regions the exclusion rate increases to 60%.

4.1.4 Control Variables

I control for other sources of secessionist conflict at the regional and country level. A dummy variable for War history indicates whether an administrative unit has experienced prior secessionist conflict. At the country level, logged GDP per capita lagged by one year is included since poorer states are more likely to experience civil war [Hegre and Sambanis 2006]. Logged Population density is also included since a highly concentrated population group faces lower organizational costs incurred for mobilization and communication; recruitment and the enforcement of agreements is easier. These factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secessionist conflict</td>
<td>30510</td>
<td>.002</td>
<td>.042</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Congruence</td>
<td>17592</td>
<td>.208</td>
<td>.266</td>
<td>0</td>
<td>0.997</td>
</tr>
<tr>
<td>Congruence2</td>
<td>17592</td>
<td>.114</td>
<td>.226</td>
<td>0</td>
<td>0.995</td>
</tr>
<tr>
<td>Economic inequality</td>
<td>30296</td>
<td>.126</td>
<td>.276</td>
<td>0</td>
<td>3.881</td>
</tr>
<tr>
<td>Rich</td>
<td>30296</td>
<td>.504</td>
<td>.649</td>
<td>0</td>
<td>4.308</td>
</tr>
<tr>
<td>Poor</td>
<td>30296</td>
<td>.829</td>
<td>.790</td>
<td>0</td>
<td>7.172</td>
</tr>
<tr>
<td>Political exclusion</td>
<td>30510</td>
<td>.329</td>
<td>.470</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>War history</td>
<td>30510</td>
<td>.0310</td>
<td>.173</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>GDP per capita (log)</td>
<td>27142</td>
<td>1.658</td>
<td>1.120</td>
<td>-2.010</td>
<td>3.863</td>
</tr>
<tr>
<td>Population density (log)</td>
<td>27139</td>
<td>-3.436</td>
<td>1.255</td>
<td>-6.944</td>
<td>-1.120</td>
</tr>
</tbody>
</table>

Table 4.2: Summary statistics
are likely to increase the probability of collective dissent (Lichbach 1995). Also, a higher population density might increase social tensions arising from land, housing and/or employment scarcity, and in turn may lower the threshold for both decentralization and pressures for some regions to ‘opt out’. The population figures per administrative unit are again computed using GPW data. Finally, I control for temporal dependence as proposed by Beck, Katz and Tucker (1998). Table 4.1.4 provides descriptive statistics of all important variables.

4.2 Results

My final dataset consists of 30,510 region-years with 53 conflict onsets for the time period from 1946 to 2005. Consequently, I use a rare-events logit regression estimator, and cluster the standard errors by country to compensate for possible unequal variances across countries. All estimations are generated using STATA 11. The results of the statistical regression are given in Table 4.1.3.

I first run a model with only the control variables, which behave as expected. Model 2 provides initial clues that boundary congruence and political and regional inequality contribute to secessionist conflict. The coefficient of Congruence is positive and statistically significant at the 5% level, which offers some preliminary evidence for Hypothesis H1. The results provide evidence that motivational factors, such as grievances due to political exclusion and economic inequality, increase the risk for secessionist conflict (H4 and H5), even though political exclusion just misses the 5% significance level (P < 0.069).

Relaxing the symmetry assumption for both rich and poor regions, in Model 3 we see that both types of regions contribute to conflict. Political exclusion is significantly related to secessionist conflict onset; however, boundary congruence does not remain stable. This outcome indicates that a simple term might not be the appropriate functional form of boundary congruence.

In Model 4 I introduce the squared term Congruence$^2$ to allow for a curvilinear effect. The quadratic term, Congruence$^2$, has a negative sign and is statistically significant at the 1% level, which supports the hypothesis that Congruence does not have a linear effect on secessionist conflict risk but affects conflict risk in a more complex manner. A test of joint significance of Congruence and Congruence$^2$ reveals that the inclusion of Congruence$^2$ in the model is justified (P < 0.01). Ceteris paribus, this model would predict that regions with a congruence level of around 0.53 have the highest risk for
## Regression analysis: Ethnofederalism, Inequality and Secessionist Conflict

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>onset</td>
<td>onset</td>
<td>onset</td>
<td>onset</td>
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<tr>
<td>Congruence</td>
<td>1.092</td>
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<td></td>
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<tr>
<td></td>
<td>(.440)*</td>
<td>(.531)</td>
<td>(1.940)**</td>
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<tr>
<td>Congruence2</td>
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<td>Political exclusion</td>
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<td>.855</td>
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<td></td>
<td>(.392)</td>
<td>(.335)*</td>
<td>(.296)**</td>
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<tr>
<td></td>
<td>(.303)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rich</td>
<td>.524</td>
<td>.591</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(.234)*</td>
<td>(.179)**</td>
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<td></td>
</tr>
<tr>
<td>Poor</td>
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<td>.932</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(.192)**</td>
<td>(.181)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>War history</td>
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<td>-.859</td>
</tr>
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<td></td>
<td>(.233)**</td>
<td>(.212)**</td>
<td>(.233)**</td>
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<td></td>
<td>(.302)</td>
<td>(.274)**</td>
<td>(.285)**</td>
<td>(.278)**</td>
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<td>(.0008)</td>
<td>(.0007)</td>
</tr>
<tr>
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<td>-.0005</td>
<td>-.0005</td>
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<td>(.0006)</td>
<td>(.0006)</td>
<td>(.0006)</td>
</tr>
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<td></td>
<td>(.0003)</td>
<td>(.0002)</td>
<td>(.0002)</td>
<td>(.0002)</td>
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<td>Observations</td>
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<td>16143</td>
<td>16143</td>
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</table>

Table 4.3: Regression results
4.2 Results

secessionist conflict. Hence, the effect of Congruence is generally positive since only 19% percent of all regions have a Congruence level that is larger than 0.53. With Congruence values larger than this threshold, the risk for conflict decreases again. In order to illustrate the effect of the main independent variables in this model, Figure 4.8 plots the predicted probabilities for a values of the main independent variables ranging from low to high.

\[9\] In Models 2-4, the number of observations decreases by almost 40% because Congruence is not defined for regions where no politically relevant and non-dispersed ethnic groups reside.

Figure 4.8: Change in predicted probabilities when boundary congruence or political exclusion varies from 0 to 1 (upper row) and when a region gets comparably more or less wealthy (lower row; all other variables held at their mean, no prior war)
Another value of interest is that while the risk of secessionist conflict is 0.03% for an average region, it grows to 84% if it is seven times poorer than the country average, and has a regionally large excluded ethnic group, boundary congruence of 0.5, and no conflict history. An example for such a region is Chechnya in 1994, which has a boundary congruence of 0.6, is 7.1 times poorer than the rest of Russia, and whose largest ethnic group (Chechens) is excluded from central state power. Hence, while each variable taken by itself has a fairly small effect on conflict risk (possibly except for Poor), when combined they have a detrimental effect on the stability of a region.

One way to evaluate the quality of the proposed model is to investigate its Receiver-Operating-Characteristic (ROC) curve. The ROC curve plots the true positive rate of model predictions in relation to the false positive rate given a certain cut-off value for binary classification. The more the curve deviates from a 45-degree line (random guessing) which can be determined by the size of the area under the curve, the better the model’s predictions. Figure 4.9 shows the ROC curve of a model including just the control variables, and the ROC curve of the full model. The plot indicates a better predictive performance for the model that includes the resource and motivational variables than the model with only controls.
4.2 Results

4.2.1 Sensitivity Analysis

In order to test the robustness of the full model (Model 1 in Table 4.5), I perform a series of sensitivity tests.

**Endogeneity of ethnofederalism.** While Model 4 provides some evidence that higher boundary congruence (up to a level of 0.53) leads to more conflict, these models do not take into consideration the problem of endogeneity of ethnofederalism. It may be the case that a federal setup is not exogenous to country characteristics, but that “federal arrangements are chosen in particular situations to address a set of problems. Hence, empirical analyses trying to assess the effect of federalism and its specific form need to take into account the endogenous nature of these institutional choices” ([Hug and Christin 2010](#)).

This objection may hold for ethnofederalism in particular. It is conceivable that governments adopt ethnofederal policies to give self-determination to ethnic groups that are already in (non-violent) conflict with each other, or as a precautionary measure to prevent conflict. If this is the case, the estimators in Model 4 in Table 4.3 are likely biased. In order to control for this bias, I use a two step estimation along the lines of [Rivers and Vuong 1988](#) and [Bollen, Guilkey and Mroz 1995](#). The two equations below illustrate this procedure:

\[
\text{Congruence} = \alpha_1 + \beta_1 \text{Number of Ethnic Groups} + \beta_2 \text{Colonial Heritage} + \beta \chi + \epsilon_1 \quad (4.1)
\]

\[
\text{Secessionist Conflict} = \alpha_2 + \beta_3 \text{Congruence} + \beta \chi + \epsilon_2 \quad (4.2)
\]

The first equation states that *Congruence* is a function of the number of ethnic groups in the country, colonial heritage ([Hug and Christin 2010](#)) and some unobserved variables \(\epsilon_1\). These predictors are assumed to be exogenous and related to regional secessionist conflict only via the ethnofederalism link.\[10\]

\[10\] As indicated before, the thesis assumes that ethnic group boundaries may be susceptible to political influence and hence could be considered endogenous to regional boundary drawing. In this procedure, however, I use the number of ethnic groups in a country. I do not have any reason to believe that the number of ethnic groups increases or decreases systematically with increasing boundary congruence or regional secessionist conflict.
The second equation represents the full model estimated in column 4 of Table 4.3. For the sake of simplicity, $\chi$ represents all other independent variables, and $\beta$ the vector of their coefficients. Previous non-violent conflict or interregional tension is likely to affect secessionist conflict risk, but is difficult, if not impossible, to observe. Consequently, these variables are captured in the error term $\epsilon_2$. However, these variables may also determine policy makers’ choices and, hence, Congruence, since the government may try to appease ethnic groups by creating ethnic regions. In this case, the unobserved variables will also be part of $\epsilon_1$. Unfortunately, if the two error terms are positively correlated, all coefficients in Equation 4.2 could be biased (Bollen, Guilkey and Mroz, 1995).

