

**AN EMPIRICAL ANALYSIS OF SECTARIAN CONFLICT IN IRAQ
DURING THE PERIOD OF 2004-2016**

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
OF
İSTANBUL ŞEHİR UNIVERSITY

BY


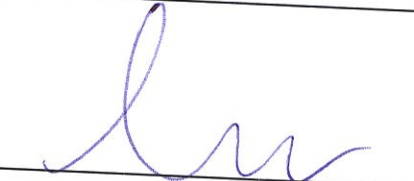
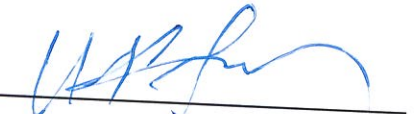
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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
POLITICAL SCIENCE AND INTERNATIONAL RELATIONS

JULY 2019

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts in Political Science and International Relations

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A handwritten signature in black ink, appearing to read 'Muhammet Akkus', written over a horizontal line.

ABSTRACT

AN EMPIRICAL ANALYSIS OF SECTARIAN CONFLICT IN IRAQ DURING THE PERIOD OF 2004-2016

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MA in Political Science and International Relations

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July 2019, 56 pages

The conflicts among different ethnic and sectarian groups have become common in the Middle East during recent years. The conflict between Shia and Sunni groups in Iraq is a typical example of this. Understanding the causes behind the conflicts would be the first step to start reducing the level of violence and develop policies to resolve conflicts. Especially, after the US invasion of the country, the level of violence among ethnic and sectarian groups has escalated. Moreover, we observe that some districts experienced violence more than the others. The detection of the factors that led to increase in the level of violence in these districts of Iraq would be helpful in the de-escalation process of the violence in Iraq and in other Middle Eastern countries experiencing similar problems. In this respect, my main research question is what caused the emergence of sectarian conflict in Iraq especially during the period of 2004 – 2016. While focusing on this question, I seek to answer why some districts encounter conflicts more than the others. The main argument of this thesis is that there are some district level factors which increase the risk of experiencing ethnic violence in Iraq. These are being a Sunni majority district, having a high level of ethnic heterogeneity, being an underdeveloped district and having a high level of road density.

Keywords: Iraq, Middle East, violence, sectarian conflict, Shia, Sunni

ÖZ

IRAK'TA 2004-2016 YILLARI ARASINDA MEYDANA GELEN MEZHEPSEL ÇATIŞMALARIN AMPİRİK BİR ANALİZİ

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Siyaset Bilimi ve Uluslararası İlişkiler Yüksek Lisans Programı

Tez Danışmanı: Dr. Öğr. Üyesi Hüseyin Alptekin

Temmuz 2019, 56 sayfa

Son yıllarda Ortadoğu'da farklı etnik ve mezhepsel gruplar arasındaki çatışmaların arttığını gözlemlemekteyiz. Irak'ta Şii ve Sünni gruplar arasında yaşanan çatışmalar bunun tipik bir örneğidir. Çatışmaların arkasında yatan nedenleri anlamak, şiddetin düzeyini düşürmede ve uyuşmazlıkları çözümede atılacak ilk adım olacaktır. Özellikle Amerikan işgali sonrasında Irak'ta farklı etnik ve mezhepsel gruplar arasında yaşanan şiddetin düzeyi daha da artmıştır. Bunun yanında Irak'ta bazı bölgelerde diğerlerine göre daha fazla çatışma yaşandığını gözlemlemekteyiz. Irak'ın bu bölgelerindeki şiddet seviyesinin artmasına neden olan faktörlerin tespiti, Irak'ta ve benzer sorunlar yaşayan diğer Ortadoğu ülkelerinde şiddetin azaltılması sürecine yardımcı olacaktır. Bu bağlamda temel araştırma sorum şudur: Irak'ta özellikle 2004-2016 yılları arasında mezhepsel çatışmaların yaşanmasına sebep olan faktörler nelerdir? Bu soruyu cevaplamaya çalışırken bazı bölgelerin neden daha fazla çatışma yaşadığını bulmaya çalışıyorum. Bu tezin temel argümanı 'district' olarak ifade ettiğimiz bölge düzeyindeki bazı faktörlerin çatışma riskini arttırdığı yönündedir. Bu faktörler arasında Sünni nüfusun çoğunluğu oluşturduğu bir bölge olmak, yüksek düzeyde etnik heterojenliğe sahip olmak, ekonomik açıdan gelişmemiş bir bölge olmak ve yüksek yol yoğunluğuna sahip bir bölge olmak gibi değişkenler sayılabilir.

Anahtar Kelimeler: Irak, Ortadoğu, mezhepsel çatışma, şiddet, Şii, Sünni

ACKNOWLEDGEMENTS

I would like to express my special thanks of gratitude who have supported me throughout the process of this thesis. Firstly, I am indebted to my advisor, Assist. Prof. Hüseyin Alptekin who always directed and helped me in all the stages of this thesis. Moreover, I owe my thanks to all the professors of the Department of Political Science and International Relations in Istanbul Sehir University, as I learned much of the methods and knowledge that I used in this thesis from them. In addition, for their valuable contributions and support in the various stages of the thesis, I am grateful to Assist. Prof. Zübeyir Nişancı and Assist. Prof. Sadullah Yıldırım. I would also like to thank Istanbul Foundation for Research and Education(İSAR) for their full support during MA studies in Istanbul Sehir University. Lastly, I would also like to thank my dear parents, and spouse who helped me a lot in finalizing this project within the limited time frame.

TABLE OF CONTENTS

Abstract.....	iv
Öz	v
Acknowledgements.....	vi
Table of Contents	vii
List of Maps	viii
List of Tables.....	ix
List of Figures	x
List of Abbreviations	xi
CHAPTERS	
1. Introduction	1
2. A Theory of Ethnic and Sectarian Conflict	6
2.1. Introduction.....	6
2.2. Conceptual Section.....	6
2.3. Literature Review	8
2.4. Hypotheses	15
2.5. Conclusion	17
3. Historical Background.....	18
4. Data and Method.....	23
5. Results.....	35
6. Conclusion.....	47
Bibliography	51
Appendices	
A. List of Districts.....	55

LIST OF MAPS

Map 1.1 The geographical spread of events.....	2
Map 4.1 Overview of the conflicts	28
Map 4.2 The map of the roads in Iraq	29
Map 4.3 The location of police stations.....	30
Map 4.4. The map for the public buildings in Iraq.....	31
Map 4.5 The light map for Iraq	32
Map 4.6 Ethnic and sectarian groups in Iraq	34
Map 5.1 Light density and conflicts.....	39



LIST OF TABLES

Table 4.1 Full names of the variables.....	25
Table 4.2 Summary statistics of variables.....	26
Table 5.1 Model 1	36
Table 5.2 Model 2	42
Table 5.3 Model 3	45



LIST OF FIGURES

Figure 1.1: Total Number of Events	3
Figure 2.1 It is drawn based on Gurr's relative deprivation theory.....	8
Figure 2.2. Causal mechanism in grievance theory.....	10
Figure 4.1 The distribution of the number of conflicts	24
Figure 4.2 Number of conflicts by year	27



LIST OF ABBREVIATIONS

AQI	: al-Qaeda in Iraq
DMSP	: Defense Meteorological Satellite Program
ESOC	: The Empirical Studies of Conflict
GED	: Georeferenced Event Dataset
IED	: Improvised Explosive Devices
ISIS	: Islamic State in Iraq and Syria
UCDP	: Uppsala Conflict Data Program
US	: United States



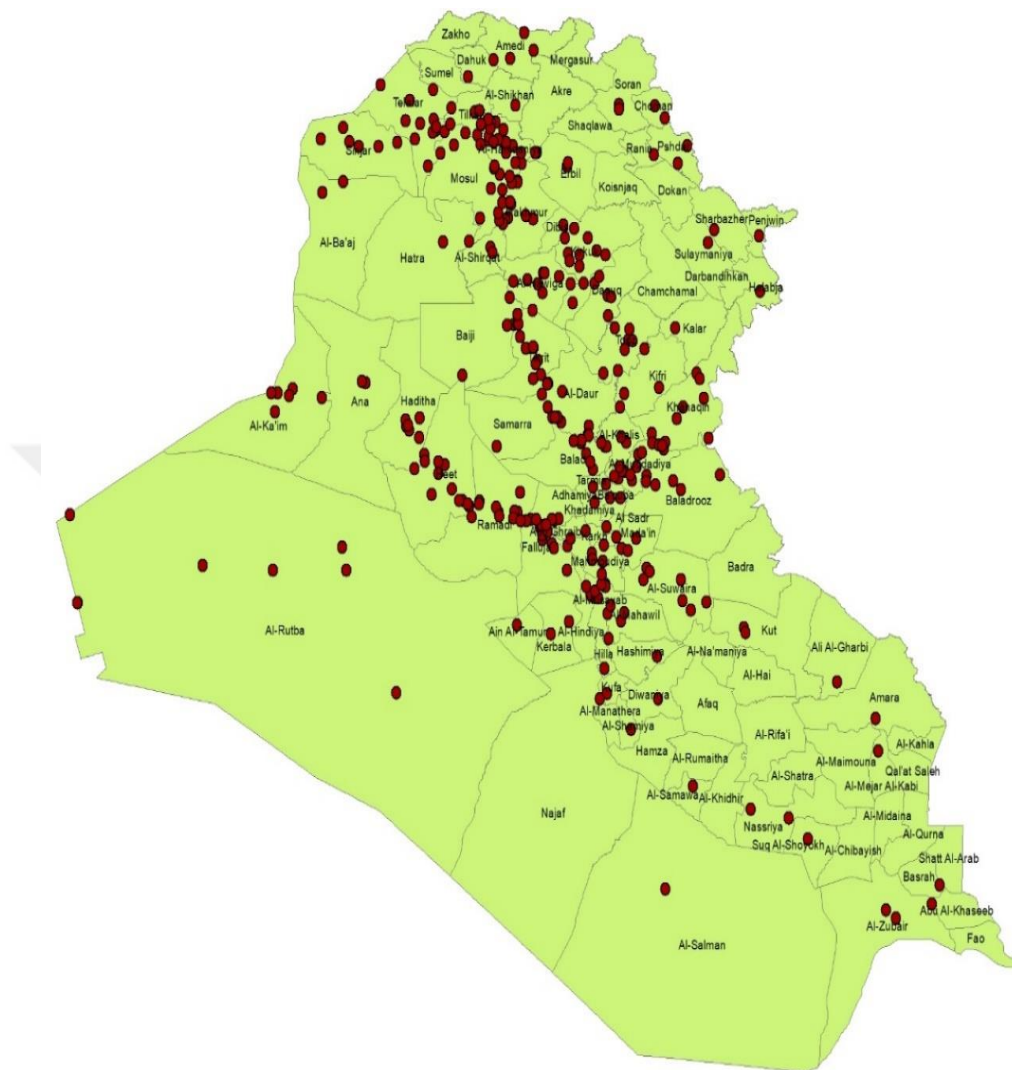
CHAPTER 1

INTRODUCTION

The conflicts among different ethnic and sectarian groups have become common in the Middle East during recent years. The most effective way to reduce the level of violence and resolve the conflicts is firstly to understand the underlying causes behind them. The conflict between Shia and Sunni groups in Iraq is a typical example of this. Especially, after the US invasion of the country, the level of violence among ethnic and sectarian groups has escalated. When we look at the spread of violence in Iraq as shown in Map 1.1, we can simply observe that some districts experience violence more than others. The detection of the factors that led to increase in the level of violence in these districts of Iraq would be helpful in the de-escalation process of the violence in Iraq and in other Middle Eastern countries experiencing similar problems. In this respect, my main research question is what caused the emergence of sectarian conflict¹ in Iraq especially during the period of 2004 – 2016. While focusing on this question, I seek to answer why some districts encounter conflicts more than the others.

As shown in Figure 1.1, the number of internal conflicts has increased dramatically after the US invasion of the country in 2003. At first glance, one may think the main reason behind the internal war would be the US invasion. After the invasion, Iraq had a weak central government and the Iraqi government mostly pursued exclusivist policies toward Sunnis. However, when we look at the ups and downs in Figure 1.1, and developments such as Sahwa movement, we start to think about that there should be some other factors that affected the emergence of the conflict in Iraq.

¹ The concept of sectarian conflict is used interchangeably with the concept of ethnic conflict throughout the study.



Legend

- events 2004 - 2016
- iraq districts

Map 1.1. This map shows the geographic distribution of events between the years 2004 and 2016. Event data comes from UCDP Georeferenced Event Dataset (GED) and district boundaries data is taken from ESOC project.

While I do not totally disregard the role of the weak central government and its exclusivist policies toward Sunni groups after the war in 2003, I argue we should also take the district-level factors into consideration to find the main causes of the violence in Iraq. In this respect, the main argument of this thesis is that there are some district level factors which increase the risk of experiencing ethnic violence in

Iraq. These are being a Sunni majority district, having a high level of ethnic heterogeneity, and having a high level of road density. Also, I argue that there are some factors which reduce the level of violence such as districts with a high level of light density which shows their economic development, number of police stations and being a Shia majority group.

