

## ABSTRACT

Title of Thesis: THE EFFECTS OF FAILED STATE STATUS  
ON TERRORIST TARGETING: A  
LEBANESE CASE STUDY

Sarah Nicole Kirk, Master of Arts, 2020

Thesis Directed By: Dr. Laura Dugan  
Department of Criminology and Criminal  
Justice

Understanding the targeting decisions of terrorist organizations is a key concept that has been largely overlooked in counter-terrorism research. The success of terrorist organizations in Lebanon motivates the current study to assess how their operational decisions changed as Lebanon transitioned from civil war to state instability. Guided by rational choice theory, I explore the idea that terrorist organizations target entities that are most threatening to their chances of survival using data from the Global Terrorism Database. Specifically, the study uses multinomial logistic regression models to understand terrorist targeting choices in Lebanon from 1975 to 2018. While Lebanon is only a case study, I anticipate that the conclusions drawn here can help us understand similar dynamics in other parts of the world. The primary analysis finds a lack of support in predicted patterns of terrorist targeting. This study also includes a supplemental analysis providing directions for future research.

THE EFFECTS OF FAILED STATE STATUS ON TERRORIST TARGETING:  
A LEBANESE CASE STUDY

by

Sarah Nicole Kirk

Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Master of Arts  
2020

Advisory Committee:  
Dr. Laura Dugan, Chair  
Dr. Gary LaFree  
Dr. Maria Velez

© Copyright by  
Sarah Nicole Kirk  
2020

# Table of Contents

Table of Contents .....	ii
List of Tables .....	iii
List of Figures .....	iv
Chapter 1: Introduction .....	1
Chapter 2: Background .....	6
Historical Context .....	8
Target Selection and Rational Choice Theory .....	16
Hypotheses .....	22
Chapter 3: Data and Methods .....	25
Data .....	25
Strengths of the GTD .....	30
Limitations of the GTD .....	31
Dependent Variable .....	32
Independent Variables .....	34
Control Variables .....	35
Methods .....	38
Chapter 4: Results .....	40
Application of Coding Principles .....	40
Descriptive Statistics .....	41
Multinomial Logistic Results .....	45
Hypothesis 1 .....	47
Hypothesis 2 .....	48
Hypothesis 3 .....	49
Model Results of Control Variables .....	50
Chapter 5: Discussion .....	52
Additional Descriptive Analysis for Known Perpetrators .....	52
Conclusions .....	57
Appendices .....	62
References .....	78

## List of Tables

Table 1. Classification of the Dependent Variable .....	28-29
Table 2. Description and Operationalization of Variables.....	33-34
Table 3. Descriptive Statistics of Independent and Control Variables .....	43-44
Table 4. Multinomial Logistic Coefficients and (SE) Predicting Target Types – Coding Principle 1 (Hardest to Reach) .....	45-46
Table 5. Marginal Effects and (SE) of Predicted Target Types – Coding Principle 1 (Hardest to Reach) .....	46-47
Table 6. Proportion of Terrorist Attacks with a Soft Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 – Hardest to Reach).....	55
Table 7. Proportion of Terrorist Attacks with a Terrorist Organization Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 – Hardest to Reach) .....	55
Table 8. Proportion of Terrorist Attacks with a Foreign Entity Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 – Hardest to Reach) ...	56
Table 9. Proportion of Terrorist Attacks with a Government Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 – Hardest to Reach) ...	57

## List of Figures

Figure 1. Timeline of Total Terrorist Attacks in Lebanon.....	23
Figure 2. Primary Target Types Identified by Coding Principles.....	41
Figure 3. Changes in Targeting Types for Each Time Period .....	42
Figure 4. Proportion of Total Terrorist Attacks During Each Time Period Attributed to Target Type (Coding Principle 1 – Hardest to Reach) .....	42-43
Figure 5. Soft Targets by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach) .....	54
Figure 6. Terrorist Organization Target Type by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach).....	55
Figure 7. Foreign Entity Target Type by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach) .....	56
Figure 8. Government Target Type by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach) .....	56

## Chapter 1: Introduction

When engaging in a terrorist attack, terrorist organizations must decide whether to attack civilians or a harder to reach target. A harder to reach target is a target that is not easily accessible or is heavily defended, resulting in the target being less vulnerable to terrorist attacks (Polo, 2019). Organizations may attack civilians one day and then attack harder to reach targets such a country's military base, seemingly without a reason or pattern. Within the field of terrorism research, there is a large debate on the rationality of target selection. Some researchers argue that terrorism is ineffective in achieving its goals, thus resulting in the selection process of choosing a specific target to attack being irrational (Abrahms, 2004, 2006, 2008; Calhoun, 2002; Gupta, 2008; Jenkins, 2006).

However, ideas posited by the rational choice theory may indicate that a terrorist organization's decision to attack a specific group of individuals is carefully planned and completely logical. Researchers argue that target selection is a rational process, in which terrorist organizations make a calculated decision to target the group of individuals that will best help achieve a specific goal or objective (Anderton & Carter, 2006; Caplan, 2006; Crenshaw, 1987, 1990; Drake, 1998; Pape, 2005; Perry & Hasisi, 2015; Shughart, 2011). The changes in target selection could be due to the hardening of certain targets or limited by the available resources as suggested by Drake (1998). In this proposed thesis, I argue that terrorist organizations change their targeting strategies based on which targeting group appears to be the most threatening. I test these ideas using data on terrorist attacks in Lebanon. More

specifically, I will examine the nature of terrorist attacks during and after the Lebanese civil war in order to determine if target selection changes according to who poses the greater threat to terrorist organizations. I draw upon Becker's (1968) perspective on the rational choice theory to craft my argument.

A terrorist organization's choice to target a specific group of individuals helps demonstrate the organization's goals and intentions to civilians, government officials, terrorist constituencies, and leaders of the world (Hoffman, 2006). Polo (2019) suggests that the choice for terrorist organizations to attack undefended civilians and official government targets reflects an intricate balance between harming opponents and gaining support for the terrorist organizations' cause. The benefits of attacking civilians include that it requires fewer resources, the attacks are highly newsworthy, and it undermines government control (Polo, 2019). However, these benefits often come at a cost, as civilians may be repulsed by the organization after witnessing the senseless loss of life, undermining any legitimacy that the organization is trying to gain.