Fortunately, a simple test exists to determine whether or not bias is present. Table 4.4 illustrates the results of this estimation procedure. First, an auxiliary regression (Model 2 in Table 4.4) shows that an ethnofederal setup is more likely if the total number of groups increases. Surprisingly, the model also shows that an ethnofederal setup becomes less likely if the country has a Spanish, British or Portuguese tradition. In any case, these variables are fairly good predictors of Congruence: The model fit as indicated by pseudo R-squared values increases considerably from 0.18 (model without instruments) to 0.38 (model with instruments). Additionally, the instruments are jointly significant at the 0.1% level.

For the squared term of Congruence, I run a second auxiliary regression (Model 3 in Table 4.4) that predicts Congruence$^2$ with the squared predictions of Congruence from Model 2. This complication is necessary in order to avoid what Wooldridge (2000, 236) calls the “forbidden regression”. Only including the squared term of the predicted values of Congruence from Model 2 in the outcome regression would confuse the “linear projection of the square” with the “square of the linear projection.” The residuals of both auxiliary regressions now allow for a test of endogeneity of Congruence and Congruence$^2$, respectively.

In Model 4 in Table 4.4 I introduce the residuals of Model 2 and 3 as additional parameters in the base model (Equation 4.2). A straightforward $t$-test on the estimated coefficient of the residuals determines whether or not we must control for endogeneity. Contrary to my expectations, the coefficients of the residuals are far from statistically significant, both separately and jointly, so there does not seem to be a reason to reject the exogeneity of Congruence in the base model.

Additionally, reverse causation might be a problem with regard to the inequality indicators. It is plausible that not only poor regions have a higher likelihood of secessionist
4.2 Results

<table>
<thead>
<tr>
<th></th>
<th>(1) Congruence</th>
<th>(2) Congruence</th>
<th>(3) Congruence2</th>
<th>(4) onset</th>
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<td></td>
<td>(2.174)**</td>
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<td>Congruence2</td>
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<tr>
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<td>(3.459)</td>
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<tr>
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<td>(.065)</td>
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<td>Portuguese col. hist.</td>
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<td></td>
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<td>(.027)</td>
<td>(.385)**</td>
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<td>.080</td>
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<td>-.193</td>
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<td>(.096)***</td>
<td>(.056)</td>
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<td>(.062)***</td>
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<td>.796</td>
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Table 4.4: Instrumental Variable analysis
conflict, but also that conflict destroys infrastructure, e.g. necessary for trade, and so may substantially diminish a region’s wealth. In order to minimize such endogeneity bias, I exclude all regions experiencing conflict in 1990, the year of wealth measurement, but this does not affect the main findings on inequality (coefficients not reported).

**Operationalization of congruence.** Another robustness check uses a *Congruence* calculation that takes into account the population numbers of all involved areas rather than their size in square kilometers:

$$Dyadic\ Congruence_i(R) = \frac{\text{Population}(R \cap G_i)}{\text{Population}(R) + \text{Population}(G_i) - \text{Population}(R \cap G_i)}$$

This measure is a different operationalization of the congruence of group and administrative boundaries and useful to test whether the results hinge on technical artifacts that stem from one specific way of calculating congruence. Yet again, the results do not change substantially (Model 2 in Table 4.5).

**Influential cases.** To exclude the possibility that the significant effects of the main independent variables hinge on extreme cases, I run the model without Slovenia (Model 3 in Table 4.5) and Chechnya (Model 4 in Table 4.5). Slovenia has the largest *Congruence* value as well as the second largest *Rich* value of all conflict regions, while Chechnya has the highest *Poor* value, which might drive the results for relative poverty. As Models 4 and 5 show, the results remain stable, indicating that it is no extreme case drives them. Instead the relationships between ethnic regions or motivations and secessionist conflict are more likely to hold in general.

**Netting out oil.** Model 5 of the sensitivity analyses considers robustness with regards to the definition of the wealth measure. *G-Econ’s* spatial GDP data covers all economic activity including revenues generated by natural resources. However, it is possible that a region is rich in oil, and so coded as being relatively wealthy by my measure, but revenue distributed elsewhere without the regional population benefiting from it. The conflict in the oil-rich Niger delta in 2004 illustrates how such situations are likely to be conflict-inducing as well, although this entails a different causal path than what has been stated by the theory. In an attempt to measure regional wealth as experienced by the population more adequately, I use the specific components provided for the G-Econ data to subtract the share of revenues generated by oil in a region from the original GDP.
4.2 Results

<table>
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<th>(3)</th>
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<td></td>
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<td>onset excl. richest</td>
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<tr>
<td></td>
<td>(1.940)**</td>
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<td>(1.510)**</td>
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<tr>
<td></td>
<td>(2.555)**</td>
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<td>(2.577)*</td>
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<td>Congruence (pop.)</td>
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<tr>
<td></td>
<td>(1.725)**</td>
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<td>(.254)*</td>
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<tr>
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<td>(.398)*</td>
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<td>(.150)**</td>
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<tr>
<td></td>
<td>(.648)**</td>
<td>(.699)**</td>
<td>(.644)**</td>
<td>(.631)**</td>
<td>(.702)**</td>
<td>(.628)**</td>
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<td>(.237)**</td>
<td>(.231)**</td>
<td>(.234)**</td>
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<td>(.280)**</td>
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<td>(.268)**</td>
<td>(.262)**</td>
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<td>16143</td>
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<td>16137</td>
<td>16143</td>
<td>12332</td>
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Table 4.5: Sensitivity analysis (temporal controls are left out for convenience)
data. Model 6 includes the asymmetrical inequality indicators using this wealth measure. The robustness of the Poor indicators suggests that the hypothesized mechanism is independent of oil, although the presence of such resource does seem to play a role in the outbreak of secessionist conflict as well. This finding is indicated by the positive Oil coefficient, which, however, is not statistically significant.\footnote{Regional oil data is computed through spatial aggregation using oil based GCP data in G-Econ.}

**Raster aggregation.** Finally, I exclude regions that are smaller than 10,000 square kilometers in order to avoid possible artifacts in the raster aggregation due to the coarse grained resolution of the G-Econ data. Even so, here the results do not change (Model 6).

### 4.3 Conclusion

In this chapter, I have provided statistical evidence that, up to a certain threshold, ethnofederal regions are more prone to experience secessionist conflict than non-ethnic regions. Political and economic inequality that are likely to produce grievances are robustly correlated with conflict as well. While a statistical analysis does not make claims about the mechanisms linking the independent and dependent variables, this chapter provides substantive advice to policy-makers seeking arrangements that will minimize the likelihood of future conflict. For the following discussion, I denote regions with a Congruence value of around 0.53 as 'medium ethnofederal regions', while I call regions with a Congruence value of close to 1 'strongly ethnofederal regions'.

If medium ethnofederal arrangements are used to address postwar situations, the per year risk of recurring conflict is a substantial 9% according to the estimations presented in this paper. This finding assumes an ethnofederal region that is otherwise not politically or economically disadvantaged in comparison to the center (low-GDP country). However, if federal borders manage to perfectly approximate the boundaries of an ethnic group settlement as is the case in strongly ethnofederal regions, then the risk for secessionist conflict is 3%, in other words substantially smaller.

Yet, grievances based on political and economic inequality are likely to exacerbate the security situation. Relative poverty seems to have an especially large effect on conflict risk. The per year risk for secessionist conflict reaches 54% if the region is three times poorer than the country average. A poor region, where the largest ethnic group is excluded from central state power, has a per year risk of around 70%. Hence, access to
4.3 Conclusion

power only on the regional level may be insufficient to appease ethnic groups. Instead, power sharing agreements at the center may be important to avoid peripheral nationalism in ethnic regions. Medium ethnofederal regions that are created to prevent rather than to address ongoing conflict seem to be a bit less conflict-prone. However, if the region is poor compared to the country average and political exclusion plays a role, the risk for secessionist conflict is still around 18%. The conflict risk in strongly ethnofederal regions with otherwise similar characteristics decreases again by a factor of three (6%).

It seems that ethnically congruent administrative units are candidates for secessionist conflict more so than federal administrative units with cross-cutting boundaries when the congruence between administrative unit boundaries and ethnic group settlements is not perfect. Well-meaning measures to accommodate ethnic minorities through ethnofederal structures can easily mask the danger of secessionist conflict when these measures are naively assumed to have a solely appeasing affect. Also, the influence of relative deprivation or relative wealth may overshadow the conflict reducing effect of high boundary congruence in strongly ethnofederal regions. For example, a medium ethnofederal region that is not suffering from political or economic inequality conditions and with no conflict history has a per year conflict risk of 0.5%, while a strongly ethnofederal region that is three times poorer than the country average has a 2.9% risk of experiencing secessionist conflict.

While these findings would suggest support for implementing ethnofederalism with regional boundaries that perfectly trace ethnic groups, an important objection applies. As indicated in Chapter 2, the low risk of conflict in strongly ethnofederal regions may be explained not only by the successful appeasement of ethnic groups, but also by the possibility of a clean partition. In fact, eye-balling the handful of regions that successfully seceded in a peaceful way provides support for the second interpretation. [Tir et al. (1998) version 4.01] list 21 cases of non-violent secessions between 1946 and 2008. Of these non-violent secessions, 14 were from the former Soviet Union, two from former Czechoslovakia, another two from former Yugoslavia/Serbia, and one from Montenegro (Macedonia and Montenegro), Senegal and Singapore. Revealingly, the mean level of Congruence of regions that seceded non-violently is 0.77 and, hence, significantly higher than those regions with the highest conflict risk.

In other words, ethnofederal institutions may either lead to violent secessionist conflict or successful secession. These findings should create great concern and lead to extraordinary care when powerbrokers consider ethnofederalism as a viable, stabilizing policy option. While this analysis has provided empirical evidence for the correlation of eth-
nofederal institutions, inequality and secessionist conflict, the next chapter intends to shed light on the processes and mechanisms that link ethnofederalism and inequality to ethnofederal mobilization and secessionist conflict.
5 Ethnofederalism and Ethnic Conflict in Nigeria’s First Republic 1967

The preceding chapter has provided empirical evidence that ethnofederal regions may be more prone to secessionist conflicts than federal regions where regional and ethnic group boundaries do not coincide. Also, economic and political inequality seem to be robustly related to secessionist conflict. However, the large-N analysis does not provide evidence about the processes that link ethnofederal institutions and violent conflict. To fill this gap, this chapter seeks to evaluate the Ethnofederal Mobilization theory by identifying the intervening variables and causal mechanisms that link means, motive and identity in ethnofederations to the outbreak of secessionist war in the case of Nigeria’s First Republic in the late 1960s. The focus will be on how ethnofederal institutions can contribute to conflict, but the role of grievances will also be addressed. In particular, loss of autonomy – or the fear thereof – seems to be an important motivational factor in the escalation to secessionist conflict. I show that in this case the existence of ethnofederal structures, i.e. designated regions for ethnic groups with a common identity and coordination infrastructure, facilitated ethnic mobilization and can partly explain escalation.