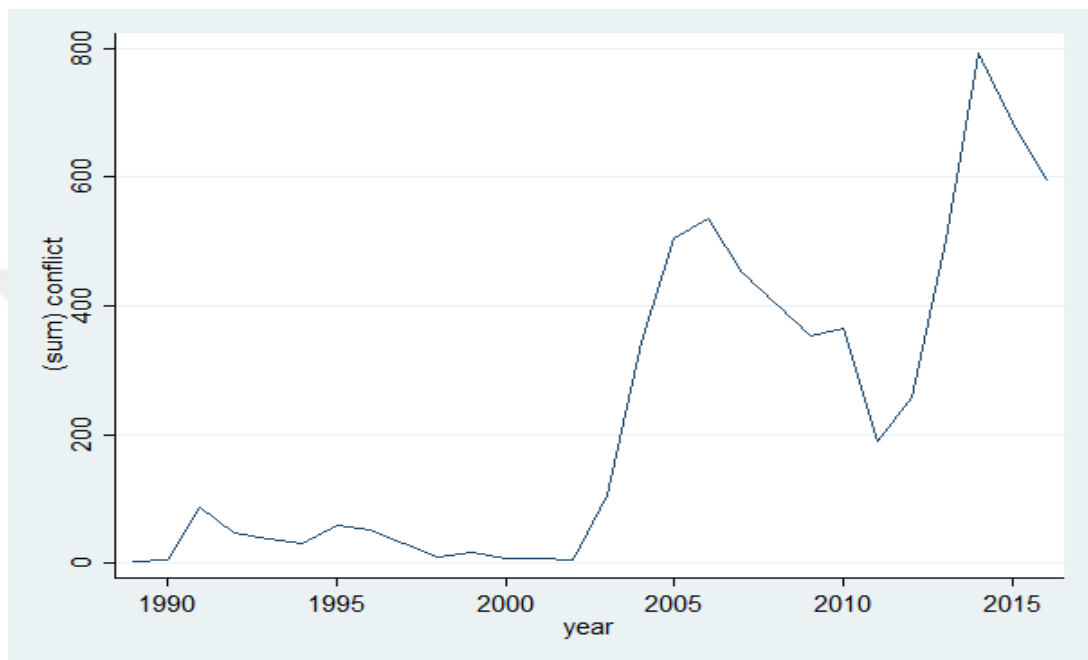


Figure 1.1. Total number of events in Iraq, calculated from UCDP Georeferenced Event Dataset (GED)

The most important contribution of my thesis to the study of sectarian violence in Iraq is the empirical contribution. I use data from several sources such as *UCDP Georeferenced Event Dataset*, *Defense Meteorological Satellite Program's Operational Linescan System*, *OpenStreetMap*, and *ESOC project*. By using these datasets, I created variables being a Sunni majority, being a Kurdish majority, being a Shia majority district, ethnic heterogeneity, light density, road density, and location of public buildings to explain the violence in Iraq.

Moreover, this study makes a spatial analysis of conflict in Iraq. In this way, it tries to understand the causal mechanism that led to violence. In this respect, I use light density data, which is not commonly used in the field, to make a district-level analysis of the conflicts in Iraq. Also, I retrieved data from OpenStreetMap to figure out

whether the location of specific buildings and the density of roads have an effect on the conflicts.

In this sense, this study is a subnational analysis which focuses on the variations among the cases within a single country. Subnational analysis will help us to better explain the relationship between our dependent and independent variables when it is compared to national level analysis. It enables us to make spatial analyses to study the casual relations between our variables. In this respect, I believe focusing on district level factors to explain the violence in Iraq contribute more than the studies which try to explain by taking national level factors into account. As I mentioned above, I do not assume that the national level factors have no role in the emergence of violence. However, these factors alone are not sufficient to explain our case. I will show their role when I discuss my results.

Firstly, I will start with the theory chapter. At the beginning of this chapter, I will define my dependent variable which is the total number of conflicts experienced during the period 2004-2016 in a district. I will try to show how it is defined in the literature and how I define them. Then, I will examine the most prominent theories of ethnic conflict. In this section, I will start with the grievance theory and how it is developed from Ted R. Gurr's relative deprivation theory to its current form. Then I will focus on greed theory which tries to explain the emergence of violence by focusing on the individuals' attempts to maximize their interests. The third theory is opportunity theory which puts an important emphasis on the conditions that favor insurgency. After that, I will discuss the institutionalist approach to the study of ethnic violence. This approach studies the effect of institutional variables such as decentralization, power-sharing, and electoral regimes of the countries on the emergence of the ethnic conflict. Lastly, I will briefly discuss the symbolic politics theory of Stuart Kaufman which is a social psychological approach to the study of ethnic conflict. After the literature review part, I will explain my hypotheses in more detail before moving to the next chapter.

After the theory chapter, I will put a brief historical background section to see the phases of the sectarian conflict in Iraq after the US invasion. In this chapter, I will especially focus on the political developments that took part during Maliki governments since their importance for the outbreak of the conflict. This chapter will provide a general picture of the political situation in Iraq, and this will help us to better understand the empirical results.

In Data and Method chapter, I will explain how I collected data from several sources such as *UCDP Georeferenced Event Dataset*, *Defense Meteorological Satellite Program's Operational Linescan System*, *OpenStreetMap*, and *ESOC project* and how I created my dependent and independent variables by using those datasets. I will also specify the estimation model that I will test my hypotheses.

After the data and method chapter, I will move on to the results chapter. In this chapter, I will show the results of the three regression models that I use to predict the emergence of the conflict. In the first model, I will include being a Sunni majority district and an interaction variable of ethnic heterogeneity and Sunni majority. In the second model, I will add being a Shia majority district and an interaction variable of Shia majority and ethnic heterogeneity into the model. In the third model, I will add the population variable to the analysis to see whether the population variable brings a change in the analysis.

CHAPTER 2

A THEORY OF ETHNIC AND SECTARIAN CONFLICT

2.1. Introduction

The research question of this thesis is what caused the emergence of the conflict among different ethnic and sectarian groups in Iraq during the period of 2004-2006. I argue that there are some factors that lead to the outbreak of conflict in Iraq. Firstly, being a Sunni majority district increased the risk of experiencing conflict after the invasion. Secondly, the districts with a high level of ethnic heterogeneity ran a much higher risk of encountering conflict. Finally, an increase in the level of road density makes the risk of the conflict much higher.

In the first section of this chapter, which constitutes the conceptual part of this study, I will define my dependent and independent variables. The dependent variable is the total number of conflicts experienced during the period 2004-2016 in a district. The independent variables are the level of ethnic heterogeneity, road density, number of police stations per ten thousand people, being a majority Sunni district, being a Shia majority district, being a Kurd majority district, and population. I will explain how both dependent and independent variables are defined in the literature and how I use them in this study.

Then I will move on the literature review section. In this section, I will categorize the literature that emerged on the causes of ethnic conflict and civil war. In this section, I will explain the arguments of grievance, greed, opportunity, institutionalist and social psychological approaches. After that, I will explain my hypothesis on the emergence of the conflict in Iraq.

2.2. Conceptual Section

In this part, I will start with discussing the dependent variable of this study, which is the outbreak of conflict. In the literature, conflict is defined in many different ways.

In this study, what I described as the conflict is an internal conflict. In general, it can be considered as a particular kind of political violence. There are several other related concepts used in the literature such as civil war, political violence, ethnic conflict, armed conflict, ethnic war and so on. Despite their differences, they tend to be used interchangeably in the literature.

To start with civil war, it is generally considered as a domestic armed conflict that includes at least 1000 deaths in a year.² However, this definition was not used by some scholars because of its weakness in measuring armed conflicts. Moreover, according to UCDP/PRIO Armed Conflict Dataset conflict is defined as:

a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year.³

Furthermore, Gurr prefers to use the concept of political violence since he considers civil war as a kind of political violence. According to him, political violence is “all collective attacks within a community against the political regime, its actors – including competing political groups as well as incumbents – or its policies”.⁴ According to Gurr, political violence covers turmoil, conspiracy and internal war. The difference between these types of violence is related to their scale of violence.⁵ Therefore, civil wars are large-scale and highly organized internal wars according to this definition.

In my thesis, I use UCDP Georeferenced Event Dataset to do my analysis. I will measure the level of violence by calculating the number of events. In the codebook of this dataset, an event is “an incident where armed force was by an organized actor

² Christopher Blattman and Edward Miguel, “Civil War,” *Journal of Economic Literature* 48, no. 1 (March 2010): 3, <https://doi.org/10.1257/jel.48.1.3>.

³ Nils Petter Gleditsch et al., “Armed Conflict 1946-2001: A New Dataset,” *Journal of Peace Research* 39, no. 5 (September 1, 2002): 615–37.

⁴ Ted Robert Gurr, *Why Men Rebel* (Routledge, 2015), 3–4.

⁵ Gurr, 11.

against another organized actor, or against civilians, resulting in at least 1 direct death at a specific location and a specific date”.⁶ In my thesis, I will use the UCDP/PRIO Armed Conflict Dataset’s definition of conflict in order to analyze the conflict between Sunni and Shia groups in Iraq.

2.3. Literature Review

In this part, I focus on the literature on the reasons behind the outbreak of ethnic conflicts. I will try to explain the most prevalent approaches in the literature in details. These approaches are greed, grievance, opportunity, institutionalist, and symbolic politics-based explanations.

2.3.1. Grievance based theories

This approach was developed by Ted R. Gurr in the 1960s and onwards with a social psychological approach to ethnic conflicts. According to him, political violence occurs through the following causal mechanism.

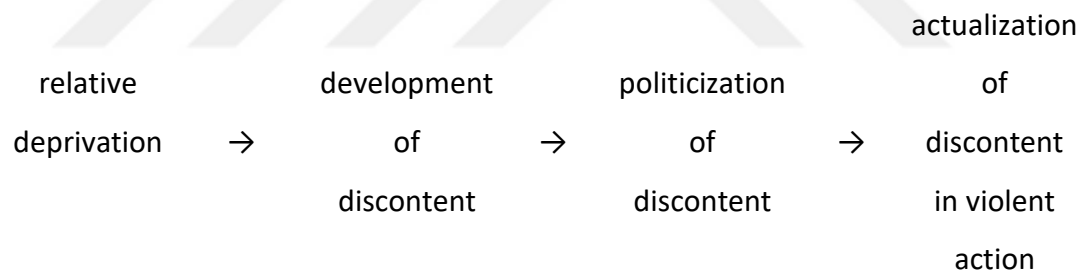


Figure 2.1 It is drawn based on Gurr’s relative deprivation theory

Gurr argues that discontent emerges as a result of relative deprivation. According to Gurr, relative deprivation is “actors’ perception of discrepancy between their value expectations and their value capabilities”.⁷ In that definition, value expectations are claimed to be “the goods and conditions of life to which people believe they are

⁶ Croicu, Mihai and Ralph Sundberg, 2017, “UCDP GED Codebook version 17.1”, Department of Peace and Conflict Research, Uppsala University

⁷ Gurr, *Why Men Rebel*, 3–4.

rightfully entitled. Value capabilities are the goods and conditions they think they are capable of getting and keeping”.⁸

Moreover, the level of the analysis is also important for the grievance literature. There are three levels of analysis: individual, group level, and country-level analysis. While Gurr’s relative deprivation theory is an individual-level study at its roots, Horowitz makes a group level analysis of ethnic conflicts. Especially his contributions on group formation and comparison is very crucial for grievance literature. The “juxtaposition of backward and advanced groups” is seen as the most important source of ethnic conflicts.⁹

These contributions helped Cederman, Gleditsch, and Buhaug develop a more comprehensive theory to explain ethnic conflicts.¹⁰ According to their analysis, political and economic inequalities create grievances and these grievances lead to conflict between groups. Horizontal inequalities¹¹ cause grievances through some steps. First of all, political and economic inequalities cause higher levels of group identification. The second step is the group comparison in which group members compare their group with others in terms of status and wealth. The third step to grievances is that group members think that they are exposed to injustice. The fourth step is the framing and blaming in which a national movement begins to form and the group members blame another group by claiming that they are responsible for these injustices.¹²

After that, these grievances start to turn into the civil war through two steps. The first step is that the grievances cause the mobilization of the group to start. The second

⁸ Gurr, 24–25.

⁹ Donald L. Horowitz, *Ethnic Groups in Conflict* (University of California Press, 1985), 141–49.

¹⁰ Lars-Erik Cederman, Kristian Skrede Gleditsch, and Halvard Buhaug, *Inequality, Grievances, and Civil War* (New York: Cambridge University Press, 2013), 13–14.

¹¹ There are two types of inequalities: horizontal and vertical. The vertical inequalities could be seen within the group. However, the horizontal inequalities are intergroup inequalities. Frances Stewart, Graham K. Brown, and Luca Mancini, *Why Horizontal Inequalities Matter: Some Implications for Measurement* (Centre for Research on Inequality, Human Security and Ethnicity, 2005), 3.

¹² Cederman, Gleditsch, and Buhaug, *Inequality, Grievances, and Civil War*, 37–44.

step before the civil war is the state repression of ethnic mobilization. In that step, the group tries to affect the current government to fix the injustices. They may organize peaceful protests, or make boycotts or sometimes take part in sporadic violence. The state's answer to the mobilization may lead to different consequences. While some countries try to find democratic solutions to these kinds of challenges, the undemocratic states tend to repress the movement by their all forces and the latter make civil war more likely.¹³



Figure 2.2. Causal mechanism in grievance theory

2.3.2. Greed-based explanations

The second approach to ethnic conflict is presented by greed-based explanations. According to the greed model, explaining conflicts in terms of a motive is not sufficient. This approach tries to explain the emergence of the civil war and ethnic conflicts by focusing on the individuals' attempts to maximize their interest. For that reason, in their earlier article, Collier and Hoeffler claimed that the economic variables can explain the outbreak of the civil war better than opportunity and grievance-based approaches.¹⁴ In their study which they use a dataset that includes data on 79 civil wars from 161 countries over the period of 1960-99, they found that "availability of finance" increases the risk for civil war. There may be various sources of finance such as "extortion natural resources, donations from diaspora and subventions from a hostile government".¹⁵ Moreover, they find that the cost of rebellion is another factor which affects the emergence of the civil war. If the foregone income is extraordinarily low, the risk of the conflict becomes higher. There are three proxies for foregone income which are male secondary education enrollment, per capita income and the growth rate of the economy.¹⁶

¹³ Cederman, Gleditsch, and Buhaug, 44–51.

¹⁴ Paul Collier and Anke Hoeffler, "Greed and Grievance in Civil War," *Oxford Economic Papers* 56, no. 4 (October 1, 2004): 563–64, <https://doi.org/10.1093/oep/gpf064>.

¹⁵ Collier and Hoeffler, 588.

¹⁶ Collier and Hoeffler, 569.

However, Collier, Hoeffler, and Rohner in their later study developed 'feasibility hypothesis' which argues that rebellion occurs when it is materially feasible. According to them, "factors that are important for the financial and militarily feasibility of rebellion but are unimportant for motivation decisively increase the risk of the war."¹⁷ They added three new variables to their analysis. These are being a former French colony in Africa, the proportion of the population made up of males in the age range 15-29, and the proportion of the terrain of a country that is mountainous. The analysis showed that the last one has little importance when it is compared with the previous two variables.¹⁸ Finally, they found out that a model that focuses on the opportunities for rebellion performs well, whereas objective indicators of grievance add little explanatory power.