Alternatively, attacking the government directly could preserve the group's legitimacy, especially if the government is seen as problematic. Attacks against the government disrupts and discredits the government by weakening it administratively, impairing normal operations, and demoralizing government officials (Crenshaw, 1981). By delegitimizing the government and boosting its own legitimacy, the group is better able to recruit civilians as fighters and auxiliary supporters. However, it takes greater resources and requires greater planning to attack the government, as officials are typically well guarded and off limits to the general public. These attacks are also



more vulnerable to intervention, which could make the terrorist organization appear weak if the attack is thwarted. Thus, the decision of who to attack is strategic and requires the organization to optimize the best outcome given its current set of circumstances. Lebanon's history provides a rich array of changing circumstances that, I argue, shifts the targeting strategy for its terrorist organizations. As described below, at different periods in Lebanon's history, terrorists might be more drawn to targeting other terrorist organizations, foreign governments, or the Lebanese government depending on who poses the greater threat to its survival, and which targeting strategy will help the organization thrive.

Across Lebanon's history, terrorism has been allowed to flourish due to tension and conflict between major Lebanese organizations. Major shifts in tension occurred during impactful Lebanese events, including the Lebanese civil war and after Lebanon became a failed state. Contributing to the start of Lebanon's civil war in 1975 was the conflict generated by power imbalances between Maronite Christians, Sunnis, and Shias religious groups (Ṭarābulsī, 2012). After the civil war ended, theory would suggest that the primary tension shifted to between foreign governments and Lebanese terrorist organizations, due to the control of Lebanese territory by Syria and Israel. After state failure in 2005, theory would suggest that the primary tension once again shifted to focus on fighting between terrorist organizations and the Lebanese government due to unassigned positions of power generated from Syria and Israel ending their occupation of Lebanon. Overall, the continued conflict throughout Lebanon's history helped strengthen terrorist organizations' power in Lebanon by increasing the credibility of the organizations to

Lebanese civilians and destroying the legitimacy of the Lebanese government (Galey, 2012).

The success of terrorist organizations in Lebanon motivates the proposed thesis to assess how their operational decisions changed as Lebanon transitioned from the civil war to complete state failure. Guided by rational choice theory, I produce a set of hypotheses that are guided by the principle that terrorist organizations target entities that are most threatening to their acquisition of power. Ideally, I would like to study this problem based on specific terrorist organizations' targeting decisions. However, due to the large number of cases unattributed to any terrorist organization, I will be using the terrorist attack as the unit of analysis. I am interested in testing if terrorist organizations overall change their targeting strategies based on threats to the organizations' survival, as suggested by Crenshaw (1987). These hypotheses are tested using data from the Global Terrorism Database (GTD), as provided by the National Consortium for the Study of Terrorism and Responses to Terrorism (START). The GTD is an open-source database that includes information on domestic and international terrorist attacks from 1970 to 2018.

Lebanon is an ideal candidate for the current case study because of the constant conflict and power struggles between non-state actors (including terrorist organizations) and the Lebanese government. This struggle, I argue, resulted in changes to targeting strategies to obtain the greatest benefit for the terrorist organizations. Lebanon also provides a unique opportunity to test the idea that terrorist organizations target individuals who pose the greatest threat to their survival. Terrorist organizations operating in Lebanon struggled to survive during and after

Lebanon's civil war. After struggling for 30 years, prominent terrorist organizations were able to gain power and thrive after the state failure of Lebanon, which had left the government weak. These historical events create an avenue to test Crenshaw's claims on terrorist targeting strategies. While Lebanon is only a case study, I anticipate that lessons learned here can help us understand similar dynamics in other parts of the world. For example, Syria's civil war in 2011 also began as a conflict between non-state actors (terrorist organizations such as the Free Syrian Army) and the Syrian government (Al Jazeera, 2018). By understanding how terrorist targeting strategies changed in Lebanon during the civil war, we gain insight into how terrorist targeting strategies in Syria may be influenced by their own civil war.

In the proposed thesis, I begin by discussing the events that led to Lebanon's civil war and the major historical events occurring during my study period. Conflict between different non-state actors resulted in the civil war and, I argue, directly impacted the target selection of terrorist organizations from 1975 to 2018. In chapter 2, I discuss the rational choice theory and apply it to target selection of terrorist attacks in Lebanon. The third chapter outlines the data sources and methods including my analytic plan, independent and dependent variables, and hypotheses. The fourth chapter reviews the results and its application to the hypotheses. The thesis ends with a discussion of the findings, additional analyses, limitations, and future research recommendations.

## Chapter 2: Background

Before analyzing the targeting decisions of terrorist organizations in Lebanon, I provide an overview of the major events that helped contribute to the power imbalances that later led Lebanon to become the failed state it is today. According to Rotberg (2003), a failed state is unable to control its own borders or display the necessary power over its own territory and faces constant threats of secession, civil war, and large-scale violent internal struggles for control between the government and one or more non-state actors. This description applies to Lebanon in two major ways and shows why Lebanon is considered a failed state. First, the Lebanese government continues to face power struggles from non-state actors. Examples of non-state actors that fight for power include many different terrorist organizations (such as Hezbollah) and powerful ruling clans (such as the Meqdad clan) (Harris, 2012). Second, Lebanon continues to face violent terrorist attacks, which are aimed at gaining power, territory, or acknowledgement by terrorist organizations. For example, in May 2018, Hezbollah won 70 seats in Lebanon's parliament, which was the first time in nine years an election was held to determine the leadership of parliament ("Lebanon profile – Timeline", 2018). However, Hezbollah then delayed the formation of the new government for eight months, in order to gain more power and control in Lebanon's government.

Other key characteristics of state failure are lack of control by the government over the country and its citizens, lack of faith in the government's ability to protect its own citizens, a lack of a stable political system, and an inability to provide a productive economic environment (Barma, 2016). After Syria ended its occupation of

Lebanon, a power struggle began between terrorist organizations and the Lebanese government for the unoccupied positions of power. Due to the lack of control by the government, many Lebanese citizens lost faith in Lebanon's social institutions, including Lebanon's police force, army, judiciary system, and government (Barma, 2016). The Lebanese government was unable to provide protection to its citizens and this role was outsourced to other non-state actors (Galey, 2012). Based on perceived powerlessness of the Lebanese government by its civilians after Syria withdrew, Lebanon became a failed state. I use a dichotomous measure of state failure to define the cases classified under time period 3 (after state failure) because terrorist attacks and historical events that occurred during this period were related to the conflict between terrorist organizations and the Lebanese government. The terrorist attacks and historical events that occurred before Syria ended its occupation in 2005 were related to the conflict between Syria and Israel's continued occupation of Lebanon and the Lebanese citizens, which are the characteristics that define time period 2 (after civil war).