The chapter begins by explaining the case selection before honing in on the historical background and chronological course of events in the decade preceding conflict onset. The analysis then discusses this case in relation to the Ethnofederal Mobilization theory. A section on contemporary Nigeria discusses how changes in the federal system in the last 40 years, especially with regard to regional boundaries, have potentially prevented the outbreak of another full-blown civil war. Finally, the chapter closes with a short conclusion.
5 Ethnofederalism and Ethnic Conflict in Nigeria’s First Republic 1967

5.1 Case Selection

As indicated, the goal of the case study is to illustrate the causal mechanisms postulated by the Ethnofederal Mobilization theory through analysis of the chain of escalatory events that led to ethnonationalist mobilization and violent conflict. Since the goal of the case study is an illustration of the mechanism, regional institutions should be directly involved in the conflict in the selected case so that the link between ethnofederal structures and conflict can be demonstrated most easily. Also, as the large-N study predicts a high conflict risk for medium levels of congruence between regional and ethnic group boundaries, the selected case should not have an extremely low or high congruence value.

The Eastern Region in Nigeria in 1967 satisfies all of these conditions. Additionally, it is particularly interesting because the Nigerian government, after the conflict was settled in 1970, implemented multiple regional boundary changes in order to address the problems that had led to the outbreak of violence in 1967[3]. For conflict management purposes this case is informative since it allows the analysis of different federal setups that were implemented to govern the multietnic society in Nigeria.

5.2 Introduction

An event like a civil war does not appear out of the blue. Rather, one can usually identify a chain of events that foreshadows the outbreak of large-scale violence, and the Nigerian Civil War is no exception in this respect. The war broke out in July 1967 in Eastern Nigeria, one of three administrative units in the fairly young federation of Nigeria, and lasted until January 1970. I will give an account of Nigeria from 1965 until the outbreak of the war in 1967.

My main source for the chronological narrative and assessment of individual attitudes of the main protagonists and the public is “Crisis and Conflict in Nigeria – A Documentary Sourcebook 1966-1970” by A.H.M. Kirk-Greene, which is a two-volume compilation of “verbatim statements made by the leading dramatis personae of the Nigerian tragedy 1966-1970 as they were uttered and before they disappear or are dangerously half-remembered” [Kirk-Greene[1971] viii]. This source provides information on what the leaders and the public believed and felt in addition to information about observable

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[1] In fact, Nigeria is the country with the highest number of boundary changes next to India.
[2] Throughout the campaign it is far more important for those involved as well as those peripheral to
events. Complementary sources include contemporaneous as well as historical, mostly non-Nigerian accounts (e.g. Coleman 1958, De St. Jorre 1972, Diamond 1988, Mwakikagile 2001).

5.3 Background

Federal system. At independence in 1960, Nigeria started off as a federation with a considerable amount of legislative and executive power devolved to its three regions: the Northern, Western, and Eastern Region. The constitution gave each region autonomy over internal affairs such as public services, judicial systems, marketing boards, and development corporations (Government of Nigeria 1960, Diamond 1988, 72f).

However, with regard to the size of the regions and, hence, their regional population numbers, Nigeria was highly imbalanced. According to the 1963 census, the Northern Region alone comprised 53.7% of the total population while the remaining population was distributed over the Eastern and Western Region (Ahonsi 1988). An estimation for 1967, the year of the outbreak of the civil war, puts the total population at 47.4 million, of which the Northern Region comprised 51.8%, the Eastern Region 27.4%, the Western Region 14.6%, and the Mid-Western Region, which was created in 1963, 5.1% (De St. Jorre 1972, 15). Obviously, the Northern Region showed clear domination with regard to the regional population from the beginning of the Nigerian federation.

Ethnic groups. The Nigerian federation was designed to give autonomy to its three largest ethnic groups, the Muslim Hausa-Fulani in the North, the Christian Igbo in the East, and the bi-communal Yoruba in the West (Suberu 2001, 2006). Consequently, these ethnic groups were dominant in their respective regions (Mwakikagile 2001, 3). The geographical distribution of politically relevant ethnic groups over the three regions in 1960 is given in Figure 5.1.

While the 1963 census was officially accepted, the numbers remained highly disputed among the population (Suberu 2006). The total population of Nigeria officially amounted to 55.6 million (Ahonsi 1988), a number that led Southern politicians to accuse the central government of data inflation for (Northern) regional purposes since for example revenue allocation was based on population numbers.

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the actual conflict to believe than to know the truth. In the pre-war crescendo months as much as during the fighting, what gains currency as accepted fact is often far more persuasive and influential than the facts themselves. The central theme of history, G.M. Young once said, is not exclusively the chronicling of what happened but also what people felt about it while it was happening.” (Kirk-Greene 1971, viii)

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Figure 5.1: Ethnic groups in Nigeria in 1960 (FAB, GeoEPR)

In addition to the three majority ethnic groups a number of minority ethnic groups inhabited the regions as well; in total they made up about one third of the total population (Min, Cedeman and Wimmer 2008). These groups included the Igbo, Tiv, and Ogoni, and up to four hundred other groups (Subern 2001) which the constitution denied their own constituent regions.

Party system and power access of ethnic groups. The party system in Nigeria was organized around the three major ethnic groups, giving each a voice to formulate its interests. In the North, the Northern People’s Congress (NPC) was dominated by the Hausa-Fulanis. In the West, the Action Group represented the interests of the Yoruba. Finally, in the Eastern Region, the National Council of Nigeria and Cameroons (NCNC),

\[^{4}\text{Mwakikagile (2001 3) speaks of 250 ethnic groups.}\]
was mostly supported by Igbos. These parties were distinctively regional in character (Mwakikagile 2001, 6).

While all three ethnic groups were well represented in their respective regions, the situation looked different on the national level. At independence, Hausa-Fulani and Igbo formed an alliance, the former being the senior partner and providing the federal prime minister, Balewa, and the latter being the junior partner and providing the president, Azikiwe (see EPR dataset). The Action Group, even though in control of the Western Region, was in the opposition. This exclusion from central power produced riots in the Western Region in 1962, and eventually led the federal government to imprison Western leaders, Enahoro and Awolowo (Mwakikagile 2001, 9). The power constellation changed in 1965, when the Hausa-Fulani and Yoruba served with the central government while the Igbos only held regional autonomy (see EPR dataset).

5.4 Chronology

The constellation between regions, ethnic groups and regional parties provides the ground on which the escalating events between 1965 and 1967 led Nigeria towards war. The following four events between 1965 and 1967 are milestones on the path to civil war because they were accompanied by an increasing degree of violence, even though alone they did not qualify as a civil war according to the definition above: the Western elections in 1965, the January 1966 coup, the subsequent July 1966 coup, and the massacres that targeted Igbos in the Northern Region from September 1966 on.

By 1962, the Action Group in the Western Region had split due to differences between progressive leader Akintola and conservative leader Awolowo. Akintola’s faction, the Nigerian National Democratic Party (NNDP), successfully sought an alliance with the Northern NPC. However, this alliance proved to catalyze mass violence when the North, during the Western elections of 1965, tried to manipulate votes to support the NNDP. Anti-election demonstrations escalated and electoral officers and party polling agents were shot, while in other regions NNDP representatives and symbols were also targeted. Soon, opposition against the party of the Northern Region turned into ethnic violence between Yoruba and Hausa-Fulani (Diamond 1988). The estimated death toll ranges from 153 people as reported in the New Nigerian in January 1966 (Kirk-Greene 1971).

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5 I thank Manuel Vogt for providing me with detailed information about his coding of Nigeria’s ethnic groups in EPR.
In January 1966, a coup led by Igbo officers killed several Hausa-Fulani and Yoruba politicians and senior army officers in the Northern and Western Region, including the prime minister Balewa [De St. Jorre 1972, Mwakikagile 2001]. In a radio broadcast, one of the Igbo plotters, Patrick C. K. Nzeogwu, proclaimed that

> the aim of the revolutionary council is to establish a strong, united, and prosperous nation, free from corruption and internal strife. […] Our enemies are the political profiteers, swindlers, the men […] that seek bribes and demand ten per cent, those that seek to keep the country divided permanently so that they can remain in office as ministers […] (Kirk-Greene [1971] 125)

According to these words, the goal of the January coup 1966 was to free the country of corrupt politicians and enforce the start of a new political order. Peters (1997, 89) quotes central army personnel stating that no “particular ethnic group [was singled out] for elimination or destruction”. Also De St. Jorre (1972, 45) points to police reports that refer to death lists with the names of Igbo officers on them. Yet, since Igbo perpetrated the coups but were not among the politicians murdered, parts of the public held the perception that the coup was ethnically motivated. A statement by the Federal Military Government claiming that “some people saw in it [the coup] an attempt to end Northern domination” documents this sentiment (Kirk-Greene [1971] 32).

After the coup, senior army commander Ironsi, an Igbo himself, took power and proposed a vision of a “new” united Nigeria, where regionalism and tribalism had no place (Unification decree 34, see Kirk-Greene [1971] 169). However, centralizing decision-making on fiscal, economic and industrial projects before abolishing the regions altogether encouraged the backward Northern Region to condemn this “ill-fated” vision (De St. Jorre 1972, Subera 2001, 31).

On July 29, 1966, a Northern counter-coup killed Ironsi and put Gowon, a Northerner, in power. This coup seemed like a repetition of the January coup, but with reversed sides. Gowon acknowledged that the coup primarily targeted officers who “came from a particular section of the country” (Kirk-Greene [1971] 196). The rebels announced that their goals were “that the Republic of Nigeria be split into its component parts and that all Southerners resident in the North be repatriated to the South, and all Northerners resident in the South repatriated to the North” (Kirk-Greene [1971] 198). This change would have decreased the likelihood of inter-group competition in the North, which Northerners feared because they were generally less educated than Easterners and
would have to fear losing out in job competition (Suberu 2001; Mwakikagile 2001).

Amidst this turmoil, at the Aburi meeting in January 1967 all regional leaders decided on the division of the army into regional battalions, a request from Ojukwu, an Igbo and the Eastern leader. Also, the parties at the meeting agreed that each region would have veto power over any subject affecting the whole country – which amounted to a confederal rather than a federal arrangement. However, shortly after the meeting, contradicting interpretations of the agreement increased tension between the leaders, in particular Ojukwu and Gowon.