Furthermore, what is known as the instrumentalist explanations in the literature, can be considered under the greed approaches. Instrumentalists argue that ethnic conflicts are tools for elites to mobilize the people for their political purposes. According to Posner, if the size of an ethnic group in a country is enough to mobilize for political support, the elites promote ethnic cleavages in that country. He argues that the cultural differences are not causing ethnic violence but are instrumentalized by the group elites. He argues that the ethnic cleavages became "politically salient" when the mobilization of the ethnic groups can provide a political base for elites.¹⁹

2.3.3. Opportunity based explanations

Opportunity logic was firstly used by political process theory which analyzes the emergence of the social movements. According to that theory, social movements emerge as a result of the interaction of three factors. The first one is "level of organization" which is considered as the extent of "readiness" of the group for

¹⁷ Paul Collier, Anke Hoeffler, and Dominic Rohner, "Beyond Greed and Grievance: Feasibility and Civil War," *Oxford Economic Papers* 61, no. 1 (January 1, 2009): 3, <https://doi.org/10.1093/oep/gpn029>.

¹⁸ Collier, Hoeffler, and Rohner, 15–16.

¹⁹ Daniel N. Posner, "The Political Salience of Cultural Difference: Why Chewas and Tumbukas Are Allies in Zambia and Adversaries in Malawi," *The American Political Science Review* 98, no. 4 (2004): 529.

mobilization. The second one is the group's consideration of the success of the insurgency. The third factor is the political situation of the group in the larger political environment. The last factor is related to the presence of the political opportunities for mobilization of the group.²⁰ It is argued that these opportunities are conditions that encourage groups to involve in contentious politics.²¹ Moreover, Karagiannis argues that opportunities occur when existing institutions are not capable of confronting larger social changes and also in the presence of the disagreements between those who hold power.²²

When it comes to Fearon and Laitin, they use opportunity logic to explain the outbreak of civil war. They argue that:

The factors that explain which countries have been at risk for civil war are not their ethnic or religious characteristics but rather the conditions that favor insurgency. These include poverty, which marks financially and bureaucratically weak states and also favors rebel recruitment, political instability, rough terrain, and large populations.²³

Moreover, Kaufman in his analysis considers opportunities in two ways. The first one is enough political space which may be as a result of state weakness, political freedom or external support. The second one is a territorial base which helps the group to mobilize.²⁴ Weidmann's study shows that higher territorial concentration gives advantages to groups to mobilize and this situation increases the risk of conflict.²⁵

²⁰ Doug McAdam, *Political Process and the Development of Black Insurgency, 1930-1970* (University of Chicago Press, 1999), 40.

²¹ Sidney G. Tarrow, *Power in Movement: Social Movements and Contentious Politics* (Cambridge University Press, 2011), 32.

²² Emmanuel Karagiannis, "Political Islam and Social Movement Theory: The Case of Hizb Ut-Tahrir in Kyrgyzstan," *Religion, State and Society* 33, no. 2 (June 1, 2005): 143, <https://doi.org/10.1080/09637490500118638>.

²³ James D. Fearon and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review* 97, no. 1 (2003): 75–90.

²⁴ Stuart J. Kaufman, "Symbolic Politics or Rational Choice? Testing Theories of Extreme Ethnic Violence," *International Security* 30, no. 4 (April 1, 2006): 53.

²⁵ Nils B. Weidmann, "Geography as Motivation and Opportunity: Group Concentration and Ethnic Conflict," *Journal of Conflict Resolution*, May 27, 2009, 531, <https://doi.org/10.1177/0022002709336456>.

Furthermore, attempts to explain ethnic conflicts with the concept of the security dilemma can be analyzed under the opportunity logic. According to this approach, as a realist international relation theory concept, the security dilemma can explain the inter-group ethnic conflicts. Posen applies the concept to ethnic conflict studies and analyzes the factors that lead to intense security dilemma when central authority collapses in multi-national states.²⁶ When central authority collapsed, ethnic groups in that country feel they are responsible for ensuring their own security. When a group attempted to increase its security by taking some precautions, another group feels less secure. This situation generally happened when the central authority collapsed in multi-ethnic empires such as Yugoslavia and the Soviet Union. The logic behind it is that defensive and offensive military tools are very similar to each other, therefore one cannot determine whether obtaining a military tool is for defense or offense. Moreover, the offense is much more effective than defense, so a group may prefer preemptive war when it feels insecure.²⁷

2.3.4. Institutionalist explanations

This approach focuses on the effect of the institutional variables such as decentralization, power-sharing, and electoral regimes of the countries on the emergence of the ethnic conflict.²⁸ According to this view, problems in the institutional structure of a country could lead to ethnic violence. The distribution of economic and political power, a political system's degree of inclusiveness, political and economic inequalities, and regime type are the main issues that are discussed by institutionalist theorists to have an effect on the outbreak of the ethnic violence.²⁹

To give an example for an institutionalist approach to the ethnic conflict, Wilkinson says that there is a link between political competition and ethnic violence. He claims

²⁶ Barry R. Posen, "The Security Dilemma and Ethnic Conflict," *Survival* 35, no. 1 (March 1, 1993): 27, <https://doi.org/10.1080/00396339308442672>.

²⁷ Posen, 28–35.

²⁸ Huseyin Alptekin, "Why and How Do Ethnic Groups Mobilize? Institutional Causes of Ethnic Mobilization Patterns in Comparative Perspective," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 2011), 3, <https://papers.ssrn.com/abstract=1899963>.

²⁹ Laia Balcells, "Political Violence: An Institutional Approach," 2015, 4.

that in democratic states if politicians in the government need the support of the minority or their votes in the elections, they aim to prevent ethnic conflicts. However, if they do not need the support of the minorities, the risk of ethnic conflict becomes higher.³⁰ Also, patterns, modes, and regimes of ethnic incorporation are thought to shape ethnic boundaries and ethno-political mobilization, in both violent and peaceful ways.³¹ Other than this particular regimes of ethnic incorporation, the level of democracy, institutional capacity, civilian-military relations, degree of decentralization, particular laws and regulations are all listed under the title institutional factors.³²

2.3.5. Social Psychological Approach

The most prevalent theory among the social psychological approaches is the symbolic politics theory of Stuart Kaufman. The main argument of the symbolic politics theory is that “hostile myths produce emotion-laden symbols that make mass hostility easy for chauvinist elites to provoke and make extremist policies popular”.³³ According to Kaufman, it is possible to create two causal stories. The first one is an elite-led ethnic mobilization in which elites use myths and symbols to promote fear, hostility and security dilemma and mobilize people for ethnic war. In addition, in the mass-led

³⁰ Steven I. Wilkinson, *Votes and Violence: Electoral Competition and Ethnic Riots in India* (Cambridge University Press, 2006), 6–7.

³¹ Hüseyin Alptekin, “A Theory of Ethnic Violence: Ethnic Incorporation and Ethno-Political Mobilization in Bulgaria and Cyprus,” *Ethnic and Racial Studies* 40, no. 15 (December 8, 2017): 2672–90; Şener Aktürk, *Regimes of Ethnicity and Nationhood in Germany, Russia, and Turkey* (New York: Cambridge University Press, 2012); Donald L. Horowitz, *Ethnic Groups in Conflict*, 2nd edition (Berkeley, Calif.: University of California Press, 2000); Arend Lijphart, “Consociational Democracy,” *World Politics* 21, no. 2 (January 1969): 207–25.

³² Pippa Norris, “Ballots Not Bullets: Testing Consociational Theories of Ethnic Conflict, Electoral Systems, and Democratization,” 2002, 206–47, <https://doi.org/10.1093/0199246467.003.0009>; Veysel Kurt, *Ortadoğu’da Ordu ve Siyaset* (Seta, 2017); Şirin Duygulu and Maria Karapetyan, “Minority Rights as an Instrument of Conflict Transformation,” *Caucasus Edition*, 2017, <https://caucasusedition.net/minority-rights-as-an-instrument-of-conflict-transformation/>; Jean-Pierre Tranchant, “Fiscal Decentralisation, Institutional Quality and Ethnic Conflict: A Panel Data Analysis, 1985–2001,” *Conflict, Security & Development* 8, no. 4 (December 1, 2008): 491–514, <https://doi.org/10.1080/14678800802539358>; Jan Erk and Lawrence Anderson, “The Paradox of Federalism: Does Self-Rule Accommodate or Exacerbate Ethnic Divisions?,” *Regional & Federal Studies* 19, no. 2 (May 1, 2009): 191–202, <https://doi.org/10.1080/13597560902753388>.

³³ Kaufman, “Symbolic Politics or Rational Choice?” 47.

ethnic mobilization already existing myths, fears, and hostility create a security dilemma.³⁴

According to symbolic politics theory, there must be three preconditions for the outbreak of ethnic war. The first precondition is the presence of the group myths that justify the hostile attitude toward an enemy group. As a result of having hostile myths and symbols, some groups see themselves superior to the other groups, and consider having the right of domination over them.³⁵ The second one is the fear of the group about its survival which must be strong for ethnic violence. According to Kaufman, the source of the conflict is coming from the myth-symbol complex which shows the survival of the group is under danger. If people fear for their survival, they will take steps toward an ethnic conflict.³⁶ The third precondition is the presence of an opportunity which would be in various forms such as having enough political or having material assistance from foreign countries to mobilize. In the former one, the leaders of ethnic groups benefit from that political freedom and recruit more followers and mobilize them. In the latter form, Kaufman stresses the role of foreign countries or organizations in influencing the opportunity structure. Foreign actors may provide arms, money and some other necessary tools for elites to mobilize the group for war.³⁷

2.4. Hypotheses

In this section, I outline my hypotheses. Firstly, I will focus on the factors that increase the likelihood of experiencing conflict. After that, I will explain the variables that reduce the risk of encountering conflict.

H₁: Being a Sunni majority district increases the risk of ethnic violence in Iraq. In Iraq, Sunni groups were excluded from politics and state institutions, especially during the Maliki government. I argue that excluded groups tend to take part in violent activities.

³⁴ Stuart J. Kaufman, *Modern Hatreds: The Symbolic Politics of Ethnic War*, Cornell Studies in Security Affairs (Ithaca, NY: Cornell University Press, 2001), 35.

³⁵ Kaufman, 30.

³⁶ Kaufman, 31.

³⁷ Kaufman, 32–33.

In addition to this, violent prone organizations would find an opportunity in these districts to mobilize and recruit people as well as increasing their operational capabilities. The presence of an opportunity increases the risk of the conflict. The districts that ensure rebellion groups an opportunity of having a territorial base are more likely to experience conflict.

H₂: The districts that have a high level of ethnic heterogeneity ran a higher risk of experiencing ethnic violence. The logic behind this situation can be better understood by focusing on myth symbol complex that explained by Stuart Kaufman. I argue that it can be expected that the myths that justify hostility can be most probably found in ethnically diverse places. The presence of the group myths that justify the hostility against the other group increases the risk for sectarian conflict. So, measuring the level of heterogeneity can give us a clue about the group myths, which are ethnic boundary markers and associated with the degree of ethnic diversity.

H₃: The third hypothesis is that the district with a high level of road density experience ethnic conflict more. I argue that roads provide an opportunity for rebellion groups to attack their enemy groups. The roads make hit-run and suicide attacks easy for violent organizations such as ISIS and al-Qaeda.

In addition to the first three hypotheses, there are some factors which I argue they reduce the risk of experiencing ethnic conflict.

H₄: The districts with a high level of light density experience less conflict. The light density variable indicates the economic development level of a district. By using this variable, we can estimate how much public and private investment made in a district. In this respect, I argue that the district which more developed will be less prone to conflict.

H₅: I argue that the districts that have a higher number of police stations are less prone to encounter conflict. Although police stations seem like potential targets for violent prone organizations which would increase the level of violence, I argue that

police stations would prevent many conflicts by deterring people from taking part in violent activities.

H₆: Being a Shia majority district reduces the risk of experiencing conflict in Iraq. It is because the central government was controlled by the Shia majority after the US invasion. Shia violent prone organizations could not find an opportunity to mobilize Shia groups for taking part in violent activities with the government.

2.5. Conclusion

In this chapter, I firstly defined the dependent and independent variables of the study. I explained how my dependent variable “outbreak of the conflict” was defined in the literature and then I explained which definition I use for my study. Then, I discussed the existing literature on the causes of ethnic conflicts. I examined the basic arguments of greed, grievance, opportunity, institutionalist, and social psychological theories. Then, I delved into the discussion of my hypothesis.

In the next section, I will briefly talk about the developments that took place after the US invasion of Iraq. I will focus on the post war reconstruction process and its failure in Iraq. Also, I will focus on the political developments that took place during the Maliki governments. In addition, I will try to focus on the political and economic conditions that led to the emergence of the violent prone organizations.

CHAPTER 3

HISTORICAL BACKGROUND

Looking at the recent history of countries in the Middle East, and especially of Iraq, we can say that identity transformations have been very frequent. It can be observed that during some periods national identities gain importance, but they disappear in others and leave their place for sectarian identities. Fanar Haddad explains this change by focusing on the role of socioeconomic and political circumstances.³⁸ He says that socioeconomic and political developments transform identities. For Iraq, I can say that after the US invasion in 2003, sectarian identities became much more salient instead of national identities.

When the US invaded Iraq, it faced a serious anti-occupation insurgency in Anbar province which is the largest province of Iraq in terms of area. Iraqi national insurgent groups started to fight against the US invasion. There were al-Qaeda affiliated groups among them such as al-Qaeda in Mesopotamia which is today known as ISIS. Firstly, al-Qaeda and local tribes together fought against the occupation. However, after 2005, some disagreements started to take place between Sunni tribes and the al-Qaeda in Iraq.³⁹ The tribes formed a group called Anbar Salvation Council to fight against the al-Qaeda in Iraq by making an agreement with the US. This alliance helped US and tribes to successfully expel the al-Qaeda from the Anbar. When it comes to 2008, the al-Qaeda's activity in Anbar dropped to the lowest levels. The rate of violence also dropped as well, and the province became much safer.⁴⁰

³⁸ Fanar Haddad, *Sectarianism in Iraq: Antagonistic Visions of Unity* (Oxford University Press, 2011), 2.

³⁹ Martha L. Cottam, Joe W. Huseby, and Bruno Baltodano, *Confronting Al Qaeda: The Sunni Awakening and American Strategy in Al Anbar* (Rowman & Littlefield Publishers, Incorporated, 2016), 1–3.

⁴⁰ Austin Long, "The Anbar Awakening," *Survival* 50, no. 2 (May 2008): 67, <https://doi.org/10.1080/00396330802034283>.