I will also discuss significant events occurring during my study period from 1975 to 2018 to provide the context needed to understanding the expected utility functions of terrorist organizations operating in Lebanon at that time. Expected utility functions are when an individual will choose a behavior which will maximize the potential benefits and minimize the potential costs (Becker, 1968). Potential offenders are constantly making a choice, to either engage in criminal behavior or engage in law abiding behavior, depending on which action will benefit the individual the most and minimize the potential costs at that time (Becker, 1968). Terrorist organizations

face the same decision processes, in which the organizations choose to engage in a terrorist attack or target a specific group of individuals based on which behavior will provide the greatest benefit to the organization and will limit the potential costs. Finally, I conclude with a discussion of the rational choice theory and its application to the study.

### Historical Context

Lebanon has been ruled by many different groups, including foreign governments. Initially, Lebanon was ruled by the Turkish until 1918, due to the defeat and dissolution of the Ottoman Empire (Harris, 2012). The French then took control of Lebanon based on the French Mandate for Syria and Lebanon in 1920 (Harris, 2012). The French created the state of Greater Lebanon as a safe haven for Maronite Christians but neglected the large Muslim population within its borders (Harris, 2012). This neglect led to power imbalances between the Maronite Christians, Sunnis, and Shias, building resentment, bitterness, and hostility in the Muslim communities toward the French and Maronite Christians.

After France relinquished their power and control over Lebanon, Lebanon gained independence from foreign rule in 1943 (Ṭarābulsī, 2012). The Maronites primarily assumed power over the country and economy. The rising tension between the Sunnis, Shias, and Maronites led to the signing of the national pact. In an attempt to balance power between the Christians, Sunnis, and Shia's, each group was assigned to fulfill a parliament position. The president was required to be Maronite, the prime minister required to be Sunni, and the speaker of parliament required to be Shia.

As attempts were made to stem the rising hostility between the three major religious groups, further conflict continued to escalate the situation. The 1948 Arab-Israeli War led to an influx of Palestinian refugees, making the Lebanese weary of foreign civilians (Harris, 2012). In 1958, Lebanese President Camille Chamoun asked the U.S. to intervene, as a civil war between Maronite Christians and Lebanese Muslims seemed imminent (see Appendix A for further details) (Harris, 2012). This invitation resulted in exacerbating the mounting tension and sowed the seeds of mistrust between Lebanese civilians and the government.

Conflict in other countries of the Middle East also contributed to Lebanon's rising tension. During the Israeli Six Day War in 1967, Palestinians used Lebanese territory as a base for attacks on Israel, straining Lebanese/Israeli relations (Ṭarābulsī, 2012). In 1968, there were two major attacks against Israel, further weakening relationships between Israel and Lebanon (Israel Ministry of Foreign Affairs, 2000) (see Appendix A for further detail). Within Lebanon, political tensions also intensified between Christian and Muslim groups after these attacks.

The next major clash between Christian and Muslim groups was the 1969 Cairo Agreement (Ṭarābulsī, 2012), which granted the Palestine Liberation Organization (PLO) autonomy over Palestinian refugee camps operating in Lebanon and access routes to northern Israel in return for PLO recognition of Lebanese sovereignty (see Appendix A for further detail). The agreement heightened hostility between PLO and Maronite Christian groups, ultimately leading to the event known as the Bus Massacre on April 13, 1975. The Bus Massacre, also known as the "Ain el-Rammaneh incident" or "Black Sunday", was a series of armed clashes between the

Phalangist (a Lebanese Christian militia) and the Palestine Liberation Organization (PLO) (Harris, 2012). The tension that had existed between religious groups for years had finally erupted into full scale violent conflicts, marking the official beginning of Lebanon's civil war.

Armed clashes between PLO guerrilla factions and other Christian militias heightened the tension between Maronite Christian and Lebanese Muslim groups. Finally, on December 6, 1975 the event known as Black Saturday occurred (Ṭarābulṣī, 2012). Four members of the Phalangist group were killed, resulting in the Phalange setting up roadblocks throughout Beirut to inspect identification cards for religious affiliation. Many Palestinian or Lebanese Muslims who passed through these roadblocks were killed immediately. After this incident, all militias from each of the religious groups (Christian Maronite, Sunnis, and Shias) joined the fighting (Harris, 2012).

In October 1976, Syria was granted access to Lebanon. Syria was mandated by the Arab League to restore peace and the Arab Deterrent Force was created to aid in Syria's mission (Maksoud, Bugh, Barnett, Khalaf, Kingston, & Ochsenwald, 2020). Maronite Christian militias were against the power granted to Syria, which led to the Hundred Days War between Maronite Christian militias and the Syrian troops of the Arab Deterrent Force from February 7, 1978 to April 1978 (Harris, 2012). This conflict resulted in Syria's expulsion from East Beirut and the end of Arab Deterrent Force's peace-keeping mission in Lebanon.

Tension between the PLO and Israel continued to escalate. The PLO faction, Fatah, hijacked a bus full of Israeli civilians on Israel's Coastal Highway in an



attempt to ruin Israeli-Egyptian peace talks and to damage tourism in Israel (Maksoud et al, 2020). In response, on March 14, 1978, Israel launched Operation Litani. Israeli forces, aided by Phalangist militants, pushed PLO forces out of southern Lebanon (Ṭarābulsī, 2012). The resulting conflicts led to the establishment of the UN Interim Force in Lebanon (UNIFIL), which was charged with establishing peace in Lebanon and to oversee the withdraw of Israel from Lebanese territory. At the same time, Israel provided financial resources and weaponry to the newly created South Lebanese Army, who fought against PLO and Shiite militants to re-capture territory in southern Lebanon (Ṭarābulsī, 2012). Conflict between PLO and Israel continued to grow, leading to Israel invading Lebanon again on June 6, 1982 in response to Palestinian guerilla attacks and the attempted assassination of Israel's ambassador to the United Kingdom (Harris, 2012). By June 15, 1982, Israeli units were entrenched outside Beirut and the U.S. began calling for the PLO withdrawal from Lebanon (Ṭarābulsī, 2012). The first troops of a multinational force landed in Beirut on August 21, 1982 to oversee the PLO withdrawal from Lebanon. An agreement was also reached to maintain a multinational force of U.S. Marines, French, Italian, and British soldiers in Lebanon (Ṭarābulsī, 2012).