By March 1967, it seemed that all events had set the course for escalation and war. Even though the July 1966 coup warranted a success broadly speaking, parts of the Northern population engaged in ‘disturbances’ directed against Easterners living in the Northern Region at the end of May 1967. This unrest led to an outflow of Easterners from the Northern Region, yet the army chose to forego intervention (De St. Jorre 1972: 59). At the end of September 1967, massacres targeting Easterners took place in the North, which led to a refugee outflow of around 1.5 million Easterners (De St. Jorre 1972: 98).

As a response to the massacres and pogroms, Ojukwu demanded that “the Federal Government and the Northern Government that perpetrated these atrocities have certain responsibilities towards them” and that they “should show – demonstrate – their own good faith by contributing, by volunteering to contribute” (Kirk-Greene 1971: 261). However, Ojukwu’s demands appeared to be unheard – for example, Gowon had apparently renounced his promise to continue payment to fleeing employees (Kirk-Greene 1971: 354, 360) amongst other breaches of confidence – and he blamed Gowon for not honoring agreements. Consequently, the personal relationship between the leaders deteriorated more and more.

On May 27, 1967, Gowon proclaimed a state of emergency and announced the creation of twelve new states, which would cut the Eastern Region in three. A day later, the Eastern Consultative Assembly provided Ojukwu with a mandate to declare “at the earliest practicable date Eastern Nigeria a free, sovereign and independent state by the name and title of the Republic of Biafra” (Kirk-Greene 1971: 450). Three days later he did. Gowon responded by announcing his “irrevocable decision to crush Ojukwu’s rebellion in order to re-unite Nigerians resident in the three Eastern States with their brothers and sisters in other parts of Nigeria as equal partners” (Kirk-Greene 1971: 453f). Finally, on July 6, 1967, fighting between Nigerian and Biafran troops broke out in the
5 Ethnofederalism and Ethnic Conflict in Nigeria’s First Republic 1967

Eastern Region.

5.5 Analysis

The Nigerian Civil War is an example of a secessionist war led by an ethnofederal region endowed with considerable regional autonomy. The question is whether the outbreak of violence can be understood in terms of the Ethnofederal Mobilization theory, so it needs to be investigated to what degree the path to violence follows its propositions, i.e., whether indeed a regional institutions promoted the political salience of ethnicity, and whether regional institutions or a regional army provided the means for secession. Second, it needs to be clarified whether political and/or economic inequality was a possible conflict motive, and what role the fear of or real loss of autonomy played.

**Ethnofederal structure.** A close look at the ethnofederal institutional structure provides insight into how it contributed to regionalization and nationalism. As with many federations, regional legislatures determined the contest for power on the national level in Nigeria. Since the three major ethnic groups dominated their regions, parties were encouraged to mobilize support “by almost any means necessary from a basis of fundamental cleavage among the groups in contention” (Whitaker 1981: 5). In other words, the structure almost prescribed mobilization on the basis of ethnicity. This led to deepening regionalism (Diamond 1988). For example, during the Western election campaign, the main election theme of the NNDP was the threat of an “Ibo domination” and “Igbo empire” (Diamond 1988: 259) and a chief NNDP propagandist declared that more and more Ibo business interests are pouring into Lagos and Ibadan and the Ibos are striving might and main to penetrate the Western economy, thereby exploiting our wealth and riches for the benefit of themselves. (Diamond 1988: 259)

This illustrates how the political elite contributed to ethnic framing and helped to polarize conflicts. Most importantly, it was Ojukwu, the leader of the Eastern Region supported by the Eastern Consultative Assembly, who declared secession. In other words, official governmental representatives of the Eastern Region took action, but not, for example, members from grassroot movements. These actors had well-established communication channels and a coordination infrastructure that facilitated decision-making and, as a result, collective action. It is symptomatic that the ethnic group that controlled its own

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“Ibo” is a synonym for “Igbo”.

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region became the one to wage a war with the central government rather than one of the minority ethnic groups without its own region. These minority groups arguably suffered from even worse political grievances because they were completely excluded from power or even discriminated against (see EPR), but likely had no chance to mobilize because institutional access did not exist.

Eventually, both Northerners and Easterners feared domination by the other group, which was enhanced by a significant flaw in the ethnofederal setup – the imbalance in population between the regions. This is deemed detrimental by outside observers (Suberu 2001, 2006) as well as Western and Eastern leaders at the time (Kirk-Greene 1971, 282). In combination with the constitutional rule stipulating that a two-third majority could encroach on the autonomy of a region, Northern dominance in population was constantly looming over the political system. On the other hand, the danger of dominance also emanated from the Southern parts of Nigeria, who would be advantaged in job competition in comparison to the Northerners (Kirk-Greene 1971). These contradictions within the system (Sklar 1965) led to mutual security fears (Diamond 1988).

Another problem with the system concerned the small number of regions. The existence of so few participants in the power contest on the national level meant that each region could potentially control a relatively large piece of the “cake” and could be expected to put much effort into mobilization; mobilization that in ethnic regions was most effectively based on ethnicity.

We can conclude that the existence of ethnic regions, the dominance of one ethnic group in each region, and the existence of organizational resources made ethnic mobilization in the three regions possible and very likely. If, in contrast, Nigeria had consisted of a number of crosscutting regions as is the case today, the outcome of regional elections would not have determined to such a large degree the power constellation at the center, and the regions would be less capable of mobilizing on ethnicity. Smaller groups would have provided a counterweight, and regional conflicts would not have pitted one ethnic group against another since overlapping cleavages would be less available for political mobilization.

Finally, not only the structure of the ethnofederation, but also its substance, i.e. federal assets and regional armies, contributed to the outbreak of secessionist conflict. At independence, the Nigerian army had been recruited on the basis of an ethnic quota system, making the number of Igbos in the Eastern army about 25% of the total, which was half the size of the Northern share of 50% (Adegboyega 2007). However, from Au-
gust 1966 onward, the army was divided into regional battalions, leaving loyal soldiers of Eastern origin at Ojukwu’s command. Additionally, in March 1967, Ojukwu appropriated all federal revenues in the Eastern Region as well as corporations, railways, rolling stock, schools and courts. De St. Jorre (1972) sums it up nicely: “The Eastern Region was in possession of its own armed forces, a fully fledged governmental machine, master of its economy and finances and imbued with a white-hot separatist passion”. If anything, secession must have seemed a realistic option in case the security situation for Easterners would become untenable (which it eventually did). In other words, state institutions and federal provisions on the regional level provided the means for Ojukwu to seriously attempt secession.

Political economists such as Fearon (2005) point to the existence of oil in the Eastern Region as a potential source of conflict, especially secessionist conflict. In the Nigerian case, oil may have contributed to the immediacy and force of the federal military reaction. Of course, oil revenues became an issue since in the case of secession, the Eastern Region would have had the right to collect taxes on oil in the Niger delta, which would have deprived the federal government of exactly this income. Also, oil resources are likely to have increased the prospects of a viable Biafran state and might have made the decision to secede easier. However, oil interests on the side of the Eastern Region did not seem to be a central motivation for mobilizing along ethnonationalist lines and declaring independence. As De St. Jorre (1972) notes, the government of the Eastern Region took over federal corporations and public service institutions in March 1967 but left “the important oil revenues […] untouched”. If the Eastern Region had wanted to secede to increase its oil profits, that would have been the first step. But as argued above, the struggle between the Eastern Region and the Nigerian federal government rather concentrated on political issues.

Another general objection to an account of ethnic violence emphasizing ethnofederal institutions points to the creation of the regional units in Nigeria. One might argue that the very existence of ethnofederal regions was the result of preceding conflict between ethnic groups, and that this conflict was protracted and caused renewed outbreak of conflict later. Indeed, ethnic relations between the ethnic groups were tense at the time of independence. Secession had been considered a serious option by the Northern as well as the Western Region since the 1950s. Also, massacres against Igbos had already taken place in 1945 (Mwakikagile 2001).

However, Nigerian scholars have largely dismissed this explanation based on “primordial geography or cultural complexity of the country’s society” and have instead em-
phased its colonial history and the configuration of the three-region federation (see Suberra 2001: 20). In fact, an investigation into British colonial rule in Nigeria reveals that the federal structure was less a result of preceding ethnic conflict but more the fact that political institutions followed a divide-and-rule philosophy and helped a great deal in emphasizing regional and tribal cleavages (e.g. Aigbo 1991). The British rulers had created two separate protectorates in 1939 that were administered in different ways (Coleman 1958; Diamond 1988). While the North was in some ways protected from Western influence, in the Southern regions Western education and missionaries exerted their influence to a great degree. This was partly a function of characteristics of the ethnic groups themselves. For example, the Hausa and the Birom ethnic groups showed less inclinations to accept Western ways than the Igbo (Coleman 1958: 330). Nigerian leaders such as Balewa admitted in 1948 that

the Nigerian people themselves are historically different in their backgrounds, in their religious beliefs and customs and do not show themselves any sign of willingness to unite (Balewa, Legislative Council Debates, Nigeria, March 4, 1948, p.227, cited in Coleman 1958: 320)

Yet, conscious policy of the British rulers discouraged contact between the ethnic groups (Coleman 1958; Diamond 1988, Peters 1997). For example, Northern leaders were prevented from participating in the central Nigerian Legislative Council until 1946/47 (Suberra 2001: 322). Also, Southerners in the North were not allowed to acquire land (Nnoli 1978), nor were Northern Muslims allowed to associate with Southerners on religious and administrative grounds (Diamond 1988).

This policy had twofold consequences. Firstly, the separation of the ethnic groups through these colonial administrative boundaries prevented the growth of a common Nigerian identity (Peters 1997; Diamond 1988). Secondly, Western influence and receptiveness towards that influence varied between the regions with the result being that the regions developed “unevenly in education, communications, sanitation facilities, hospitals, public works, housing, and other aspects of modern civilization” (Coleman 1958: 329). When the ethnic regions became focal points of political power, these differences also became politically important and served as a basis for “the appeal for united action for self-improvement” (Coleman 1958: 330). In other words, mobilization was based on ethnic cleavages since every region favored only one ethnic group. Summing up these insights, conflictual ethnic relations certainly have their place in an explanation of violent

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7 A quasi-federal system including administrative devolution and political and budgetary regionalization was introduced in 1946 (Coleman 1958).
conflict in Nigeria. However, one must not ignore their origin and political relevance: The latter was to a considerable degree determined by the institutional structure that the British colonists put in place.