Sunnis in Iraq boycotted elections in 2005. However, it was considered a mistake later, because their boycott caused to their exclusion from the state institutions. Shia groups and parties started to take control of the central government and the other state institutions. For example, Shia militias get control of the military positions. Because of that reason, Sunni tribes decided to participate in 2008 provincial elections to get control of their provinces. Also, Sunni leaders participated in the 2010 parliamentary elections to have the opportunity to take their shares from the wealth of the country.⁴¹

When it comes to 2010, violence escalated again in Iraq. The presence of the weak Iraqi central government and its exclusivist policies toward Sunnis; and withdrawal of US troops that created a security vacuum created an opportunity for the growth of the previous terrorist organization. ISIS benefited from that environment and increased its activities in Iraq. It captured the important parts of Iraq such as Mosul and Anbar provinces. It can be said that the opportunities encouraged involving in contentious politics in Iraq.

As it is seen, the existing political institutions are failed in Iraq to respond to the demands for social change. Their failure created an opportunity for the spread of the ISIS as a terrorist movement especially after 2010.

When Sunnis started to take place in political processes, there emerged two different political tendencies. The first group was the Iraqi Islamist Party which founded the Jabhat al-Tawaquf. The second group was the National Dialog Front which had nationalist and secular tendencies. Sunni parties allied with Shia liberal Ayad Allawi in 2010 elections by forming a cross-sectarian coalition which is known as al-Iraqiya. Al-Iraqiya won the election but it did not help them to come to power. Maliki used sectarian conflict to convince Shia parties to become president for the second time. Some important positions were promised to be given the al-Iraqiya in return for Maliki's second term. However, these promises were not kept by Maliki. After that,

⁴¹ Stephen Biddle, Michael E. O'Hanlon, and Kenneth M. Pollack, "How to Leave a Stable Iraq: Building on Progress," *Foreign Affairs* 87, no. 5 (2008): 44.

groups which took part in al-Iraqiya started to leave the alliance because of the failure. Maliki supported that process by applying some policies to divide his rivals.⁴²

In Iraq, Nuri el-Maliki came to power in 2006. He tried to consolidate his power and also to get the full control of the Iraqi Security Forces. He used force against his potential rivals. For example, he gave a command to Iraqi Security forces to attack the Shiites cleric Muqtada es-Sadr Mehdi Army.⁴³ This is because there was also competition among Shia groups. There were some other Shia groups such as the Islamic Supreme Council of Iraq and Dawa.⁴⁴

Especially after the parliamentary elections in 2010, Maliki got the full control of the political and military power. He was controlling Iraq's military forces, intelligence apparatus, and special operation units. He also got the control of the Iraqi High Electoral Commission and the Central Bank of Iraq. After that, people started to think that political solutions are becoming harder under these conditions. A huge number of Sunnis started to organize protests against the Maliki government.⁴⁵

The political participation of Sunnis in Iraq is very important in reducing violence and terrorism. However, it is hard to see their effective participation of Sunnis during Maliki period. Maliki excluded all Sunni politicians from the government. Firstly, he fragmented the Iraqi National Movement (al-Iraqiya). After that, he started to target Sunni politicians. Firstly, he targeted Sunni Vice President Tariq al-Hashemi and he left the country. After that, in 2012 he arrested bodyguards of Finance Minister Rafia al-Issawi who is from Anbar province. Targeting al-Issawi launched an anti-governmental protest movement in Sunni provinces, especially in Anbar.⁴⁶

⁴² Harith Hasan Al-Qarawee, "Iraq's Sectarian Crisis," *Carnegie Middle East Center*, 2014, 10, http://carnegieendowment.org/files/iraq_sectarian_crisis.pdf.

⁴³ Ned Parker, "Machiavelli in Mesopotamia: Nouri al-Maliki Builds the Body Politic," *World Policy Journal* 26, no. 1 (2009): 17–18.

⁴⁴ Al-Qarawee, "Iraq's Sectarian Crisis."

⁴⁵ Marisa Sullivan, "Maliki's Authoritarian Regime," *Middle East Security Report* 10 (2013): 6, <http://understandingwar.org/sites/default/files/Malikis-Authoritarian-Regime-Web.pdf>.

⁴⁶ Wicken, Stephen, "Iraq Sunnis in Crisis" (Washington: Institute for the Study of War, 2013), 6–7.

Moreover, these protests, in the beginning, were peaceful. And during that process, Sunni Arab identity was formed by its grievances against the Maliki government⁴⁷. Al-Qaeda and other groups tried to use these protests for their purposes. Political exclusion made people more prone to be radicalized. These radical groups hope to exploit people's grievances against the Maliki government and Shia. Also, in 2013, Iraqi Military Forces targeted a Sunni protest camp and many people died in that raid.⁴⁸ That also was another important event that caused the escalation of the conflict.

When we look at the postwar reconstruction in Iraq after the US invasion, it is obvious that the reconstruction process was failed. There are several reasons. Firstly, there was no socio-political cohesion which ensures the legitimacy for Iraqi state. Also, it cannot accomplish the core functions of a state such as the provision of security, rule of law, basic services, basic ability to make budgeted plans and collect taxes and revenues. With these shortcomings, the newly established regime relied on Shiites and other groups were excluded from the governmental institutions. Especially Maliki government's sectarian based policies made any political alliance and integration very hard.

The newly established Iraqi state was very weak in term of government and security. Its military was not powerful to control its territories against the enemies or other terrorist groups such as ISIS. Iraqi military was heavily depending on the US and the US withdrawal left Iraqi army in a very weak position. For example, ISIS very easily got the control of the main important cities of the Iraq, and in many places Iraqi Army did not fight against ISIS, they left their guns and run away.

Moreover, the security sector formation in Iraq was also problematic. Iraqi security services were composed of Shia militants. Some Sunni groups were promised to be included in military during Anbar Awakening but that was not realized. Shia militants

⁴⁷ Wicken, Stephen, 27–28.

⁴⁸ "Kerkük'te Çatışma: 23 Ölü - Akşam," [aksam.com.tr](http://www.aksam.com.tr), accessed May 24, 2017, <http://www.aksam.com.tr/dunya/kerkukte-catisma-23-olu/haber-198713>.

got the control of the Iraqi army especially after 2005. Sunnis boycotted the elections in 2005, and that made them be away from the governmental institutions and bureaucracy. These developments actually show the failure of the state-building process. Without integrating Sunnis into political system, it is not possible to decrease the rate of violence.

In conclusion, historical background chapter will help us to better understand the relationship between national and district level factors that led to the emergence of sectarian violence in Iraq. In the results chapter, when I interpret my estimation results, I will use these historical events to better explain the casual mechanism between my dependent and independent variables.

CHAPTER 4

DATA AND METHOD

In this chapter, I examine empirically the factors that led to the emergence of ethnic and sectarian conflict in Iraq. I have used data from several sources such as the UCDP Georeferenced Event Dataset, Defense Meteorological Satellite Program's Operational Linescan System, OpenStreetMap, and ESOC project to carry out an analysis that reflects some of the unobserved aspects of the question what caused the conflict between ethnic and sectarian groups in Iraq. I have used various software programs such as ArcGIS, Stata, and SPSS to analyze the effects of variables such as being a Sunni majority district, being a Shia majority district, Being a Kurdish majority district, ethnic heterogeneity, light density, road density, number of public buildings, and police stations.

This study is a subnational analysis of the conflict in Iraq. According to Snyder, there are two different kinds of subnational analysis. The first one is the within nation comparisons which focuses on the cases within a single country. The second type is between nation comparisons that focuses on subnational units of analysis across different countries. Subnational analysis helps us to make more valid casual inferences in our researches.⁴⁹ In this study, my subnational units are 104 districts of Iraq. I believe focusing on district level factors to explain the violence in Iraq contribute more than the studies which try to explain by taking national level factors into account. When I interpret my estimation results of district level analysis, I will also make some references to national level factors to understand how and when they become meaningful to understand the violence in Iraq.

The dependent variable of this study is the total number of the conflicts occurred between years 2004-2016 in a district. Since the dependent variable is count data, I

⁴⁹ Richard Snyder, "Scaling Down: The Subnational Comparative Method," *Studies in Comparative International Development* 36, no. 1 (March 1, 2001): 95–98, <https://doi.org/10.1007/BF02687586>.

use Poisson regression model. Figure 4.1. shows the distribution of the dependent variable.

In addition, I have 4 categorical variables as independent variables. These are the Sunni majority, Shia majority, Kurd majority, and majority others. Also, I have 6 numerical variables that I used in the regression analysis. These are the number of police stations per 10000 people, road density, light density, ethnic heterogeneity, public buildings, and two interaction variables. Table 4.2 shows the summary statistics of the variables that I used in my analysis. In the next section, I will explain in detail each variable and how I created them.

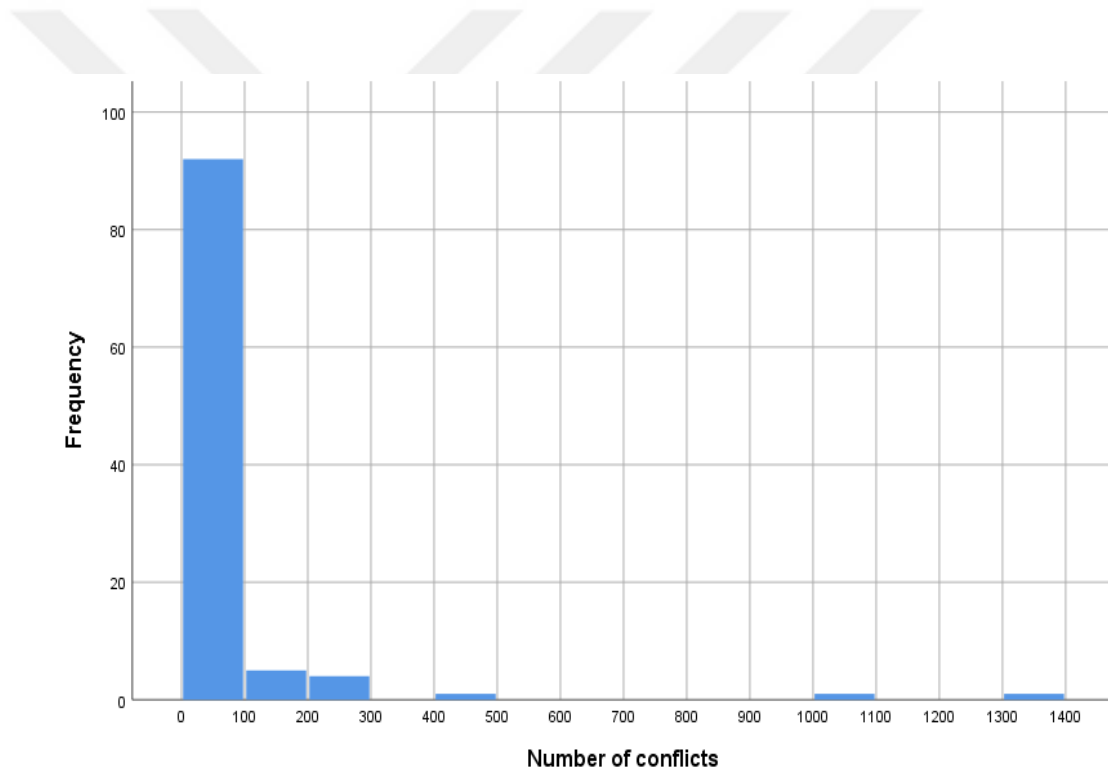


Figure 4.1 The distribution of the number of conflicts

Figure 4.1. shows that approximately 90 of our cases have a total conflict number between 0-100 for the period of 2004-2016. 5 of the cases experienced between 100-200 conflicts. 4 of them are between 200-300 conflicts.

In the next section, I will focus on how I created my variables and from which sources I collected them. Before starting to explain my variables, in Table 4.1, I will give the

full names of my variables together with their acronyms. In the results chapter, I will use acronyms in the regression tables to save space.

Table 4.1. Full names of the variables

Number of conflicts	The total number of conflicts between years 2004-2016
Police stations per 10k	The number of police stations that a district has per 10000 people
Ln light density	Ln value of the light density
Ln road density	Ln value of road density
Road density	The value of the road density
Light density	The value of light density
Public buildings	The number of public buildings
m_other_eth	Other ethnic groups majority
Majority Kurd	Being a majority Kurdish district
Majority Shia	Being a majority Shia district
Majority Sunni	Being a majority Sunni district

Table 4.2 shows the summary statistics of my dependent and independent variables. The number of observations is 104. The maximum value for the number of conflicts is 1312 while the minimum value is 0. The number of police stations per 10000 people is between 0 and 46. I have four dummy variables m_other_eth, Majority Kurd, Majority Shia, and Majority Sunni. They take a value either 1 or 0. The table also includes the statistics of road and light density and their Ln values. I will use their Ln values in my models.

Table 4.2 Summary statistics of variables

	N	Minimum	Maximum	Mean	Std. Deviation
Number of conflicts	104	0	1312	57.53	175.443
Police stations per 10k	103	0	46	1.2902	4.67049
Ln light density	104	-3.83	4.07	1.1919	1.45658
Ln road density	104	.95	5.98	3.8863	.93895
Road density	104	2.59	396.91	74.1832	80.12694
Light density	104	.02	58.82	7.5463	11.16851
Public buildings	103	.00	590.00	61.4615	93.27050
m_other_eth	104	.00	1.00	.0385	.19324
Majority Kurd	104	.00	1.00	.2692	.44571
Majority Shia	104	.00	1.00	.4038	.49304
Majority Sunni	104	.00	1.00	.2500	.43511

In the following sections, I will explain from which sources I collected my data, and how I created my variables in detail. In this way, Table 4.2 will be more meaningful after these sections.

4.1. The number of conflicts

In this study, the conflict data is based on UCDP Georeferenced Event Dataset (GED). The unit of analysis in this dataset is the event. An event is “an incident where armed force was by an organized actor against another organized actor, or against civilians, resulting in at least 1 direct death at a specific location and a specific date”.⁵⁰ The dataset contains detailed information on the specific location and time of an event. By using this location and time information, I created my dependent variable which is the number of the conflicts. I calculated the total number of events for each district for the years between the periods of 2004-2016. The dataset includes events from 1989 to 2016. In my thesis, I use the events between 2004 and 2016 inclusive. It is

⁵⁰ Croicu, Mihai and Ralph Sundberg, 2017, “UCDP GED Codebook version 17.1”, Department of Peace and Conflict Research, Uppsala University

because I would like to focus on the conflicts that occurred after the US invasion of the country. Moreover, as shown in Graph 2, the total number of internal conflicts increased dramatically during the period 2004-2016.