The U.S. continued to advocate for peace in Lebanon, resulting in the creation of a peace agreement on May 17, 1983, stating that Israel would withdraw its troops conditional on the departure of Syrian troops (Ṭarābulsī, 2012). Many Lebanese Muslims viewed the peace agreement as a way for Israel to gain permanent power over southern Lebanon and vehemently opposed the agreement (Ṭarābulsī, 2012). Syria also opposed the agreement and declined to discuss the withdrawal of its troops,

thus halting any further discussions of peace. Resentment against foreign government interference increased, until Hezbollah carried out a suicide bombing on French and American military barracks in Beirut on October 23, 1983 (Maksoud et al., 2020). This resulted in the Lebanese government cancelling the May 17 agreement on March 5, 1984 and President Reagan withdrawing all U.S. Marines from Lebanon (Harris, 2012).

Between 1985 and 1989, sectarian conflict worsened as various efforts at national reconciliation failed (Ṭarābulsī, 2012). Finally, in September 1989, the Taif Agreement was created to end the civil war and to balance power between the Maronite Christians, Sunnis, and Shias. The agreement reorganized the government by reducing the power of the traditionally Maronite president and re-distributing the number of parliamentary seats, cabinet posts, and senior administrative positions to achieve equal power and representation of Christian and Muslim officials (Ṭarābulsī, 2012). The agreement also called for the disarmament of all militias, the withdrawal of Israeli forces, and for Syrian forces to remain in Lebanon for a period of up to two years to help assist the new government (Maksoud et al, 2020).

Even though the civil war was technically over, fighting and conflict continued until the October 13, 1990 Massacre in Beirut. Conflict occurred between the Syrian Army and Lebanese militias due to Prime Minister Michel Aoun declaration of the War of Liberation against Syrian occupation of Lebanon (Ṭarābulsī, 2012). An estimated 700 Lebanese civilians were killed, 2000 Lebanese civilians injured, and at least 400 Lebanese Army soldiers executed (Maksoud et al., 2020). Due to the severity of the attack and Syria gaining full control over Lebanon's capital,

the 1990 Massacre is known as the official end to Lebanon's civil war (Harris, 2012; Maksoud et al., 2020; "Lebanon profile – Timeline", 2018; Ṭarābulṣī, 2012).

Before the two-year deadline established in the Taif Agreement ended, a treaty of "fraternity, coordination, and cooperation" was signed on May 22, 1991 between Lebanon and Syria to legitimize Syria's continued presence in Lebanon (Maksoud et al., 2020). In the same month, the National Assembly ordered the dissolution of all militias, except for Hezbollah ("Lebanon profile – Timeline", 2018). In 1992, Lebanon held its first free election since before the start of the war in 1972 ("Lebanon profile – Timeline", 2018). Even though the Lebanese government made attempts to re-establish the political power of the government, the continued occupation by Israel and Syria prevented the country from gaining total independence.

In response to Israel's continued occupation in Lebanon, tension and fighting between Lebanese militias and Israel intensified (Maksoud et al, 2020). Israel then launched Operation Grapes of Wrath on April 1996, in which Israel bombed Hezbollah bases in southern Lebanon, southern Beirut, and the Bekaa Valley ("Lebanon profile – Timeline", 2018). The Israel-Lebanon Monitoring Group with members from U.S., France, Israel, Lebanon, and Syria was then established to monitor a truce between Israel and Lebanon and eventually led to Israel beginning to withdraw from Lebanon. On May 23, 2000, Israel officially ended its occupation of Lebanon ("Lebanon profile – Timeline", 2018). Syria refused to exit Lebanon and calls for Syrian disengagement by Maronite Christians and Sunnis rapidly increased. The U.S. also called for Syria to end its occupation and to cease interfering with

internal Lebanese matters (Maksoud et al, 2020). In response to Syria refusing to end its occupation, the UN Security Council adopted the UN Security Council Resolution 1559 on September 2, 2004 (Maksoud et al., 2020). The resolution called for all foreign forces to cease occupying Lebanon and for the disbanding and disarmament of all Lebanese and non-Lebanese militias. Starting February 21, 2005, daily protests of Syria's continued occupation of Lebanon began by Lebanese Christians, Sunnis, and Shias (Maksoud et al., 2020). On April 26, 2005, Syria officially ended its occupation of Lebanon ("Lebanon profile – Timeline", 2018).

After all foreign governments had withdrawn from Lebanon, issues related to political power and representation in the Lebanese government arose. As the end of President Lahoud's nine-year period in office approached in late 2007, attempts to select a new president were delayed, due to March 9 bloc group refusing to accept any successor until they received a greater share of political power (Maksoud et al., 2020). This resulted in Lahoud's term ending in November 2007 and opposing political parties continued to fight over the position. The position remained unfilled until May 21, 2008, when the Doha Agreement was signed to end Hezbollah's 2008 Coup Attempt ("Lebanon profile – Timeline", 2018). In this agreement, Hezbollah gained veto power in government and required that Michel Suleiman would be elected president. At that time, Michel Suleiman was the commander of the Lebanese Armed Forces and had recently helped navigate a peace agreement between the Lebanese government and Hezbollah (Maksoud et al., 2020). He was the only candidate that the opposing political parties would agree to elect due to his status as

an independent and the respect he had gained throughout his extensive military career (Maksoud et al., 2020).

Over the next 10 years, Hezbollah continued to undermine the government and advocated for more political power. In January 2011, a group of 11 ministers from Hezbollah and allied parties resigned from the government due to disagreements between Hezbollah and other political parties, causing the government to collapse (Maksoud et al., 2020). After five months of deliberation, the new prime minister granted eight additional parliament seats to Hezbollah and its allies in order to reconvene the government. Next, Lebanon's political system came to a halt in 2014 for two years when President Suleiman resigned from office. Hezbollah delayed electing a new president until Lebanon's other political parties finally acceded to their demands of electing Michel Aoun as the new president in October 2016 (Maksoud et al., 2020). Michel Aoun had formed an alliance between the political party he led (Free Patriotic Movement) and Hezbollah in 2006 (Maksoud et al., 2020). Michel Aoun and the Free Patriotic Movement supported Hezbollah throughout the years in a variety of situations, such as helping Hezbollah in their war against Israel. In return, Hezbollah secured Michel Aoun's election as Lebanon's next president (Maksoud et al., 2020).