**Political inequality.** After federal elections in spring 1965, the Igbos enjoyed regional autonomy. However, on the national level they had to be content with irrelevant posts such as Housing, Trade and Aviation, while the Hausa-Fulani-dominated NPC controlled all strategic ministry positions including External Affairs, Defense, Economic Development, and Lagos Affairs, and held the position of prime minister through Balewa ([Diamond 1988](#) 227f). Also, the Hausa-Fulanis made up the majority in the army, even though not with regard to the leading positions ([Mwakikagile 2001](#) 12). In other words, political inequality was indeed present. Yet, during the rigging of the Western elections, even more parliamentary seats went to the NNDP and NPC while opposition leaders were prevented from being nominated, ballot papers were lost, and counting was forged ([Diamond 1988](#)).

The Easterners’ political grievances can be considered extensive, not because of what happened during the elections alone, but because of the significance placed on the Northern allies’ resulting ‘victory’ in the Western Region. That is to say, the relative large number of seats gained in parliament for the Northern/Western Region led to the NPC’s *de facto* control of the center. In other words, it had successfully captured “for the region and its political class the maximum feasible share of federal resources” ([Diamond 1988](#) 52). Even more so, the federal structure consisting of only three regions even provided for the possibility of two regions ganging up against the third and severing its autonomy since a two-third majority was needed to make constitutional amendments ([Diamond 1988](#) 73). Hence, there is reason to believe that Easterners’ fear of unlawfully losing out and being dominated was strong. In the words of [Kirk-Greene 1971](#) 22), during the Western elections “the East had one constitutional chance to save itself from the otherwise certain condemnation to a long-term politico-economic sentence as a second class citizen.” When it seemed like it had missed that chance, wide-spread violence resulted. In the end, the federal structure, even while devolving substantial autonomy to the regions, did not include provisions to secure this autonomy against the center ([Diamond 1988](#) 74).

**Economic inequality.** The country comprised considerable socioeconomic differences between the North and the South (Western and Eastern Region), which had existed since colonial times. As already indicated, the British had kept two separate protectorates, which promoted education and English language proficiency in the South and preserved
5.5 Analysis

the North’s social structure and Muslim emirates. This policy created a severe education gap. For example, in 1950 only two secondary schools existed in the North compared to 52 in the South (Dudley 1968); and in 1964, the number of first degree graduates was about ten times higher in the East than in the North (Peters 1997). This regional inequality in turn had consequences for employment and wealth: Only 1% of administrative posts in the federal administration were held by Northerners and only 29% of the total wage employment in the country in 1960 were accounted for by the Northern Region (Diamond 1988, 27f). When Ironsi put centralization measures into effect in early 1966, this policy move contributed to Northerner’s fears of job competition with Easterners and Westerners in the Northern Region (Suberu 2001), which in turn led to pogroms against Easterners (Diamond 1988).

Loss of regional autonomy. When Gowon pronounced the abolishment of the existing four regions and a division of the country into twelve new regions, heightened mistrust between the Northerners and Easterners led Easterners to believe that their autonomy was about to be severely cut if not completely taken away. Likewise, Northerners held similar fears when Ironsi in 1966 implemented his vision of a “new” Nigeria by centralizing decision-making on fiscal, economic and industrial projects (De St. Jorre 1972, 55) and abolishing the regions. It seems that mutual mistrust and fear of losing autonomy went hand in hand, both in the case of Easterners and Northerners.

Summing up, based on this account, loss of autonomy was the most immediate conflict trigger – the Eastern Region declared independence a few days after the abolishment of the regions was announced. Also, political inequality contributed directly to security fears on the side of the Igbo; the Eastern Region perceived that the population dominance of the Northern Region combined with the exclusion of the Eastern Region at the national level as a domination threat, which of course increased even more in the presence of pogroms against Easterners. Socioeconomic inequality, on the other hand, was an indirect conflict motive. Northerners’ fears of loosing out in job competitions resulted in pogroms against Easterners, who in turn feared for their security; ultimately, this prompted Ojukwu to push for secession (Ojukwu’s declaration of the ‘Republic of Biafra’ [Kirk-Greene 1971, 451).

To conclude, the ethnofederal setup provided the structural basis for ethnic mobilization that was to some degree already present before independence, but that was reinforced in the post-independent struggle for power. The existence of a regionally and ethnically homogeneous army assisted in making secession look like a seemingly viable goal, not to mention the whole federal infrastructure that could be used to build up a separate
state. Political inequality and the fear of losing autonomy directly and socioeconomic differences indirectly motivated the outbreak of secessionist conflict.

This case also shows that there are more institutional aspects of ethnofederalism than the mere overlap of ethnic and administrative boundaries that are relevant for the governance of divided societies. As the case of Nigeria shows, some conflict motives such as the loss of autonomy or the fear thereof may be more directly connected to structural factors such as population imbalance between the regions and number of regions than hitherto assumed. Consequently, it may be fruitful to carefully distinguish between these factors in the assessment of ethnofederalism.

The occurrence of violence in the face of separatist mobilization is not only a function of a rebellious region, but also of the actions and reactions of the incumbents. While this insight might seem trivial, in a comprehensive framework of secessionist violence this factor should not be left unmentioned. Nigeria’s government in 1967 hardly consisted of individuals dedicated to the non-use of force. In fact, it was a military government led by Gowon, a ranking battalion commander before he became military chief of staff, and the military governors of the other regions, who all had a personal history in the Nigerian army. Talks were held, but the fact that decision-makers had a military background and direct access to military equipment and personnel meant few obstacles stood in the way of military force.

### 5.6 Contemporary Nigeria

Scholars and practitioners that are interested in conflict management or conflict prevention will ask what lessons can be learned from this case of secessionist conflict in an ethnofederation. Unfortunately, history does not provide for the luxury of repeated ‘runs’ where one can hold all things equal and vary only the factor or interest. Hence, it is always inherently unsafe to work with counterfactuals and make statements about what would have happened if a different political system had been in place. Nevertheless, this study will offer a few remarks about the current system in Nigeria and the absence of large-scale civil war since the Biafran war of 1967.

Local British governors such as Huge Clifford did not even deem it possible to “weld” different ethnic groups into a single homogeneous nation (Peters 1997 48). Coleman (1958 325) maintains that if the British administration had implemented a system that did not respect the traditional culture of the North, “tribal animosities” would probably
have been greatly exacerbated. This reasoning may explain the British choice of political system, but it does not mean that large-scale violence necessarily would have followed attempts at ethnic “welding”.

In fact, the history of Nigeria since 1970 seems to suggest otherwise. Figure 5.2 shows the average level of ethnofederalism in Nigeria in a given year as computed by averaging Congruence values per region per year. This average degree of ethnofederalism decreases over time due to several state reorganization measures in the years 1976, 1987, 1991 and 1996 that led to an increase of cross-cutting ethnic and regional boundaries. Importantly, large-scale intranational violence that includes the central government did not recur, neither in the Eastern Region nor in any other region.

Figure 5.2: Average degree of ethnofederalism in Nigeria over time
While this already points to the beneficial effect of cross-cutting cleavages, a graphical overlay of the regional boundaries with ethnic group boundaries shows what this means for each of the politically relevant groups in the country. Figure 5.3 illustrates how the number of Nigeria’s regions has grown to 37 (including Abuja Federal Capital Territory) since the Biafran war. In 1967, Gowon pronounced the creation of 12 new states, which cut the former Eastern Region into the states of Rivers, East-Central and
South-Eastern State, and the Northern Region into six. In this constellation, the degree of ethnofederalism is still fairly high for the Western Region inhabited by the Yoruba and the East-Central state mostly populated by Igbo.

When in 1976 the reorganization of boundaries divided the major ethnic groups across several regions, conflicts were consequently transferred from the central to the regional level since administrative opportunities at the center were greatly reduced (Horowitz 1985). As a result, contention at the “all-Nigeria level” decreased. In the case of the Hausa-Fulani in the North, intraethnic cleavages proliferated, which had been obscured by the formerly undivided Northern Region. Further, other minorities such as the Kanori now had the chance to gain seats in parliament once awarded their own state (Horowitz 1985).

State creations in 1991 and 1996 reinforced this tendency. The three regions that had existed at the time of independence were each eventually divided into five or more regions. This change meant that the three majority ethnic groups, the Hausa-Fulani, Yoruba and Igbo, no longer exclusively inhabited one region but were spread across at least five regions. In contrast, the three politically relevant minority ethnic groups, the Ijaw, Ogoni, and Tiv were more or less concentrated in their own regions. In other words, while on average the rearrangement of regional boundaries led to more cross-cutting boundaries, for some groups the state system actually became more ethnofederal. This constellation stands today.

It seems that between the two extremes of complete ethnofederalism and rigorous cross-cutting of regional and ethnic boundaries, the current Nigerian system applies a middle way that takes into account group size. Population dominance by large ethnic groups, which had heightened security fears and reinforced ethnic competition for central state power in 1967, can potentially be counteracted through the diffusion of political power over several subunits. Minority ethnic groups, on the other hand, can gain a voice by controlling their own region. The absence of large-scale civil violence since 1970 seems to provide some evidence that this federal system avoided at least those problems that led to the secessionist conflict in 1967.

This is not to say that ethnic conflict has been completely absent from Nigeria since the Biafran war (see Imobighe 2003). For example, the conflict between the Andoni and the Ogoni led to thousands of deaths (Horowitz 2002). Likewise, the feud between the Tiv and Jukun ethnic groups has been flaring up since the 1960s (Aluaigba 2009). Many of these conflicts revolve around land and resource issues (Egwu 1998). Yet, however
violent they are, none of these conflicts involve the central government of Nigeria as a conflict actor. Nor have they come close to reaching the casualty level of the Biafran war, which is estimated at 75,000 (Lacina and Gleditsch 2005) not including deaths from starvation etc. An escalation to such massive violence and upheaval seems to have been contained by the current federal system, even if Nigeria, like many other countries, still struggles with conflictual ethnic relations.

5.7 Conclusion

In the Nigerian case, the existence of ethnofederal institutions reinforced existing cleavages and contributed to the occurrence of collective action. Ethnic identities increased in salience and became central to addressing economic and political issues. The overlap of regional and group boundaries led to an association of regional conflicts with ethnicity. This overlay always posed a danger that the regional party system reinforced, which became “operational” during the Western elections and the January 1966 coup. In both cases, the governments’ strategy of using ethnicity to address political and economic ills proved effective in gathering supporters. Organizational structures, notably the regional government with its Constitutive Assembly, facilitated communication and meetings. Likewise, the existence of a regional army encouraged the Eastern leader, Ojukwu, to actually fight for secession.