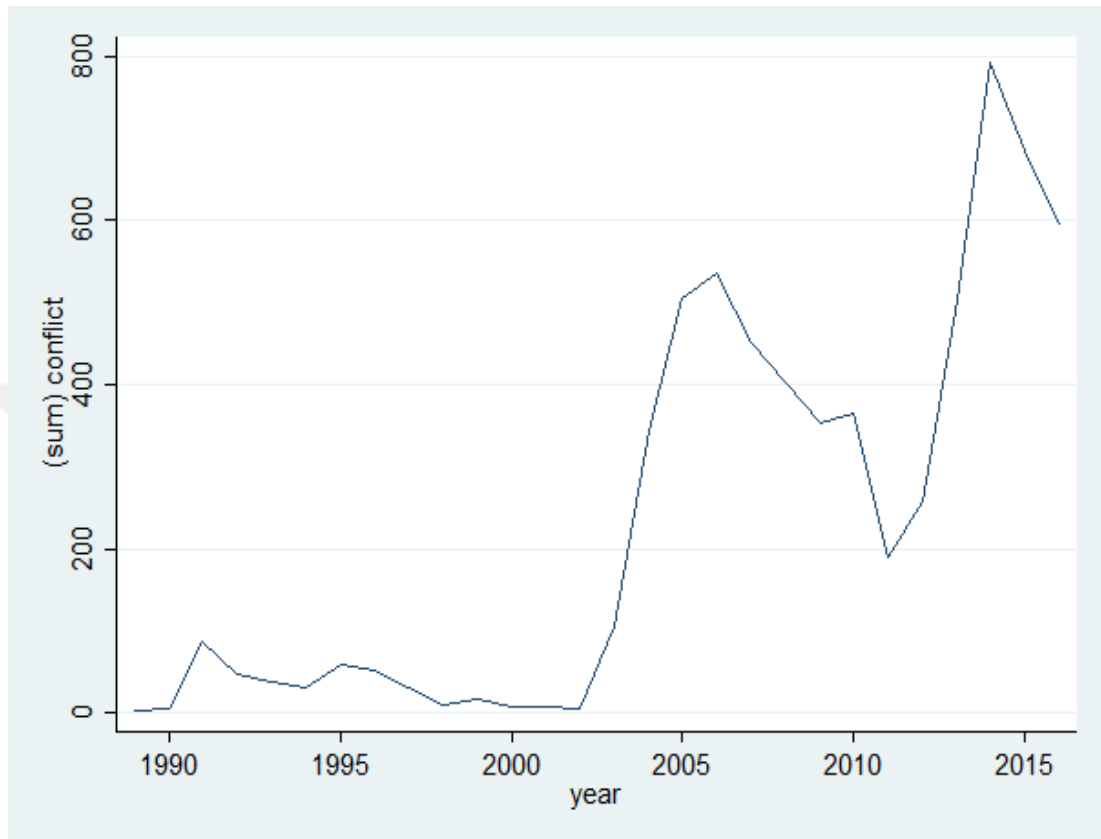
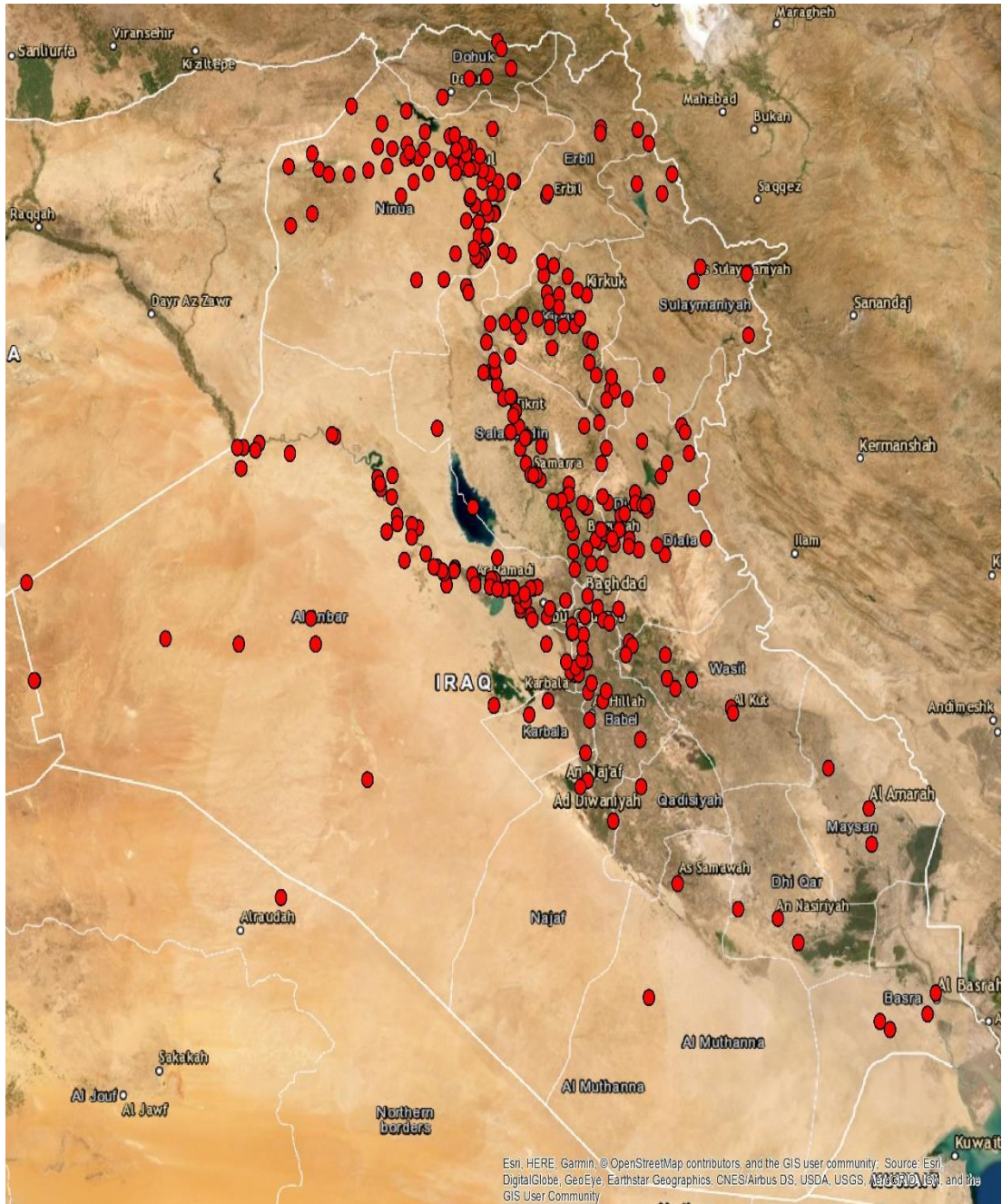


Figure 4.2. Number of conflicts by year, data comes from UCDP Georeferenced Event Dataset (GED).

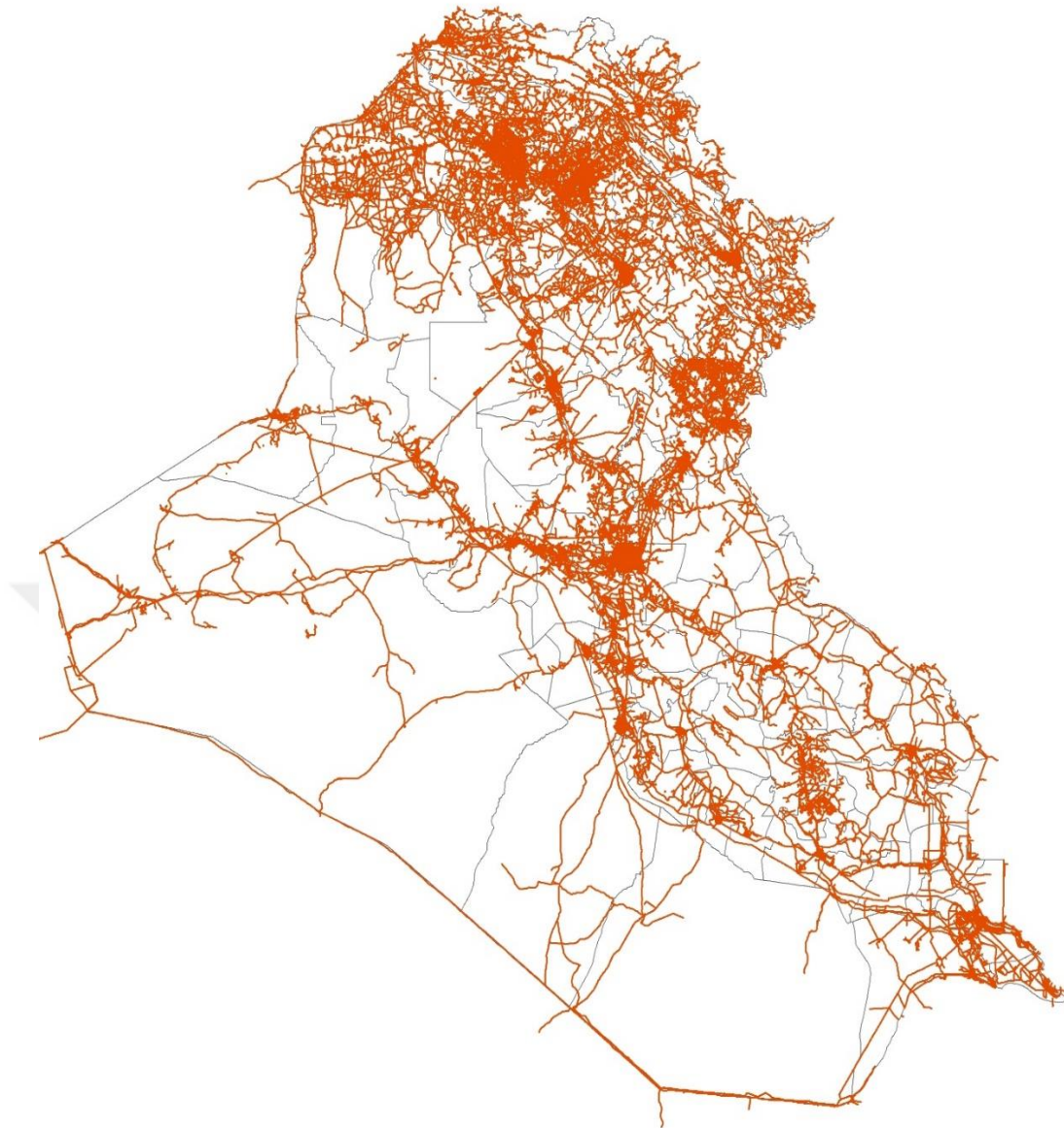
Map 4.1 shows the spread of conflicts throughout the country between 2004 and 2016. According to the map, it is possible to say that the southeastern part of the country which is mostly Shia populated area has experienced less violence when it is compared to Sunni populated west and northwestern regions. Also, the intensity of conflicts in Kurdish populated areas in the northeastern part of the country is at low levels during this period.



Map 4.1. Overview of conflicts

4.2. Road density, Police stations, and Public buildings

I created my independent variables police stations, road density, and public buildings by extracting data from OpenStreetMap. Firstly, the road data was in line format, I transformed it to raster data format to calculate the road density for each district. Then I calculated the mean of the density for each one of 104 districts of Iraq and added to the main dataset.

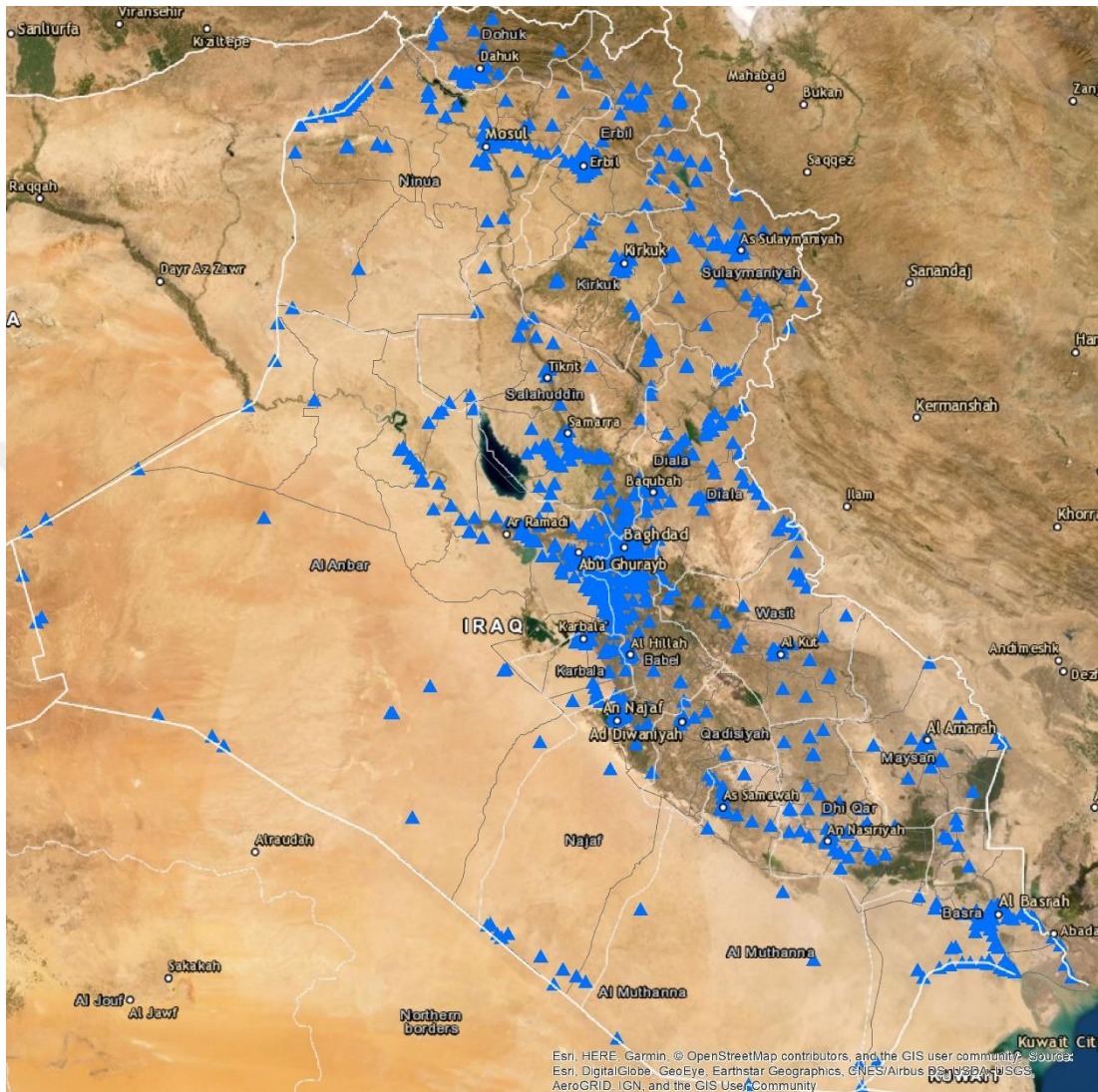


Map 4.1. The map of the roads in Iraq. The road data is based on OpenStreetMap data. The map is produced in the ArcGIS software program. The road density variable is calculated based on this map.