On November 3, 2017, Prime Minister Saad Hariri visited Saudi Arabia, announced his resignation, and accused Hezbollah and Iran of destabilizing Lebanon. Hezbollah rejected the claims and accused Saudi Arabia of directing Hariri to resign in order to weaken Hezbollah. Hariri then returned to Lebanon on November 22 and rescinded his resignation ("Lebanon profile – Timeline", 2018). Finally, Lebanon

held its first legislative election since 2009 on May 6, 2018. Hezbollah and its allies won the majority of seats in Lebanon's parliament, thus resulting in Hezbollah being the dominant political party for the first time in Lebanon's history. The formation of the new government was delayed until January 31, 2019 due to continued disagreements between political parties and Hezbollah's demands for one of the Sunni representative's cabinet seats. In the next section, I discuss how the shifting tensions and conflicts throughout Lebanese' history influenced terrorist organizations' utility functions and targeting decisions.

### *Target Selection and Rational Choice Theory*

Researchers have tested to see if target selection is a rational process, in which terrorist organizations make the decision to target a specific group of individuals (Anderton & Carter, 2006; Caplan, 2006; Crenshaw, 1990; Drake, 1998; Pape, 2005; Perry & Hasisi, 2015). Target selection is based on calculating which targets will yield the greatest benefit to the organization and will limit the potential costs from attacking the specific target (Shughart, 2011). For the proposed thesis, I will use ideas from Becker's (1968) framing of the rational choice model of crime to help elucidate the targeting choices of Lebanese terrorist organizations based on which targets might optimize their utility during different periods in Lebanon's history. I will be focusing on the general targeting strategies of Lebanese terrorist organizations, instead of identifying the specific targeting strategies to individual terrorist organizations.

The rational choice model of crime suggests that individuals will take into consideration both the costs and benefits of committing a specific action, may it be a law-abiding behavior or engaging in a crime (Becker, 1968). Becker frames the rational choice decision by using the expected utility function to account for the components of risk and reward, as demonstrated in equation 1.

$$EU = pU(Y - a) + (1 - p)U(Y) \quad (1)$$

According to equation 1,  $Y$  represents the gains achieved after committing the crime and not being apprehended;  $a$  is the severity of punishment if apprehended;  $p$  represents the potential offender's likelihood of getting caught and convicted of the crime. Individuals may choose to not commit a crime if the potential benefits ( $Y$ ) are too low and the chances of being caught ( $p$ ) and given a severe punishment ( $a$ ) are too high. Thus, the decision to engage in criminal behavior for person  $i$  depends on whether  $E(u_{crime})_i > E(u_{noncrime})_i$ , in which the  $u_{noncrime}$  is simply the status quo.

Becker's utility function has been applied in a variety of different crimes such as drunk driving, sexual assault, burglary, and terrorism. Nagin and Paternoster (1993) conducted a study with undergraduate college students to assess potential engagement in drunk driving, sexual assault, and theft based on varying costs and benefits. They found that attractiveness of the crime target, the ease of committing the crime with minimum risk, and perceptions of the costs and benefits of committing the crime were all significantly related to all offending decisions. An individual would engage in any of the three offenses if they believed that the chances of being caught for the offense were low and the potential benefits of committing the crime were high.

Hakim, Rengert, and Shachmurove (2005) conducted a study to investigate if differences in expected utility functions based on home characteristics lead to the decision to burglarize or not burglarize a home. The study found that if there are no security precautions and the house is more isolated from potential guardians, the lower the costs to the offender and the greater chance the offender will choose to commit the burglary. Also, targeting expensive homes will provide the greatest benefits to the burglar, thus leading to a greater chance of burglary.

Finally, Dugan and Chenoweth (2012) created a second utility function to measure the utility of refraining from perpetrating a terrorist attack in Israel. By increasing the benefits gained for terrorists not engaging in attacks, terrorists would choose to engage in the non-terrorist behavior, leading to a reduction in terrorist attacks overall. The study found that increasing the number of conciliatory actions by the government on non-terrorist behavior was related to decreases in terrorist attacks in Israel. In contrast, increasing the repressive actions by the government on terrorist behavior was either unrelated to terrorist attacks or led to increases in terrorist attacks.

Utility functions are a helpful concept in understanding why some individuals engage in criminal or terrorist behaviors. Every individual's or organization's utility function varies, depending on what the individual or organization values most. While terrorist organizations have different motives and stated goals, Crenshaw (1987) argues that they also all share one common goal, to survive and eventually thrive. In order to optimize their utility function, the terrorist organizations would make strategic choices about when and how to attack, so they can improve their chances of



survival. Therefore, I argue in this thesis that terrorist organizations carefully select their targets to maximize their own utility function while satisfying their main objective (survival). One strategy is to attack any entity or group that poses a threat to that survival. Attacking the group that poses the greatest threat potentially increases the chances of the organization's survival, thus helping to optimize the organization's utility function<sup>1</sup>. As represented in equation 2, the utility function measures the power and perseverance of the organization to survive.

$$E(U_{target\ i}) = p_i U(Y_i - a_i) + (1 - p_i) U(Y_i) \quad (2)$$

According to equation 2,  $Y_i$  represents the gains achieved after targeting a group  $i$  and not being apprehended as well as an organization's chance of survival;  $a_i$  is the severity of punishment if apprehended;  $p_i$  represents the terrorist organization's likelihood of getting caught and punished for targeting a specific group. Thus, the decision to attack one target over another depends on which target will most likely optimize the organization's utility function. One important component of targeting strategies is that they change over time due to varying levels of perceived threat to all terrorist organization's survival, which is the case in Lebanon. Appendix B provides a summary timeline of key moments in Lebanese history and identifies if the event occurred during the civil war, after the civil war, or after state failure. Each time period had tensions and conflicts between different groups, resulting in predicted changes in terrorist targeting strategies.

---

<sup>1</sup> I use the word "group" to refer to a type of entity and not a specific organization. To keep this distinction, I use the word "organization" to refer to terrorist organizations.

As discussed previously, before the civil war, tension primarily existed between religious organizations based on power imbalances between the Maronite Christians, Shias, and Sunnis (Harris, 2012). Eventually, this tension led to violent conflict and the beginning of the civil war, allowing religious organizations to fight for dominance over other groups (Ṭarābulsī, 2012). Based on the tension between religious and terrorist organizations, other terrorist organizations held the greatest threat due to attempts to gain power during the turmoil of the civil war. If this theory is correct, all terrorist organizations should have changed their primary targeting to other terrorist organizations during Lebanon's civil war to maximize their own utility function and ensure their own survival over other terrorist organizations.