The existence of a single region dominant in population proved detrimental to ethnic relations. This constellation led to fear of potential and real government exploitation. The difference in ethnicity between the regional leaders and incumbents arguably contributed to mistrust: Easterners doubted Gowon’s guarantee to provide for the safety of Easterners in the Northern Region or to keep other promises. Consequently, fears about losing existing political autonomy were present in Nigeria when Gowon threatened to abolish the Eastern Region.

In contemporary Nigeria, the government has addressed this problem by distributing the largest ethnic groups across several regions, while awarding small minorities their own regions. Also, since 1960 the number of regions has increased by a factor of 10 with the consequence that political power is less concentrated but diffused across regions. In this setting, it is hardly conceivable that one region would threaten to hijack the center and dominate the whole country.

The Nigerian case clearly illustrates the dangers of ethnofederalism. However, it also
5.7 Conclusion

lends insight into how the organization of regions, including ethnic regions, could be used to diffuse potential threats to the integrity of the state by lessening the political impact of large ethnic groups and strengthening that of small. In a constellation such as present in 1967 Nigeria, ethnofederalism in combination with a low number of regions asymmetrically populated proved to be detrimental. A different constellation with many equal regions including a few ethnic regions, may prove suitable to govern ethnically divided societies.
6 Ethnofederal Mobilization Beyond Nigeria

The results from the statistical analysis in Chapter 4 have shown that boundary congruence and secessionist conflict are correlated. Economic and political inequality also contribute to an increased conflict risk. In the preceding chapter, the case of the Eastern Region in Nigeria 1967 has illustrated how a constellation of means, motivations and ethnic identity together produce secessionist conflict in ethnofederal regions. This chapter provides a tentative assessment as to what degree the Ethnofederal Mobilization theory can explain other cases and what other insights can be gained from investigating the mechanisms that lead to conflict.

The purpose of this chapter is twofold. First, additional evidence will be provided that Ethnofederal Mobilization theory can partly explain the outbreak of violence. However, in cases where the degree of ethnofederalism is very high, the need for additional explanations becomes obvious. In this case, the Ethnofederal Mobilization theory predicts less mobilization and violence because there may be enough resources and opportunities for self-determination available to appease ethnic groups. Yet, high-congruence regions such as Slovenia and Croatia experienced conflict, which is to some degree puzzling since their predicted risk for conflict – based on the statistical results using boundary congruence as a single predictor – is indeed lower than, for example, the Eastern Region in Nigeria.

I argue that these cases illustrate not only how ethnofederalism contributed to conflict but also how its potential appeasing effect was counteracted by economic inequalities and the expected loss of territory and autonomy. The difference in casualties in Croatia and Slovenia also indicates the possibility of a clean partition in the case of high congruence and, hence, the prevention of violence. Also Eritrea in Ethiopia shows a fairly high degree of boundary congruence, and the existence of ethnofederal institutions helped mobilization in that leaders of the rebel groups were (former) local government members.

\[1\] It should be stressed, however, that the theory only makes probabilistic predictions and that these cases are not necessarily “outliers” in the sense that conflict was not expected at all.
However, the fact that Eritrea was annexed against the will of the population must certainly be included in the explanation for violence and rebellion. Investigating these cases leads to the conclusion that the Ethnofederal Mobilization theory is incomplete by itself and that motivations for rebellion based on inequality and loss of autonomy need to be addressed to arrive at a comprehensive understanding of secessionist conflict.

The second purpose of this paper is find explanations for why secessionist conflict broke out even if ethnofederal mobilization was hardly possible judging from low levels of boundary congruence. In these regions, the Ethnofederal Mobilization theory predicts little mobilization and violence. The case of Dagestan in Russia serves to illustrate why conflict still broke out even if the region was not ethnically homogeneous or designed for one particular ethnic group. Also, the case of Kayin in Myanmar shows that ethnofederal institutions that are poorly implemented can fuel ethnonationalist projects. Table 6.1 lists the conflict regions and their corresponding Congruence level based on the spatial overlay procedure described in Chapter 4.

<table>
<thead>
<tr>
<th>Conflict region</th>
<th>Congruence value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia</td>
<td>0.99</td>
</tr>
<tr>
<td>Eritrea</td>
<td>0.84</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.77</td>
</tr>
<tr>
<td>Kayin</td>
<td>0.30</td>
</tr>
<tr>
<td>Dagestan</td>
<td>0.18</td>
</tr>
</tbody>
</table>

Table 6.1: Conflict regions discussed in this chapter

6.1 Croatia and Slovenia in Yugoslavia 1991

The break-up of Yugoslavia in 1991 was followed by some of the most studied cases of civil war. The violence between Croatian respective Slovenian forces and the Yugoslav army were a direct consequence of Slovenia and Croatia’s declaration of independence in June 1991. At the end of 1991, Serbia accepted the secessionist claims. The question arises whether the influence of ethnofederal institutions can explain these two cases.

In 1990, Yugoslavia (officially called the ‘Socialist Federal State of Yugoslavia’) consisted of six socialist republics: Serbia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia and Slovenia. The republics were administrative units with considerable power including the right to self-determination and secession, which was anchored in the
6.1 Croatia and Slovenia in Yugoslavia 1991

Figure 6.1: Ethnic groups in Yugoslavia in 1990 (FAB, GeoEPR)

constitution of 1974, and all republics and provinces had equal representation in the state presidency. Ethnically, Yugoslavia was fairly diverse. John Borrell states that there were “five nationalities, four languages, three religions, two alphabets and one political party” (Time Magazine, August 6, 1990) hinting to the potential problems that such diversity brings with it. As Figure 6.1 shows, neither republic was ethnically uniform (except perhaps Slovenia), but each hosted a majority of the titular nationality. For example, Serbs were the majority in Serbia with 85%, whereas in Croatia, Croats were the majority ethnic group with 75% (Szyyna 2000). Since 1974, the designation of Yugoslavia’s republics to ethnically defined nationalities was entrenched in the constitution (Malesevic 2000).

In the 1980s, the federal center lost more and more its hold over the republics, which was due to a large extent to massive decentralization, especially with regard to the economy (Crawford 1998, Malesevic 2000). As a result, local leaders such as Franjo Tudman, the Croatian President, and Milan Kučan, the Slovenian president, gained more and more power and became more accountable to their regional constituency (Crawford 1998), which was fairly ethnically homogeneous. In other words, playing the ethnic card helped politicians stay in power. Identity politics, however, increased the political salience of ethnic identity. As a result, nationalism grew: While support for secession in Slovenia
was at a mere 28 percent in early 1990, a referendum in December of the same year chose independence (Bookman 1992). The referendum on independence found success in Croatia, as well (Malesević 2000). In all three regions involved, Serbia, Slovenia and Croatia, hate propaganda contributed to an escalation of inter-ethnic tensions (Ramet 2006). In other words, regional institutions were used to mobilize the ethnic constituency in each region.

However, economic interregional inequality is likely an important factor for secessionist mobilization in Slovenia, the richest of the conflict regions analyzed in this thesis. As Figure 6.2 shows, Slovenia (together with Croatia) was comparably rich compared with the country on average – the spatial aggregation procedure based on the G-Econ data (see Chapter 3) actually reveals that the region was about twice as rich as the country on average –, while Serbia and Montenegro was relatively poor.

In the case of Slovenia, its regional wealth led to overproportional contributions to the Federal Fund used for the support of underdeveloped republics (Bookman 1992), especially for Serbia, which was held responsible for the declining economy in Yugoslavia since 1975 (Palairet 2007). Since the regions were otherwise economically autonomous, other republics served as “scapegoats” of economic and other problems (Malesević 2000).
Eventually, the imbalance in financial contributions drove Slovenia to withdraw from the Federal Fund “as a part of of its general effort to divorce itself from the nation” (Bookman 1992 235).

In the case of Croatia, the role of imminent power loss can be demonstrated. Serbian leader Milošević conveyed in a series of speeches that “Serbs had to fight for their rights as a nation and that he, as head of Serbia’s League of Communists, could best prosecute that struggle on behalf of all Serbs” (Bennett 1995 94). His irredentist rhetoric proclaimed a ‘Greater Serbia’ that would include parts of Croatia. That he was serious about encroaching on the autonomy of other republics was indicated by his abrogation of Kosovo’s autonomy status in 1989 (Malesević 2000). Croatia’s reaction to Serbia’s claim on its territory was to ‘go nationalist’ on its own and to seek international recognition as a separate state (Bennett 1995).

To conclude, ethnofederal institutions were the prerequisite for mobilization efforts in both cases. Importantly, however, economic inequality reinforced the nationalist quest for an independent Slovenia, and Serbia’s threat to redraw regional boundaries triggered ethnonational mobilization in Croatia. Yet, one crucial difference between these cases might explain the lower predicted risk for Slovenia than for Croatia according to the statistical analysis in Chapter 4 (see Figure 6.1). While both regions experienced conflict, Slovenia’s total death toll was, with 50 to 70 casualties, fairly low, while the war in Croatia claimed up to 6,000 lives (Lacina and Gleditsch 2005). Malesević (2000) explains this observation by the fact that Slovenia had no significant minorities. As a result, secession was quickly negotiated with Serbia (ibid.). It seems that if a region is almost completely congruent with ethnic group boundaries, a peaceful solution may be more likely. This case detail supports the assumption of the curvilinear relationship between boundary congruence and violent conflict as stated by hypothesis H2 in Chapter 2.