Secondly, OpenStreetMap also provides data on public buildings such as schools, hospitals, colleges, universities, and police stations. By using this information, I calculated the number of police stations and other public buildings for each one of the districts and added them into my dataset.⁵¹ The following buildings are included in the public buildings; hospital, school, university, college, art center, community

⁵¹ The data is retrieved from <https://www.openstreetmap.org>

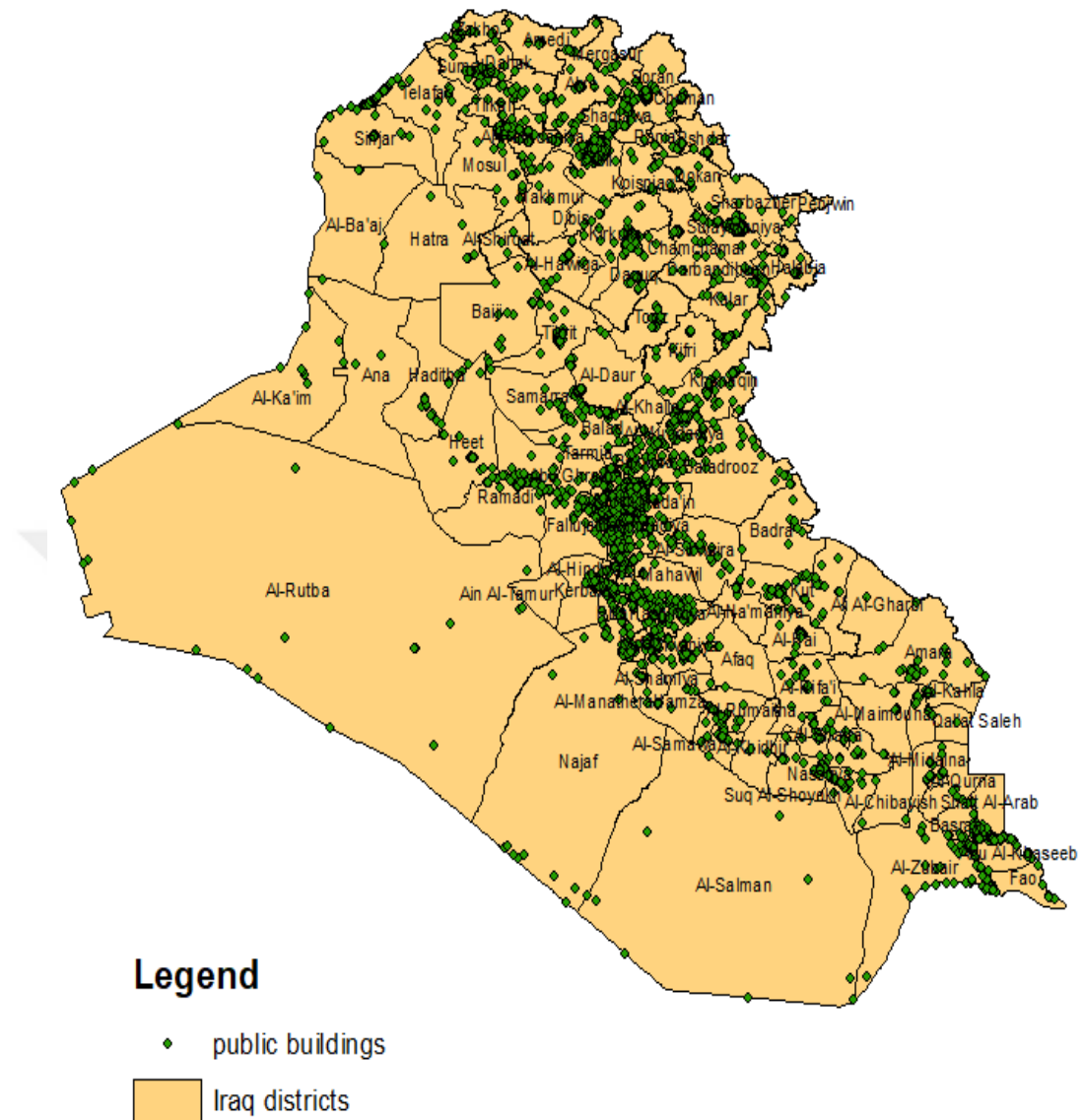
center, courthouse, embassy, fire station, graveyard, kinder garden, library, nursing home, post office, prison, recycling, telephone, and town hall.



Legend

- ▲ police stations
- district borders

Map 4.2 The location of police stations. The map is created in ArcGIS program. The data on the location of police stations is retrieved from the OpenStreetMap.

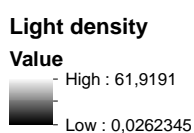
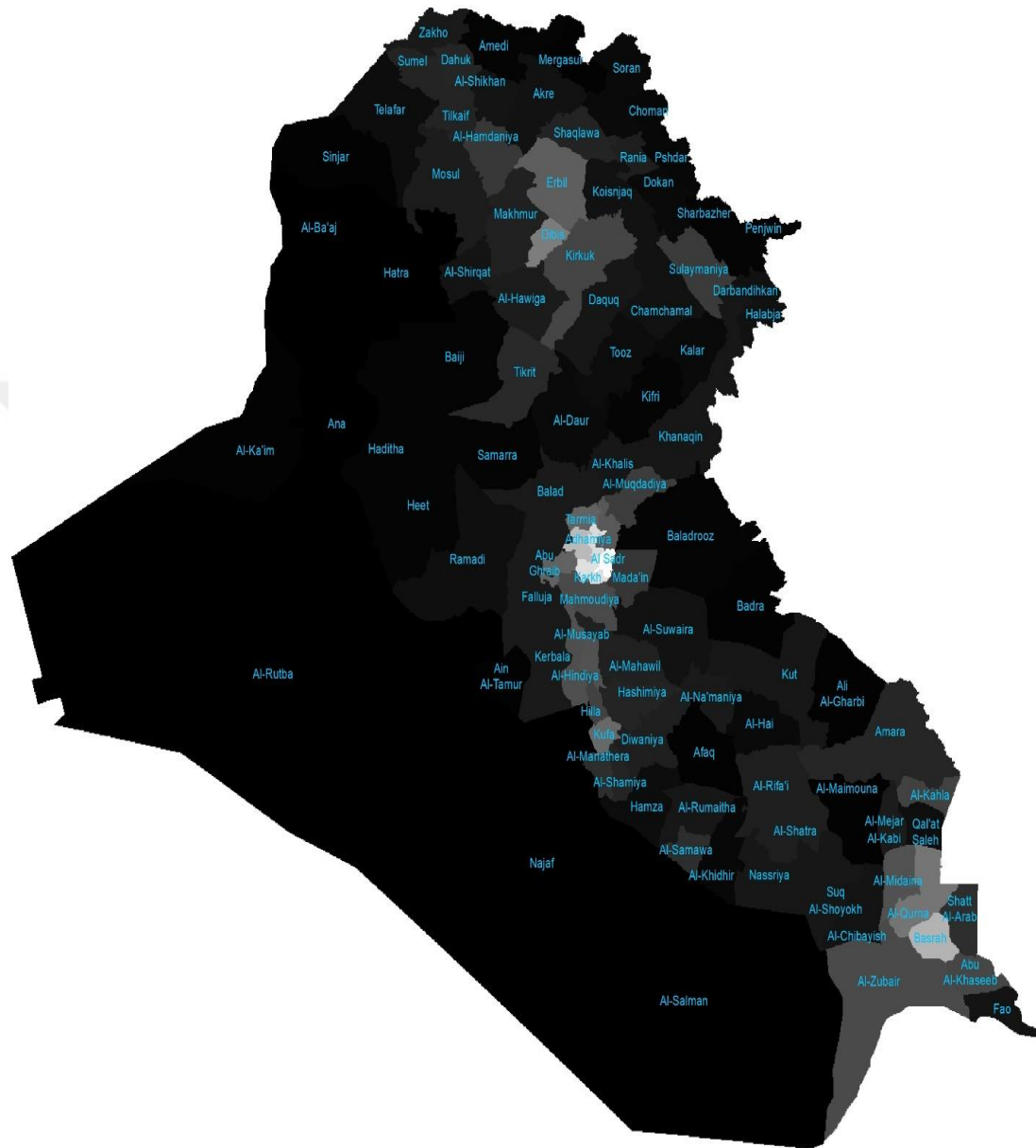


Map 4.4. The map for the public buildings in Iraq.

4.3. Light density data

The light density is another variable of this study which is calculated for each district in order to control the effect of the economic development on the emergence of the sectarian conflict in Iraq. The data is taken from the Defense Meteorological Satellite Program's Operational Linescan System which provides images of the earth at night. The luminosity is ranged from 0 to 63 at every 5 square kilometers for the time period 1992-2013. Firstly, I calculated the mean value of brightness for each one of 104 districts starting from 2004 to 2013. Then I calculated the average light density for

the period 2004-2013 and added into my dataset. Map 4.5. shows an example of the mean light density of each district in Iraq.



Map 3.5. The light map for Iraq. The map is produced in the ArcGIS software program. The luminosity data comes from the Defense Meteorological Satellite Program's Operational Linescan System.

4.4. Ethnic composition and district boundaries data

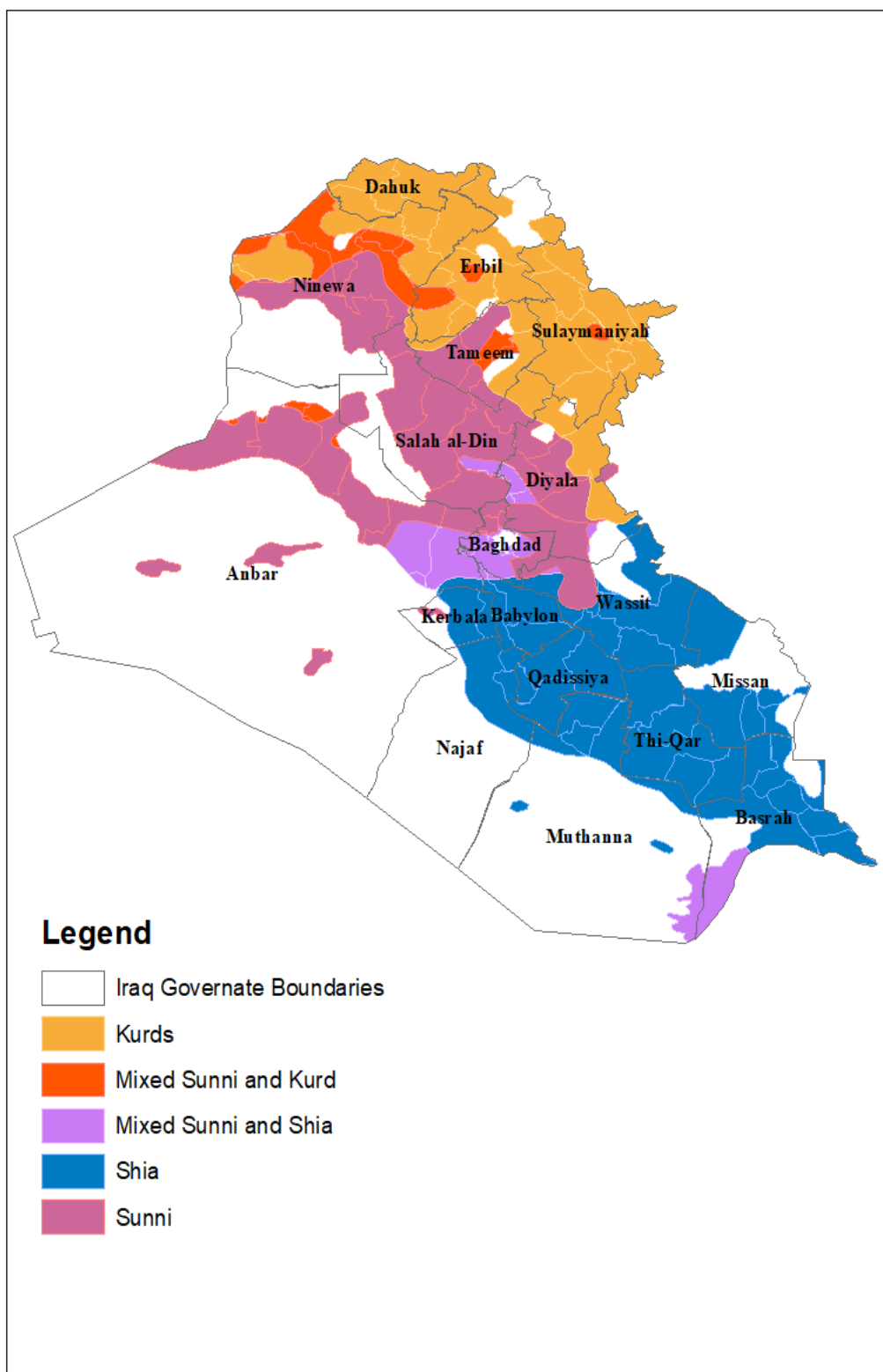
The data on the ethnic groups and district boundaries in Iraq is based on the ESOC project's ethnic composition map at the district level. It is prepared in the GIS data

format. It gives information on the boundaries of districts and their ethnic composition. There are 104 districts 18 provinces in Iraq. Dataset indicates ethnic groups and the total area they have in each district. Areas are coded as Shia, Sunni, Mixed Shia-Sunni, Turkoman, Cristian, and Kurds. The population data of each area is extracted from LandScan. All these data provided as a GIS shapefile.⁵²

Firstly, by using this dataset, I created my ethnic heterogeneity variable. In order to calculate ethnic heterogeneity, I excluded the largest group in the district and then sum the areas of the remaining groups and then divided into the total area. Secondly, I created the majority variables. I calculated the share of each group in a district and then coded it as the majority group if its share is greater than 0.5. By using this information, I formed the Sunni majority, Shia Majority, Kurd majority, and other (Mixed Shia-Sunni, Turkoman, Cristian) majority variables. These are coded as dummy variables.