After the civil war, tension shifted from conflict between terrorist organizations to conflict between terrorist organizations and the foreign governments, especially the governments of Israel and Syria. Even though individual terrorist organizations operating in Lebanon have different incentives for attacking either Israel or Syria, I will study the overall decision for terrorist organizations to attack any foreign entity instead of differentiating between attacking Israeli or Syrian targets. I will include a supplemental analysis that studies the targeting strategies of specific ideology groups, such as Hezbollah, to account for these differing motivations.

Due to the continued occupation by Syria and Israel after Lebanon's civil war, terrorist organizations felt the most threatened by these foreign governments and wanted to remove them from Lebanon. Threats to the survival of terrorist organizations varied based on which targeting group ruled the location, leading to

varying targeting types amongst terrorist organizations. Attacks occurring in foreign controlled territory would have target types of foreign nationalities more than attacks occurring in only Lebanese controlled territory. The potential benefits of attacking foreign governments include gaining power and recognition for attacking a high-level target (Polo, 2019). Also, control of Lebanese territory by Israel and Syria after the civil war built stability, which threatened the survival of terrorist organizations. If this theory is correct, then all terrorist organizations should have reacted to this threat by changing the primary targeting type to foreign governments, in order to weaken the power and control foreign governments had over Lebanese territory and gain this power for the terrorist organization. The frequency of attacks against foreign governments by terrorist organizations should increase until 2005, when Syria officially ended its occupation of Lebanon (Addis, 2011).

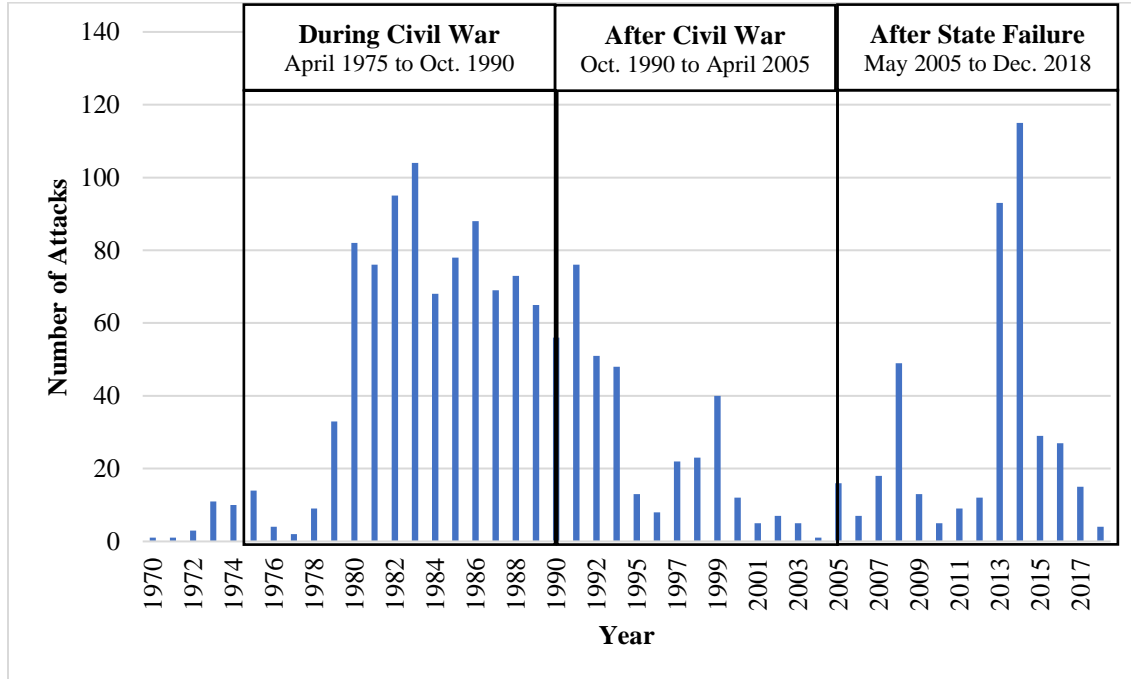
After Syria ended its occupation of Lebanon, a power struggle began between terrorist organizations and the Lebanese government based on power vacuums left after Israel and Syria ended their occupation of Lebanon. As previously discussed, Lebanon became a failed state due to the lack of control by the Lebanese government. With the Lebanese government being unable to protect citizens from foreign intervention and terrorist attacks, radical movements were better able to grow in power. Based on the inability of the Lebanese government to react against terrorist attacks, survival of the terrorist organizations was no longer threatened, and the primary objective of the terrorist organizations should have theoretically changed. If this theory is correct, then instead of focusing solely on survival, all terrorist organizations should have changed their focus to thriving and expanding their

organizations by attacking the Lebanese government to gain the power associated with attacking a high-level target (Crenshaw, 1981). Also, terrorist organizations attack governmental targets in order to gain recognition as non-state actors with political power that are legitimate alternatives to the Lebanese government (Crenshaw, 1981). For example, Hezbollah emerged as a legitimate alternative to the Lebanese government by offering social services to Lebanese civilians and has even gained political power within the Lebanese government (Maksoud et al., 2020). Ultimately, all terrorist organizations should have changed their targeting strategies after Lebanon became a failed state to gain power and prevent the Lebanese government from having full control over the country.

### Hypotheses

Based on the rational choice theory and terrorist organizations' focus on survival, the thesis poses several hypotheses for terrorist targeting strategies in Lebanon. Due to significant periods of conflict in Lebanon's history (including during the civil war, after the civil war, and after state failure), Lebanese terrorist organizations will target groups that appear the most threatening to the organization's primary objectives (either to survive or thrive). Figure 1 indicates the total number of terrorist attacks occurring in each of the major time periods.

**Figure 1: Timeline of Total Terrorist Attacks in Lebanon**



*H1:* During the civil war, terrorist organizations had the highest probability of being targeted, net other factors.

Based on tensions between religious groups before the civil war, conflict and fighting occurred due to direct competition between terrorist organizations to gain power needed to ensure survival. The theory would claim that other terrorist organizations posed the greatest threat to the terrorist organization’s survival.

*H2:* After the civil war and prior to state failure, foreign governments had the highest probability of being targeted, net other factors.

The theory would claim that terrorist organizations after the civil war shifted target types to foreign governments. Foreign governments held considerable power in ruling large portions of Lebanese territory and terrorist organizations’ survival was threatened by this power.