6.2 Eritrea in Ethiopia 1964

Also in the Eritrean secessionist conflict, the regional government played a central role in the quest for independence. The Eritrean war of independence in Ethiopia that broke out in 1964 is, with around 28 years duration, one of the longest civil wars in the post-World War II period and cost a total of around 350,000 lives (Lacina and Gleditsch 2005). It ended in 1991, when Eritrean forces were able to defeat the Ethiopian army so that Eritrea, after a referendum on independence, successfully seceded from Ethiopia.
The federal structure in Ethiopia looked like those of many other African states shaped by foreign powers. After Italian and British colonists withdrew from the region after World War II, the UN decided that Eritrea would enter into a federation with Ethiopia having “a federal, autonomous status as an equal partner within Ethiopia”, a decision which the Eritrean Democratic Front agreed to in 1950 (Lobban 1976). However, during the following decade, Eritrean autonomy was gradually removed by the Ethiopian government. For example, the Eritrean constitution, as well as the Eritrean National Assembly, were suspended in 1956 (Negash 1997), Arabic and Tigrinya were canceled as official languages, and in 1958 the Eritrean flag was officially abolished (Lobban 1976, Yohannes 1991). In effect, these events amounted to an annexation of Eritrea to Ethiopia. When Eritrea was made a province in 1963 (see Figure 6.3), Idris Mohammad Adam, the former chairman of the Eritrean National Assembly, initiated the Eritrean Liberation Front (ELF), which operated from exile to fight against the Ethiopian government (Yohannes 1991, Negash 1997).
6.3 Kayin in Myanmar 1948

It seems that Eritrea did not, as declared officially, enjoy an equal status next to Ethiopia, but systematically lost more and more of its autonomy. Eritreans were even discriminated against since their native tongues were banned as official languages. Also, the Eritrean legal system was disabled so that Eritreans could not make use of it anymore, and Eritrean parties lost their strength under the influence of the Ethiopian government. This is likely to have reinforced an Eritrean identity even if Eritrean nationalism had been prevalent among the Eritrean population through oppression by Italian colonists. In fact, contends that Eritrean national identity fundamentally resulted from the actions of both the colonists and the national movement that mobilized on grievances induced by the loss of autonomy. To conclude, first, ethnofederal institutions facilitated organization and, hence, collective action of groups such as the Eritrean Democratic Front, which later turned into the ELF. Second, an increasingly strong Eritrean identity that became salient through the common experience of discrimination and loss of autonomy in the first ten years after accession by Ethiopia supported ethnofederal mobilization.

6.3 Kayin in Myanmar 1948

Turning to the regions with fairly low boundary congruence, the conflict involving the Kayin (Karen) ethnic group, the largest minority group in Myanmar according to EPR, is a case where ethnofederal institutions existed, but where the conflict issue evolved around the appropriate shape of the ethnic region.

Similar to the Nigerian case, the British colonial administration by the British had resulted in a separation of the majority Burman population from the hill tribes in the frontier regions, that is Chin, Kachin, Shan, Kayah and Kayin regions, which were isolated from each other as well. According to British rule did nothing to foster national unity. On the contrary, both directly and indirectly it stimulated sectional particularism. It separated Burma proper from the frontier peoples by practicing direct rule in the former and indirect rule in the latter; and it divided the frontier peoples from one another leaving them under their own chieftains.

In other words, administrative structures put in place by the colonists promoted ethnic cleavages. Continuing this trend, at independence in 1948, the conference held in Pang-
long with representatives of minority ethnic groups decided on a federal constitution that gave full autonomy in internal administration to the frontier areas. The constitution included autonomy provisions of all Burmese states including economic affairs, education and police. Minority groups were represented in the Chamber of Nationalities at the national level (Callaghan 1998). Importantly, every state was granted the right of secession after 10 years conditional on a two-thirds majority in the affected state council (Chapter X in 1947 Constitution). Additionally, also similar to the Nigerian case, the Burmese army was ethnically segregated since 1947 (Kreutz 2007), which was according to Walton (2008) a sign of the lack of trust between the ethnic groups and also a source of intensified institutionalization of ethnic divides.

Thus, the Myanmar conflicts, and the Kayin conflict in particular, certainly fit the Ethnofederal Mobilization theory, so far. However, remarkably, the degree of congruence between group and region boundary in Kayin was fairly low; it was the least ethnofed-

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2http://www.ibiblio.org/obl/docs/panglong_agreement.htm, last accessed 2011-05-31
eral region that experienced conflict in Myanmar. As Figure 6.4 shows, some part of the Kayin ethnic group lived inside the boundaries of the new state; however, a significant portion also inhabited neighboring regions in Southern Myanmar such as Bago, Aveyarwady, Yangon, and Shan. Thus, the creation of a Kayin region was difficult due to these geographical contingencies, if not impossible, even if the British had promised the Kayin people their own state (Walton 2008). Finally, the boundaries of the new state separated the Kayin from each other, and their refusal to accept the boundaries of the Kayin state eventually led to rebellion (Silverstein 1959). This case may be representative for those regions that to some degree empower and unite ethnic groups through ethnofederal institutions, but where these provisions remain suboptimal and ethnic groups are still not awarded the kind and degree of territorial autonomy they expect.

6.4 Dagestan in Russia 1999

As we have just seen, an explanation using ethnofederal institutions is adequate for some cases of secessionist conflict in federations. In others, however, explanations have to be sought elsewhere. Clearly, the case of Dagestan in Russia in 1999 needs a different explanation since the region was not designated to a particular ethnic group. In contrast, Dagestan is inhabited by a multitude of minority ethnic groups (see Figure 6.5), and no single ethnic group has a large majority within the region. A large majority of Dagestan’s population is Muslim Sunnite (Ware and Kisriev 2001, Arukhov 2005).

It is likely that from the perspective of regional leaders, in such an ethnic group constellation, mobilization on ethnicity is difficult and less justifiable here than in the neighboring region of Chechnya, for example. In fact, the electoral system in Dagestan favors candidates in the State Council that receive support from several nationalities (Ware and Kisriev 2001). Possibly as a result, the level of regional separatism in Dagestan is fairly low compared to other Russian republics (Gorenburg 2001 data from 1993). Concurring, Arukhov (2005) maintains that this heterogeneity prevented ethnic groups from defining themselves territorially through separation or autonomy despite the existence of social organizations that evolved around ethnicity.

Nevertheless, the 'Wahhabi' movement made demands for a separate Islamic state, which resulted in violent clashes with the Dagestani government supported by Moscow

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3The Congruence value of the Kayin region (0.3) just manages to exceed the mean of the Congruence variable and has one of the lowest Congruence values of all conflict regions.

4The Avar ethnic group are the majority, however, their Congruence level is a mere 0.18.
in August 1999. An explanation for this conflict is likely to take into account economic deprivation in Dagestan. According to spatial aggregation calculations using G-Econ, Dagestan is around five times poorer than Russia, on average (see Figure 6.5). Since Wahhabism is a religious movement that assigns importance to puritanism and rejects Western influence, especially modernization (Ware et al. 2003), mobilization of an economically aggrieved population is more likely to be successful. In fact, based on interviews with Dagestani elites, Ware et al. (2003) maintain that economic problems have contributed to the spread of Wahhabism. They report that villagers, which are in general poorer than the urban population in Dagestan, are least likely to consider Wahhabism as extremist. This explanation is also favored by Arukhov (2003, 124), who suggests that the “destruction of the Republic’s economic base [...] the appearance of a harsh social stratification based on wealth, noticeable income polarization, inter-ethnic and social conflicts, and mass unemployment” led to the Dagestani’s defensive reaction.

Linkages to Chechnya have also contributed to Dagestan’s request for separate statehood. While Wahhabism was traditionally focused on living according to Islamic law but sought to stay in the Russian Federation, links to Chechen separatists triggered a re-
Figure 6.6: Economic inequality in Russia in 1990 (FAB, G-Econ)

orientation towards establishing a separate emirate (International Crisis Group, 2008).

6.5 Conclusion

The discussion of selected cases has shown that the mechanisms postulated by the Ethnofederal Mobilization theory can be found in Yugoslavia (1991) and Myanmar (1949), and to some degree in Ethiopia (1964). Thus, generalization beyond the Nigerian case is possible even with regard to the conflict mechanisms. As illustrated by these cases, an increase in boundary congruence is likely to increase the risk for secessionist conflict. In particular, Myanmar’s colonial background illustrates once again how administrative structures institutionalize ethnic identities, and in this respect contribute to ethnonationalist mobilization.

However, the cases in Yugoslavia and Ethiopia need further elaboration since when there is very high boundary congruence, rather little conflict is expected. An explanation complemented by grievance based on economic inequality as well as the loss of autonomy is applicable here. Economic inequality has a large role to play in secessionist conflicts as the case of Slovenia illustrates. Also, loss of autonomy or the fear thereof seems to be a central motive in many conflicts, most notably Eritrea, which experienced
6 Ethnofederal Mobilization Beyond Nigeria

a subtle annexation pushed by Ethiopia. This analysis also holds for Croatia, which feared Serbia’s territorial encroachment. Comparing battle deaths in Slovenia and Croatia confirms that the risk of conflict may decrease when boundary congruence is close to 1 since partition may be easier to negotiate. The case of the Kayin in Myanmar has shown that ethnofederal institutions may empower ethnic groups, but may also leave them in a struggle with the central government if ethnofederal structures are poorly implemented.

In other cases, the Ethnofederal Mobilization theory may not be the best explanation at hand, especially if the region is ethnically heterogeneous as is the case in Dagestan. Second, while often enough ethnofederal power and the loss of it or the fear thereof may operate in tandem to trigger rebellion, autonomy may exist in different forms than ethnofederal power devolution, for example through a history of independence. This means that careful in-depth analysis of conflict cases is necessary in order to assess if and how ethnofederal institutions affect ethnonationalist mobilization.

Other cases where the theory is difficult to apply are non-violent cases of secession, such as the mostly peaceful secessions in Czechoslovakia and Soviet Union. This observation points to the simplicity of the Ethnofederal Mobilization theory that links ethnofederal regions directly to violence. The state as an actor is largely left out, except for its role as a ‘producer’ of grievances when it encroaches on a region’s autonomy through centralization measures etc. However, violence is often also a function of the state’s willingness to repress secessionist projects. This willingness may be a function of geostategical value of the region determined by its location or the existence of natural resources such as oil (as in Dagestan) and natural gas (as in Baluchistan). Additionally, openness to international norms as paralleled by the end of the Cold War is likely to determine whether or not a government uses force to repress secessionism.

The following concluding chapter will discuss some of these insights to provide an assessment of the strengths and weaknesses of the approach presented and scrutinized in this thesis, not only with regard to academic purposes but also practical applications.
7 Conclusion

This thesis has offered a new way of conceptualizing and measuring ethnofederalism and it has found an empirical pattern that suggests that ethnofederalism, depending on the degree of boundary congruence, can increase and decrease secessionist conflict risk. The results of the statistical analysis (Chapter 4) suggest that regions with boundaries that crosscut ethnic settlement boundaries have a comparably low risk of experiencing conflict. This finding holds for most regions in the investigated sample. With increasing degree of boundary congruence, the risk of conflict increases as well, however only up to a medium level, which corresponds to the boundary congruence of regions such as Chechnya. Beyond this threshold, an increasing degree of boundary congruence decreases conflict risk. Hence, for regions that are almost completely congruent with ethnic group settlements, the risk for secessionist conflict is again comparably low.