Map 4.6. shows the geographic distribution of the ethnic and sectarian groups in Iraq. This map is taken from ArcGIS online database. It disregards Turkoman and Cristian groups since their size is smaller than the other groups. Northeastern part of the country is mostly Kurdish populated area. The south of the country is mostly Shia populated area while the western part of the country is mostly Sunni. We also observe that there are some mixed regions. In the north, there is a mixed Kurd-Sunni Arab region. Also, western part of Bagdad, is a mixed Shia and Sunni populated region.

⁵²The dataset is available at "<https://esoc.princeton.edu/files/ethnicity-study-ethnic-composition-district-level>"



Map 4.6. Ethnic and Sectarian Groups in Iraq. The map is taken from ArcGIS online database.

CHAPTER 5

RESULTS

As I mentioned in the previous part, I use Poisson regression model since my dependent variable is count data. The dependent variable is the total number of the conflicts occurred in a district during the period 2004-2016. There are 104 districts. The independent variables are the Sunni majority, Shia majority, Kurd majority, majority others, police stations per 10000 people, road density, light density, ethnic heterogeneity, public buildings, and two interaction variables.

In this chapter, I will use three models. In the first model, I will include being a Sunni majority district and an interaction variable of ethnic heterogeneity and Sunni majority. I will not include being a Shia majority district variable in the analysis. In this way, I will be able to compare the estimation results with being a majority Shia district.

In the second model, I will add Shia majority and an interaction variable of Shia majority and ethnic heterogeneity into the model. I will exclude the variables “being a Sunni majority district” and “interaction of ethnic heterogeneity and Sunni majority”. In this model, I will be able to compare results with being a majority Sunni district.

In the third model, I will add the population variable into my model to see whether it makes any changes in my results. The population variable would eliminate the effect of some variables in our model. For example, the reason for experiencing more conflict in a district would be the population size of the district rather than some other variables that I included in my analysis. Therefore, the population variable will enable us to control this situation.

Model 1:

$$\log(\text{numberofconflicts}) = \text{Intercept} + \beta_1(\text{majoritysunni}) + \beta_2(\text{majoritykurd}) + \beta_3(\text{ethnicheterogeneity}) + \beta_4(\text{int_eth_sunni}) + \beta_5(\text{m_other_eth}) + \beta_6(\text{lnlightdensity}) + \beta_7(\text{lnroaddensity}) + \beta_8(\text{publicbuildings}) + \beta_9(\text{policestations})$$

Table 5.1 Model 1

Parameter	B	Std. Error	Sig.	Exp(B)
(Intercept)	.864	.0997	.000	2.374
majority sunni	2.845	.0645	.000	17.201
int_eth_sunni	-.022	.0015	.000	.978
m_other_eth	.067	.0716	.351	1.069
majority kurd	-.889	.0884	.000	.411
ethnic heterogeneity	.036	.0012	.000	1.037
ln light density	-.117	.0152	.000	.889
ln road density	.285	.0268	.000	1.330
police stations	-.067	.0079	.000	.936
public buildings	.004	.0002	.000	1.004

Dependent Variable: Number of conflicts

Model: (Intercept), Majority Sunni, int_eth_sunni, m_other_eth, Majority Kurd, ethnic heterogeneity, Ln light density, Ln road density, Police stations per 10k, Public buildings

As shown in Table 5.1, being a Sunni majority district increases the risk of experiencing conflict 17.2 times more when it compared to Shia majority districts. The result is statistically significant, and the p-value is 0.000. After the U.S. invasion of the country in 2003, attempts to reconstruct peace and stability in Iraq were failed because of several reasons. Firstly, Sunni groups were remained outside of the state institutions including bureaucracy and army after power shift to Shia groups. The promises that were given to Sunni tribes during the Sahwa Awakening against AQI on integrating their fighters to national security forces and supplying resources to Sunni

areas were not kept. Then the sectarian policies that were followed by the Maliki government made the reconstruction of peace in the post-war period more difficult. Therefore, it is not surprising to encounter with that result which shows Sunni majority districts in Iraq experience conflict much more than Shia majority districts.

In light of these political developments, I argue that being a Sunni majority district provided an opportunity for violent rebellion organizations. When the political remedies were blocked, violence-prone organizations increased their effectiveness in the Sunni Majority districts. Especially, terrorist organizations such as AQI and then ISIS found a political environment that is suitable to recruit people and organize to fight.

The second independent variable is being a majority Kurd district. Our estimation results show that being a majority Kurd district reduces the likelihood of experiencing conflict approximately 2.43 times⁵³ when it compared to Shia majority districts. It is interesting to have such a result that shows Kurdish majority districts experiences less conflict than Shia majority district. The main reason would be that there were some internal conflicts among different Shia majority groups especially when Maliki first came to power. He tried to consolidate his power and to get the full control of the Iraqi Security Forces as we mentioned in the historical background chapter. He used force against his potential rivals. For example, he attacked to the Shiite cleric Muqtada es-Sadr's Mehdi Army to consolidate his power. These events made Shia majority districts more prone to conflict when they are compared to Kurdish majority districts.

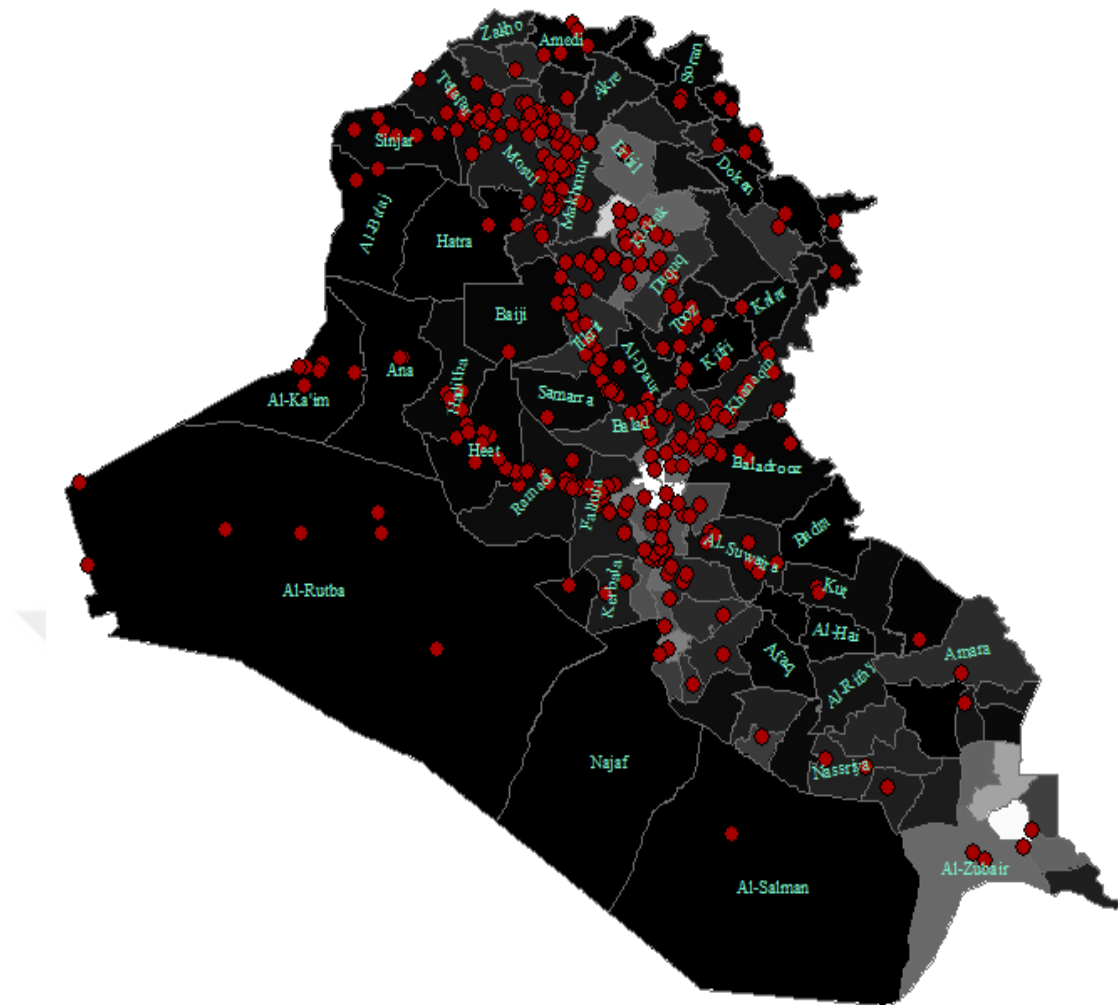
Thirdly, our model also aims to predict the effect of the ethnic heterogeneity on the emergence of the conflicts. For one unit increase in the value of ethnic heterogeneity, 1.07 times more conflict occurred, and it is statistically significant with a p-value of 0.000. Therefore, in the districts that various ethnic and sectarian groups live close to each other, the possibility for the production of emotion-laden myths and symbols that legitimizes the use of violence against each other is much higher. When we think

⁵³ Since the sign of the effect is negative (-) in Table 5.1, I divided exponential (B) into 1 in order to find the occurrence rate of conflicts in the majority Kurd districts.

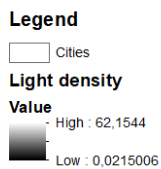
about what happened after the US invasion of the country, relations between different ethnic and sectarian groups changed very drastically. For instance, Sunnis blamed Shiites with betrayal during the invasion of Iraq by the US. Shia groups were seen as responsible for the defeat by the United States. Therefore, hostility against Shia groups as well as the United States was legitimate in the eyes of the Sunni people. Also, sectarian policies which followed by Iraqi Prime Minister Maliki to consolidate his power, increased the production of myths and symbols among Shias which legitimized hostility against Sunni groups. To sum up, the production of myths and symbols have increased in ethnically heterogenic regions after the US invasion and in these regions, we observe more conflicts than the others.

Also, I included an interaction variable into my first model to see the effect of the ethnic heterogeneity and Sunni majority variables together. The result is a bit interesting. One unit increase in the `int_eth_sunni` is associated with 1.02 times decrease in the probability of experiencing conflict with a statistically significant result at 1% level. The ethnic heterogeneity in Sunni majority districts plays a reducing role in the likelihood of experiencing conflict. In the second model below, we will be able to observe the situation for the Shia majority districts.

In addition, one unit increase in the `ln` of the light density is associated with 1.12 times decrease in the probability of emergence of conflict. The result is statistically significant at 1% level. Our model found a causal relationship between the emergence of conflict and the brightness of the district. The brightness enables us to make predictions about the economic development of the districts. Therefore, the districts that have a high level of light density are more developed. We observe that economically developed regions experience less conflict when they are compared to underdeveloped regions. Furthermore, as shown in Map 4.2, Shia and Kurd regions are brighter than Sunni regions. This illustrates that there is an obvious inequality among districts. This inequality among districts would be another driver of the conflict. However, we should make further detailed analyses to make this argument more robust.



Map 5.1 Light density and conflict



In addition, one unit increase in the ln of the road density increases the likelihood of the emergence of conflict by 1.33 times. Therefore, the districts that have a high road density are more prone to violence. The roads provide an opportunity for insurgent groups to carry out hit and run attacks and suicide attacks to their targets. In Iraq, most of the insurgent groups used improvised explosive devices (IED) effectively against the central Iraqi government and the US security forces. Roadside bombs, static vehicular car bombs, and explosive-laden vehicles can be seen as different

types of IEDs.⁵⁴ Roads were very crucial in the use of these forms of warfare. Therefore, the increase of road density increases the likelihood of experiencing conflict.

Also, the analysis shows that one unit increase in the number of police stations per 10000 people reduces the occurrence of conflict by 1.07 times at %1 significance level. I was expecting to see the opposite result. It is because police stations would have been attacked by rebellion or other terrorist groups which would increase the violence rate. However, the districts with more police stations have less inclined to experience violence. The reason would be that police stations eliminates the security dilemma in their surrounding regions. In this way, they decrease the fears of the groups against each other and appease the tension.

One unit increase in the number of public buildings is associated with 1.004 times increase in the likelihood of the occurrence of the conflict. Although the effect size seems small, it is statistically significant at %1 level. In light of these results, it is possible to assume that terrorist organization target public buildings as a part of their propaganda. Therefore, when the number of public buildings increases the risk of the conflict increases.

Finally, the regression result shows that there is no statistically significant relationship between being other majority district and the number of the conflict. When I say other majority districts, I mean the districts which Turkmen or Christian groups constitutes the majority. Since their number is not sufficient to include in the analysis separately, I generated being other majority district variable. I could not observe a causal link between being other majority district and the emergence of the conflict.

⁵⁴ Ahmed Hashim, *The Caliphate at War: The Ideological, Organisational and Military Innovations of Islamic State* (Hurst, 2018), 189–91.

Model 2:

$$\log(\text{numberofconflicts}) = \text{Intercept} + \beta_1(m_shia) + \beta_2(m_kurd) + \beta_3(\text{ethnic heterogeneity}) + \beta_4(\text{int_eth_shia}) + \beta_5(m_other_eth) + \beta_6(\text{lnlightmean}) + \beta_7(\text{lnroadmean}) + \beta_8(\text{publicbuildings}) + \beta_9(\text{policestations})$$

As shown in Table 5.2, I included in the analysis Majority Shia and an interaction variable of ethnic heterogeneity and Shia majority to see the difference between two models. Also, by using Model 2, we can compare Sunni majority districts with Kurd majority districts. The other independent variables that I used in the first model remains in the second model.

Firstly, being a Shia majority district is reducing the risk of experiencing conflict 1/0.075 times when it is compared to Sunni Majority districts. This means Shia majority districts experience conflict approximately 13 times less than Sunni majority districts. The main reason that lies behind it would be the control of the central government by Shia. In addition to this, in the post-war period, Shia militias were recruited by Iraqi security forces. These developments made Shia majority districts less prone to conflict by eliminating the opportunity that insurgent groups would find broad public support to mobilize and recruit fighters. The example of the al-Mahdy Army of Shi'i cleric Muqtada as-Sadr supports our argument. It was one of the Shia insurgent groups in Iraq. The organization was in conflict with the Maliki government. Since the lack of public support, Iraqi security forces could easily take the group under the control.