*H3:* After state failure, the Lebanese government had the highest probability of being targeted, net other factors.

After Lebanon became a failed state in 2005, the theory would claim that the target type shifted from foreign governments to the Lebanese government because the terrorist organizations and the Lebanese government were fighting to gain power. The Lebanese government wanted to gain the power lost to Syria and Israel during the civil war, but terrorist organizations wanted to gain this power for themselves. The theory would indicate that terrorist organizations no longer focused on survival, but instead focused on thriving and delegitimizing the Lebanese government to allow terrorism to flourish.

## Chapter 3: Data and Methods

To test the above hypotheses, I use data from the Global Terrorism Database to assess how one of three major time periods in Lebanon's history (during the civil war, after the civil war, and after state failure) influences the targeting type of terrorist organizations and provide controls for the relationship between these key phenomena. Instead of conditioning on the specific terrorist organization, the unit of analysis for the thesis is the specific terrorist incident. I am interested in understanding why terrorist organizations overall change their targeting strategies rather than focusing on specific perpetrators and their targeting strategies. In order to focus on the collective targeting strategies, I will be controlling for the types of organizations if known. I begin with a discussion of the Global Terrorism Database, describing the strengths and weaknesses of using these data for this research. I discuss the outcome of interest, along with the independent and control variables. Finally, I explain the methodology including the analytic method of choice, the multinomial logistic regression model.

### Data

Data used for this thesis come from the Global Terrorism Database (GTD), collected by the National Consortium for the Study of Terrorism and Responses to Terrorism (START). The GTD is an open-source database that includes information on domestic and international terrorist attacks from 1970 to 2018. Collectors seek out a variety of sources to include in the database, such as media articles, electronic news archives, available data sets, and secondary source materials like books, journals, and legal documents (START, 2019). Throughout the GTD's history, the data were collected by different groups that relied on different protocols, thus influencing the information collected about the terrorist incidents (Dugan & Distler 2016). Phase one

was collected in real time by the Pinkerton Global Intelligence Service from 1970 to 1997. Phase two was collected retrospectively by the Center for Terrorism and Intelligence Studies from January 1998 to March 2008. Phase three was collected prospectively by the Institute for the Study of Violent Groups from April 2008 to 2011. Phase four (the current phase) is collected in real time by START since 2012. The last phase uses machine learning to search among 55,000 unique sources per day to determine if an article is reporting information about a terrorist incident (Jensen, 2013). Access to these technology advancements has helped increase awareness of terrorist attacks and increased confidence that all terrorist incidents are being reported in the GTD. The different data collection periods might result in inconsistent data acquisition, requiring me to include control variables in the analysis for the GTD collection periods.

Terrorism in the GTD is defined as, “the threatened or actual use of illegal force and violence to attain political, economic, religious, or social goals through fear, coercion, or intimidation” (LaFree and Dugan, 2007). For an incident to have been included in the dataset, it must contain the following three elements:

- I. The incident was intentional (the result of a conscious calculation on the part of the perpetrator).
- II. The incident included some observable level of violence or the threat of violence.
- III. The perpetrator of the incident was a sub-national actor.

In addition to these three criteria, two of the following three conditions must also be met in order for an event to have been included in the GTD:



- I. The violent act was aimed at attaining a political, economic, religious, or social goal.
- II. The violent act included evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) other than the immediate victims
- III. The action must be outside the context of legitimate warfare activities.

In total, there are 2,486 terrorist attacks occurring in Lebanon between the years of 1970 to 2018 in the GTD. I will filter on incidents that meet the third additional criteria, which is the terrorist incident must be outside the context of legitimate warfare activities. One of the time periods included in the analysis is during Lebanon's civil war. I want to exclude the attacks that are justified by the civil war and focus on the terrorist attacks that were purposely caused to optimize the terrorist organizations' utility functions. There is a total of 1,665 terrorist incidents occurring in Lebanon that will be used in the analysis.

The GTD will provide the necessary data on the terrorist incidents occurring in Lebanon to understand why targeting strategies change over time. The dependent variable of interest measures the general target type for each terrorist incident in Lebanon from 1970 to 2018. Target types included in the GTD are listed as business, government (general), police, military, airports & aircraft, government (diplomatic), educational institution, food or water supply, journalists & media, maritime, NGO (non-governmental organizations), private citizens & property, religious figures/institutions, telecommunication, terrorists/non-state militias, tourists,

transportation (other than aviation) unknown, utilities, and violent political parties. I will sort these specific target types into the general categories of terrorist organization, foreign entity, government, and soft targets. A soft target is a group or location that has low protection and is easily accessible, resulting in the target being more vulnerable to terrorist attacks. Table 1 demonstrates how the specific target types in the GTD are categorized into general target types for the dependent variable. All the specific target types included in the general category of soft targets in table 1 fit this description because they are all public places that are more vulnerable to terrorist attacks. I will be analyzing the target type of each terrorist attack reported in the GTD and will observe how the overall selection of specific target types changes over the three major time periods.

**Table 1: Classifying the Specific Target Type by the General Target Type for the Dependent Variable**

Terrorist Organizations	Foreign Entity (Nationality ≠ Lebanese)	Government (Nationality = Lebanese)	Soft Targets
Terrorist/non-state militias	Government (general)	Government (general)	Business
Violent Political Parties	Government (diplomatic)	Government (diplomatic)	Educational Institution
	Military	Military	Food or Water supply
	Airports & Aircrafts	Airports & Aircrafts	Journalists & Media
	Police	Police	Maritime
			NGO (non-governmental organizations)
			Telecommunication

			Tourists
			Transportation (other than aviation)
			Utilities

In the GTD, the dependent variable of target types can have up to three potential target types identified for each terrorist attack. In order to construct a categorical dependent variable with mutually exclusive targets, I will need to reconcile those attacks which include multiple target types across categories (e.g., government and foreign entity) to identify the primary target type. I will read the full case and collect additional details to fully understand the terrorist attack. There are several potential coding principles I can use when determining my primary targeting type. One potential way is to identify the hardest reaching target for the specific terrorist attack. The more effort a terrorist organization must exert to attack a target indicates that the target is more valuable to the terrorist organization and their goals (Asal, Rethemeyer, Anderson, Stein, Rizzo, & Rozea, 2009; Drake, 1998; Polo, 2019). For example, if a Lebanese government official was attacked at their home and other civilians in the area were also harmed, the primary target type would be government. The government is a harder to reach target than a public institution. Successfully attacking the government requires more time, effort, and resources than attacking an easily accessible soft target (Polo, 2019).