Interpreting this pattern, violence is most likely if regions are equipped with some, but not enough, power. In other words, this takes place where groups control resources and/or identity strengthening institutions but the power distribution between the center and the region is still under contestation. In the extreme case, the center may threaten to withdraw regional power again to preempt rebellion, which in turn may push a region towards secession, which happened in the Biafran conflict in Nigeria in 1967. Similarly, in the case of Baluchistan in Pakistan in 1974, the central government suspected separatist activity and deposed the regional government [Khan 2009]. Also, the Myanmar experience has shown that while the country was organized along ethnic lines at independence, those ethnic groups such as the Kayin that were somewhat regionally dispersed did not get their expected share of the territory and started to rebel [Silverstein 1959].

The decrease in conflict risk once boundary congruence approximates a perfect match suggests an explanation pointing to the appeasing effect of ethnofederalism in its ideal implementation. However, additional data on non-violent secessions suggest that strongly ethnofederal regions are more prone to break away from the state, while most of secessionist violence occurs in regions that are ethnofederal to a medium degree. Hence, the lack of violence in strongly ethnofederal regions may simply be due to the feasibility of
7 Conclusion

a clean partition in these cases, *ceteris paribus*.

These results underline the central contribution of this thesis to the extant literature on ethnofederalism. Without the continuous notion of ethnofederalism reified by a spatial measure of ethnofederalism, these detailed insights would have been impossible to achieve. By overlaying data on federal substate boundaries with settlement data on ethnic groups, the degree of ethnofederalism for a particular region can be calculated, which allows an estimation of secessionist conflict risk in that region. Geographical Information Systems, as a fairly new methodology in the study of secessionist conflict and civil war in general, allows researchers to adequately address the important notion of territory. Through this approach, the effect of ethnofederal structures on secessionist conflict can be more precisely determined. Also, in doing so, the conceptual distinction between federalism and ethnofederalism is clearly made, which promotes an understanding of specific constellations of explanatory factors for secessionist conflict.

Further, particularly conflict in high congruence regions such as Croatia and Slovenia illustrate the need for explanatory factors other than those referring to institutions. By combining explanatory factors pertaining to both means and motive, this thesis provides a comprehensive understanding of collective behavior that overcomes limitations of either approach by itself. Socioeconomic imbalances and political exclusion are found to increase conflict risk as well, while the loss of autonomy or the fear thereof is a recurring theme in a multitude of conflicts. Relative economic deprivation and relative wealth compared to the country average can trigger nationalist ambitions of a region that is already ethnically homogeneous as the cases of Croatia and Slovenia have shown. Finally, political exclusion generally increases the risk for secessionist conflict illustrated by the Nigeria case. If a region is not able to influence politics at the center *and* expects to lose existing autonomy, ethnonationalist mobilization can be the consequence.

The analyses performed in this thesis generate insights that may go beyond the purely academic realm. Since the relationship between regional and ethnic group boundaries has been shown to have an influence on violent conflict, designers of federal institutions may be well advised to take these insights into account. Based on the statistical analysis, regions that exhibit very high congruence between their own and ethnic group boundaries have a lower risk of conflict than regions that do so to a medium degree. Consequently, it would seem beneficial if regional boundaries perfectly traced ethnic group boundaries or if no ethnofederal system was in place at all. However, as indicated, the lack of violence in the first case may be explained by two theories: First, the successful appeasement of ethnic groups, and second, the feasibility of a clean partition. Hence, any recommenda-
tion of what congruence level to apply – to either create a region that follows or crosscuts ethnic group settlements – depends on the outcome of interest, either the lack of violence or a country’s territorial integrity. Ultimately, this is a normative question that may be answered differently by different actors. In any case, if neither violent secessionist conflict nor state break-up are desired, the advice based on the statistical result in this thesis must be against ethnic regions in federations instead, cross-cutting federal boundaries may promote ethnic “fission” (Horowitz 1985) and thus offer better prospects to decrease the likelihood of secessionist conflict.

Yet, the prospects of ethnofederalism may not be as bleak as the statistical results suggest. The case study of Nigeria provides a more detailed picture of ethnofederal structures that goes beyond the regional boundary congruence. Recall that a major contribution to Biafra’s secession and the outbreak of violence was the Northern Region’s population dominance and the Eastern Region’s fear of losing power. In contrast, the lack of large-scale violence in Nigeria since 1970 illustrates that if small ethnic groups have their own regions while the larger ethnic groups are distributed over several regions, the fear of domination and loss of autonomy may be attenuated.

Interestingly, a setup like this is also found in other multinational federations such as Switzerland and Canada – countries that have not experienced civil war in more than 150 years. Figure 7.1 shows that in Switzerland, the smallest (politically relevant) ethnic group, the Italian Swiss, mostly inhabit the canton of Ticino, while the largest ethnic group, the German Swiss, is distributed over around twenty other cantons. Similarly, in Canada (see Figure 7.2), the French (Quebecois) minority mostly inhabit the province of Quebec where French is the only official language. In contrast, the English speaking population as the majority ethnic group is distributed over several provinces. In other words, in line with the theory of ethnic core regions as conducive to state break-up and conflict (Hale 2004), not only the ethnofederal setup of the region determines the occurrence or lack of violence, but also the ethnofederal setup of the whole country and the distribution of its population. This observation points to the importance of grievances

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1This is also not to say that partitions in general are a guarantee for peace. The Eritrean-Ethiopian border dispute that has been on and off since Eritrea’s secession in 1993 shows that, instead of recurring civil war, interstate conflict is a possibility.

2Canada experienced its last rebellion when French and English Canadian rebels revolted against the British colonial government in 1837 (Rendeau 2007). While the Canadian government is currently dealing with a separatist movement in Quebec, this movement has never turned sufficiently violent to be included in any civil war list. Switzerland in its current form came to existence after the Sonderbund War in 1847 when seven Catholic cantons revolted against centralizing measures of the federal administration (Oechsl 2009), but has since that time not experienced violent rebellion.

3See 'Charter of the French Language' (Bill 101) passed by the National Assembly of Quebec in 1977.
7 Conclusion

![Ethnic groups in Switzerland](image)

**Figure 7.1: Ethnic groups in Switzerland in 2005 (FAB, GeoEPR)**

Based on fears of losing power that this thesis has shown to contribute to conflict, but may be alleviated by the conscious (re-)drawing of boundaries.

Also, economic inequalities between regions should obviously be reduced to a minimum. This is certainly easier said than done, especially since inequalities may be a matter of perception rather than objective facts. The problem in ethnofederations is that if ethnic regions blame the government for economic inequality and, for example, make requests for a revision of interregional transfers, interethnic relations can be expected to deteriorate. This hostility in turn decreases the likelihood for governmental provisions that benefit a relatively poor or rich minority region. Ethnic and economic issues may reinforce each other. Unfortunately, evidence that economic inequality contributes to conflict does not directly lead to insights about how to address this inequality, which is why this thesis refrains from offering practical advice in this regard. Instead, suggestions of how to address inequality may be found in studies on intergovernmental transfers and fiscal decentralization (e.g. Bahl and Linn [1994], Treisman [2006]).

Further, since political exclusion has been shown to increase the risk for secessionist conflict, inclusion of minority representatives at the center additional to territorial autonomy may be useful to prevent secessionist conflict. Provisions like power-sharing agreements and proportional representation in the central government are likely to counteract what scholars have called the “centrifugal effects” of federalism and decentralization (Chandler [1987] 156). If group representatives enjoy positions of power at the center
they have more incentive to stay in the federation. Also, a common forum at the center increases interethnic collaboration and may improve relations between different ethnic groups (Horowitz 1985).

While this study is a further step towards clarifying the relationship between ethnofederalism and secessionist conflict, more research has to be dedicated to answer open questions. A theoretical limitation of this thesis is that it is only concerned with secessionist conflict. However, the distinction between territorial and governmental conflicts is to some degree artificial since both often occur together. As the case of Nigeria has shown, the Eastern Region chose secession when the struggle for control at the center proved unsuccessful. Including governmental conflict in the analysis and investigating its relationship to secessionist conflict is likely to extend our understanding of the mechanisms that lead to conflict.

Further, the thesis does not account for non-violent ethnofederal mobilization. However, ethnofederal mobilization may operate in non-violent cases as well, while the lack of violence, as indicated in the preceding chapter, may also be explained by the behavior of governments in repressing or allowing separatist activity. In this thesis, the focus on the region as the determinant of violence is justified to fill a gap – most empirical studies on civil war exclusively focus on characteristics of central governments (Cunningham).
Gleditsch and Salehyan (2009). Yet, since “it takes two” to engage in conflict – and the focus of the region might unduly put moral responsibility on regional actors – actions of the central government should be analyzed to clarify its role in the occurrence of violence. In doing so, we might achieve a more thorough theoretical account of civil war.

Also, the notion of loss of autonomy has been used in a fairly broad manner. While the thesis has demonstrated that losing power or anticipating a loss of power is a common trigger for regional ethnonationalist conflict, a disaggregation of this term and a distinction between political losses and downgrading, territorial losses, or even threats to ethnic groups as a whole may improve prospects for conflict management. Similarly, more insight could be gained from distinguishing between the kinds of powers that are devolved to federal regions, which has been neglected by a purely structural definition of ethnofederalism. Finally, the question of why strongly ethnofederal regions are relatively peaceful has only been answered preliminarily. Possibly, additional in-depth case analysis of ethnofederal regions and countries that never experienced violence can clarify whether something may be learned from these cases for designing stable ethnofederal institutions.

The fact that more research on ethnofederalism is urgently needed is indicated by the high numbers of victims and acute instability resulting from the frequent recurrence of secessionist conflict in countries such as India, Myanmar and Pakistan, to name a few. The seemingly intractable nature of these conflicts requires careful analysis to distinguish systematic from contingent factors leading to ethnofederal mobilization and violence. Thus, future studies may rely on the insights provided in this thesis regarding the central determinants of secessionist conflict in ethnofederations. In doing so, our understanding may advance as to why ethnofederalism can be a slippery slope for secession and how ethnofederal structures can be used to govern ethnically diverse societies.
Bibliography


Bibliography


ESRI - Economic and Social Research Institute. 1998. ESRI Data & Maps.
Bibliography


Bibliography


Bibliography


Bibliography


Bibliography


114


Bibliography


Bibliography