According to Model 2, Kurdish majority districts experience conflict 1/0.035 times less than Sunni majority districts. This means in the districts that Kurds are the majority ethnic group, the risk of experiencing conflict is approximately 28 times less than Sunni majority districts. When we compare Sunni and Kurds with each other, we can say that Sunni groups are relatively excluded more than Kurds after the US invasion of the country. For instance, Kurds gained regional autonomy and took a share from the resources of the country. As a result, Kurdish regions experienced

rapid economic growth. Therefore, Kurdish regions experienced conflict less than politically and economically excluded Sunni majority districts.

Table 5.2. Model 2

Parameter	B	Std. Error	Sig.	Exp(B)
(Intercept)	3.629	.0913	.000	37.660
majority shia	-2.588	.0609	.000	.075
majority kurd	-3.342	.0792	.000	.035
m_other_eth	.024	.0517	.642	1.024
int_eth_shia	.012	.0033	.000	1.012
ethnic heterogeneity	.004	.0009	.000	1.004
ln light density	-.149	.0154	.000	.862
ln road density	.342	.0272	.000	1.408
police stations	-.082	.0081	.000	.921
public buildings	.003	.0002	.000	1.003

Dependent Variable: number of conflicts

Model: (Intercept), Majority Shia, m_other_eth, int_eth_shia, Majority Kurd, ethnic heterogeneity, Ln light density, Ln road density, Police stations per 10k, Public buildings

Additionally, ethnic heterogeneity increases the likelihood of experiencing conflict in Model 2. For per one unit increase in the ethnic heterogeneity, the occurrence rate of conflict will be 1.004 times more. Although it seems to have a small-sized effect, it is statistically significant at 1% level. Moreover, there is an interesting result that we have in this model. When we look at our interaction variable int_eth_shia, it plays an increasing role in the emergence of the conflict. One unit increase in the interaction of ethnic heterogeneity and Shia majority is associated with 1.012 times increase in our dependent variable. In the Shia majority districts, if ethnic heterogeneity increases, the likelihood of experiencing conflict increases as well. The

result is statistically significant at %1 level. On the other hand, as shown in Table 5.1, ethnic heterogeneity in the Sunni majority districts shows the opposite effect.

Furthermore, the estimation results that we have for ln road density and ln light density in this model are not much different from the first model. One unit increase in the ln of the light density in the second model is associated 1.16 times decrease in the occurrence probability of the conflict. Additionally, one unit increase in the ln of the road density increases the likelihood of experiencing conflict 1.408 times more. Both results are statistically significant at %1 level.

We also observe that one unit increase in the number of police stations per 10000 people decreases the probability of experiencing conflict 1/0.921 times. This means there will be 1.08 times less conflict for every extra police station. The exponential (B) score for police stations increased to 1.08 in this model from 1.06 that we had in Model 1.

Finally, public buildings variable is still statistically significant in Model 2. For every unit increase in public buildings, there will be 1.003 times increase in the number of the conflict.

Model 3:

$$\log(\text{numberofconflicts}) = \text{Intercept} + \beta_1(\text{majoritysunni}) + \beta_2(\text{majoritykurd}) + \beta_3(\text{ethnicheterogeneity}) + \beta_4(\text{int_eth_sunni}) + \beta_5(\text{m_other_eth}) + \beta_6(\text{lnlightdensity}) + \beta_7(\text{lnroaddensity}) + \beta_8(\text{publicbuildings}) + \beta_9(\text{policestations}) + \beta_{10}(\text{population})$$

As shown in Table 5.3, I included the population variable as a control variable to see if it brings a change in my results. The results are very similar to my first model. We do not observe striking differences from the Model 1. Only we observe a drop in the statistical significance and exponential B score of public buildings variable.

According to Model 3, being a Sunni Majority district increases the risk of experiencing ethnic violence by 16.43 times when it compared to being a Shia majority district. The exponential B for being a Sunni majority district in the first model was 17.2. The inclusion of population in the model 3, made about 0.77 decrease in the score of the exponential B. However, it is not a remarkable change.

This model also predicts that being a majority Kurdish district reduces the likelihood of experiencing conflict approximately 1.87 when it compared to Shia majority district. In the Model 1, the exponential B score for this variable was 2.43. We observe that the population variable dropped the B score of being a majority Kurd district about .44 in the Model 3.

Also, we observe that for one unit increase in the value of ethnic heterogeneity, 1.03 times more conflict occurred. We observe a slight drop in the exponential B score of the ethnic heterogeneity in the Model 3 when we compared it with Model 1. However, it does not cause a significant change in our estimation results.

The same situation is relevant for \ln light density and \ln road density variables. Although we observe slight drops in their exponential B in Model 3, the results are not remarkably different from what we observed in the first model. We still observe that the district with high level of road density experience more conflict. Also, the district with high level of light density experienced less violence in the model 3.

The results that I have from the three models are very compatible with the theoretical assumptions of the symbolic politics theory. As I explained in the Literature Review section of this study, according to symbolic politics theory, there are three preconditions for the outbreak of the conflict. The first one is the presence of the groups myths that justify hostility against an enemy group. Our ethnic heterogeneity variable can be an important indicator to test this argument. Ethnically mixed districts are more prone to have these kinds of myths and symbols which justify enmity against rival groups.

Table 5.3. Model 3

Parameter	B	Std. Error	Sig.	Exp(B)
(Intercept)	.955	.1009	.000	2.599
majority sunni	2.799	.0645	.000	16.433
majority kurd	-.628	.0928	.000	.534
m_other_eth	.088	.0720	.223	1.092
int_eth_sunni	-.020	.0015	.000	.980
ethnic heterogeneity	.034	.0013	.000	1.034
ln light density	-.115	.0152	.000	.892
ln road density	.255	.0273	.000	1.291
police stations	-.060	.0074	.000	.942
public buildings	.001	.0004	.002	1.001
population	6,975E-7	8,2768E-8	.000	1.000

Dependent Variable: Number of conflicts

Model: (Intercept), Majority Sunni, int_eth_sunni, m_other_eth, Majority Kurd, ethnic heterogeneity, ln light density, ln road density, Police stations per 10k, Public buildings, population

The second precondition for the outbreak of the ethnic conflict is the fear of the group about its survival. According to symbolic politics theory, if people start to think that their group's survival is under danger, they start to mobilize and take part in violent activities. This process produces a security dilemma among the groups. Our variable number of police stations per 10K people proves this assumption. We observed that the districts with more police stations experience less conflict. This shows us that the police forces can eliminate the security dilemma that emerges among the groups and in this way, they can reduce the level of violence.

The third precondition for the outbreak of the conflict is the presence of an opportunity. The opportunity structure can be in various forms. My analysis showed

that being a Sunni majority district and having a high level of road density increased provided an opportunity for violent organizations in Iraq to mobilize and recruit militants. Therefore, we can say that our findings are very compatible with the assumption of the symbolic politics theory in explaining the ethnic violence Iraq.

In conclusion, I used three models in this chapter to determine the factors that led to the emergence of conflict in Iraq. I found that there are four factors that cause the emergence of conflict. Firstly, being a Sunni majority district increases the likelihood of experiencing conflict when it compared to Shia and Kurd districts. Secondly, ethnic heterogeneity increases the risk of conflict. Thirdly, in the districts that we have a high level of road density, the possibility of experiencing conflict is increasing. Fourthly, ethnic heterogeneity in Shia majority districts increases the risk of conflict.

On the other hand, there are some factors which reduce the risk of conflict. Firstly, being a Shia and Kurdish majority district reduces the risk of experiencing conflict. Secondly, the districts with a high level of light density experience less conflict. Thirdly, districts with more police stations experience less conflict. Finally, ethnic heterogeneity in Sunni majority districts reduces the risk of conflict.

Lastly, I found that my estimation results are compatible with the assumptions of the symbolic politics theory of Stuart Kaufman in explaining the sectarian violence. The independent variables such as ethnic heterogeneity, being a Sunni majority district, number police stations per 10 thousand people and road density are adequate indicators to test the explanatory power of that theory.

CHAPTER 6

CONCLUSION

This study aimed to understand the underlying causes of conflict between Shia and Sunni groups in Iraq from 2004 to 2016. I did a spatial analysis to detect the factors that caused the outbreak of the conflict by examining 104 districts of Iraq. I used data from various sources. The conflict data is based on the Uppsala Conflict Data Program's Georeferenced Event Dataset. Light density data is based on the Defense Meteorological Satellite Program's Operational Linescan System. The road density and public buildings data is retrieved from OpenStreetMap. The district boundaries and ethnic group data is based on ESOC Project.

I found that there are some district-level factors that increase the risk of sectarian conflict in Iraq. Firstly, being a Sunni majority district increases the risk of experiencing conflict. I explained the logic behind this situation with two examples. The first one is that, Sunnis were subjected to political and economic exclusion during the Maliki governments. The second one, which could be seen as a result of the first example, the Sunni districts provided an opportunity as being territorial bases for ISIS to recruit militants and mobilize. These two examples explain how being a Sunni district increases the risk of the sectarian conflict.

Secondly, the risk of ethnic violence is high in the districts which have a high level of ethnic heterogeneity. I explain the reason behind it by focusing on the myth-symbol complex which was introduced by symbolic politics theory of Kaufman. I argued that after the US invasion of the country, we observe an increase in the production of myths and symbols that legitimize hostility against each other among Shia and Sunni groups. This situation increased the risk of violence in the country. Additionally, the interaction variables that I included in the analysis showed that the ethnic heterogeneity in Shia majority districts increases the risk of sectarian conflict while reducing in the Sunni majority districts.

Thirdly, my spatial analysis showed that the districts with a high level of road density experience more conflict. I found that roads in Iraq, provided an opportunity for violent groups for carrying out hit and run attacks and suicide bombings. Also, insurgent groups in Iraq used Roadside bombs, static vehicular car bombs, and explosive-laden vehicles against their rival groups. Therefore, we observe that the district with high level of road density experienced more conflict.

Furthermore, I detected some variables that reduce the risk of experiencing conflict. Firstly, being a Shia majority district reduces the risk of encountering conflict. The main reason for that is the control of the central government by Shia groups. I argue that Shia insurgent groups could not find an opportunity to mobilize against a Shia controlled government. I mentioned the example of Muqtada al-Sadr's al-Mahdi army to support my argument. The Maliki government could easily take its potential rivals under its control. Moreover, the recruitment of Shia militants by Iraqi army also played an important role in that result.

Secondly, I found that being a Kurdish majority district reduces the risk of experiencing conflict. My estimation results showed that Kurdish districts experienced less conflict than both Shia and Sunni majority districts. The main explanation for this is Kurdish districts have regional autonomy and Kurds took a share from the resources of the country. Moreover, we observe that during the time period that this study focuses on Kurdish districts have experienced a rapid economic growth. All these factors I mentioned, made Kurdish districts less prone to conflict.

Thirdly, the districts with a high level of light density have less risk of the sectarian conflict. I used light density variable to test the relationship between level of economic development and the experiencing conflict. I found that economically more developed districts experience less conflict when they are compared to underdeveloped districts.

Finally, I figured out that the districts which have more police stations experience less conflict. The reason is that police stations can eliminate the security dilemma in their

districts. They reduce the level of fear of the groups against each other and appease the tension. In this way, they can play a deterrent role in preventing conflicts in their districts. Therefore, the districts that have more police stations experienced less conflict.

I would like to mention some possible policies that would reduce the risk of ethnic and sectarian violence in Iraq. Firstly, this research shows that economically developed districts experience less conflict. Therefore, the government should encourage public and private investments in Sunni majority districts in order to reduce the level of violence in Iraq.

Secondly, I found that the districts with more police stations encounter sectarian violence less than the other districts. This shows that the security vacuum in the districts is filled by the violent prone organization. Therefore, the government should build more police stations in the district that the level of violence is high. The local people should be recruited as officers in those police stations.

Thirdly, Sunni majority districts are at risk of experiencing violence more than Kurdish and Shia majority district. These districts were used by ISIS and other similar terrorist organizations as territorial bases to recruit people and organize them for violence. The main facilitator of this process was the political and economic exclusion of the Sunnis from political processes. Therefore, in order to reduce the level of violence, there should not be any obstacle in front of the political participation of the Sunnis in Iraq. Otherwise, the Sunni majority district will become territorial bases again for the violent prone organizations.

I would like to mention some limitations that I faced during this study. The main limitation was the lack of data. In the beginning, I planned to do a times series analysis, however, I could not find yearly changing data at the district level to conduct that research. The sources that I collected my data did not provide such a possibility.

Firstly, the data on road density, police stations, and public buildings comes from the OpenStreetMap. However, it is not possible to retrieve yearly data starting from 2004 to 2016 by using OpenStreetMap. Secondly, I have the same problem with the data I took from ESOC project. The data on the location of ethnic groups and the district boundaries do not indicate whether or not the location of ethnic groups and boundaries were changed throughout the period that this research focuses. I believe that by adding yearly data, this study can be further improved.



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APPENDIX

A. List of Districts

Abu Al-Khaseeb	Al-Na'maniya
Abu Ghraib	Al-Qurna
Adhamiya	Al-Rifa'i
Afaq	Al-Rumaitha
Ain Al-Tamur	Al-Rutba
Akre	Al-Salman
Al Resafa	Al-Samawa
Al Sadr	Al-Shamiya
Al-Ba'aj	Al-Shatra
Al-Chibayish	Al-Shikhan
Al-Daur	Al-Shirqat
Al-Hai	Al-Suwaira
Al-Hamdaniya	Al-Zubair
Al-Hawiga	Ali Al-Gharbi
Al-Hindiya	Amara
Al-Ka'im	Amedi
Al-Kahla	Ana
Al-Khalis	Ba'quba
Al-Khidhir	Badra
Al-Mahawil	Baiji
Al-Maimouna	Balad
Al-Manathera	Baladrooz
Al-Mejar Al-Kabi	Basrah
Al-Midaina	Chamchamal
Al-Muqdadiya	Choman
Al-Musayab	Dahuk

Daquq	Mahmoudiya
Darbandihkan	Makhmur
Dibis	Mergasur
Diwaniya	Mosul
Dokan	Najaf
Erbil	Nassriya
Falluja	Penjwin
Fao	Pshdar
Haditha	Qal'at Saleh
Halabja	Ramadi
Hamza	Rania
Hashimiya	Samarra
Hatra	Shaqlawa
Heet	Sharbazher
Hilla	Shatt Al-Arab
Kalar	Sinjar
Karkh	Soran
Kerbala	Sulaymaniya
Khadamiya	Sumel
Khanaqin	Suq Al-Shoyokh
Kifri	Tarmia
Kirkuk	Telafar
Koisanjaq	Tikrit
Kufa	Tilkaif
Kut	Tooz
Mada'in	Zakho