Another potential way to identify the primary target is based on the spatial context of the terrorist incident. For example, if a terrorist attack occurred at a mall and one member of a terrorist organization was harmed during the incident, the

primary target type would be soft target because the attack occurred in a public area and the terrorist organization was targeting civilians. Even though the terrorist was harmed during the attack, it appears the Lebanese civilians were the primary target instead of the one terrorist that was coincidentally visiting the mall at that time.

I will also randomly assign the primary target classification when there are multiple targets identified using a random number generator. By arbitrarily assigning the target classification, I can compare the different coding principles. I will run my models using the three coding methods to determine if using any of the coding principles influences my results.

#### Strengths of the GTD

There are several strengths to using the Global Terrorism Database, as discussed previously by LaFree and Dugan (2007). First, the GTD includes domestic and international terrorism incidents for all years, which is more expansive than other data sources that only collect information on transnational terrorism (e.g., ITERATE, RAND prior to 1998). The inclusion of domestic attacks is crucial for the proposed thesis study because some of my hypotheses focus on attacks by Lebanese groups on Lebanese targets in Lebanon (i.e., domestic attacks). Second, the GTD provides 48 years of terrorist incident information. Based on the comprehensiveness of the database, I can view the number of terrorist attacks occurring before, during, and after the civil war, as well as after state failure for Lebanon. Figure 1 illustrates a timeline of all terrorist attacks occurring in Lebanon during the study period. Third, improvements in technology have eased the collection of information on terrorist attacks, thus allowing data collectors and researchers to be more confident that the

incidents of terrorism reported in the news are being included in the GTD (Dugan & Distler, 2016). Even though the GTD is the best available database for my proposed thesis, there are still some limitations of the GTD that need to be addressed.

#### Limitations of the GTD

Because the GTD relies on open sources, it suffers from several limitations that will affect the validity of this research (Dugan & Distler, 2016). First, multiple sources reporting on the same incident has resulted in some inconsistencies about the facts of the terrorist attack. Currently, the GTD team uses specific coding rules if sources are reporting conflicting information on the intended target to determine which source is the most accurate. The team places greater weight on the sources that are historically more valid, the source that is the most recently updated, and if the same target type is reported across multiple sources (Dugan & Distler, 2016; LaFree, Dugan, & Miller, 2015). If none of the coding rules are satisfied, the GTD team uses the lowest reasonable value for the variable, in an effort to have the most conservative estimate possible (Dugan & Distler, 2016). By having conservative estimates, this could bias my estimates of my hypotheses and could result in me incorrectly rejecting my hypotheses.

Second, there is a bias toward newsworthy events, which can lead to sources under-reporting smaller attacks. The terrorist organization target category may be consistently under-reported across all time periods. Terrorist attacks against other terrorist organizations may not be covered by media sources because attacks against other target groups such as civilians will receive more media attention (Polo, 2019).

This would bias my estimate of hypothesis one toward zero and could result in me incorrectly rejecting hypothesis 1.

Third, there are inconsistencies over time in data collection. As discussed in the data section, the GTD has had four different data collection periods, resulting in potentially inconsistent data acquisition and reporting procedures of terrorist attacks. For example, in phase 2, the data was collected retrospectively rather than in real time. By collecting data retrospectively, certain sources became unavailable, leading to either missing incidents or missing data for the attacks. It is difficult to assess whether differences in the number of attacks over time are due to changes in the actual number of attacks or changes in the data collection strategy. In order to overcome these inconsistencies, I will be incorporating control variables to account for the differences across the data collection periods. By controlling for the data collection periods, the estimates will not be affected by the variations in information provided throughout each of the data collection periods. Even though I am including these control variables, I could still potentially be missing cases from data collection period 2. This could bias my estimates of hypotheses two and three toward zero because phase 2 starts during time period 2 and ends during time period 3.

Finally, there is missing data for 1993 due to the Pinkerton Global Intelligence Services (PGIS) misplacing the data before the START center gained control of the data. This year has been excluded from the present analysis.

### Dependent Variable

In alignment with the three hypotheses, I will create a categorical dependent variable with four values, each representing one of the four mutually exclusive target

types. The general target type categories are terrorist organizations, foreign entity, government, and soft targets. The soft target category will be the reference category for the analysis. Table 1 demonstrates how the specific target types in the GTD are categorized into general target types for the dependent variable. In addition to the classification of specific target types into general target types, there are additional coding rules for the foreign entity and government target types. For the foreign entity target type, the nationality of the target cannot be Lebanese. For the government target type, the nationality of the target must be listed as Lebanese. The complete list of variables and their operationalization can be found in table 2.

**Table 2: Description and Operationalization of Variables**

Variable	Possible Values	Description
<b>Dependent Variable</b>		
Target Type	[0, 3]	General category of the target attacked during the terrorist incident.  0 if it was a soft target, 1 if it was a terrorist organization, 2 if was a foreign entity, and 3 if it was the government.
<b>Independent Variables</b>		
During Civil War	0, 1	Terrorist attacks occurring from April 13, 1975 to October 13, 1990.
After Civil War (Prior to State Failure)	0, 1	Terrorist attacks occurring from October 14, 1990 to April 30, 2005. Also, excluding all terrorist attacks occurring in 1993.
After State Failure	0, 1	Terrorist attacks occurring from May 1, 2005 to December 31, 2018.
<b>Control Variables</b>		
Unattributed	0, 1	The perpetrator of the terrorist attack is unknown.
<i>Ideology</i>		
Religious	0, 1	The ideology of the organization is religious.
Nationalist	0, 1	The ideology of the organization is nationalist.

Political	0, 1	The ideology of the organization is political.
<i>Collection Period</i>		
GTD1	0, 1	Information on terrorist incident was collected in phase 1 of the GTD.
GTD2	0, 1	Information on terrorist incident was collected in phase 2 of the GTD.
GTD3	0, 1	Information on terrorist incident was collected in phase 3 of the GTD.
GTD4	0, 1	Information on terrorist incident was collected in phase 4 of the GTD.

*Independent Variables*

The primary independent variables of interest are significant time period's in Lebanon's history. I will create dichotomous measures for each of the time periods, in which 0 indicates that the terrorist attack did not occur during the specified time period and 1 indicates that the terrorist attack did occur (see Table 2 for the variable descriptions).

Rather than focusing on specific events that triggered different targeting strategies, I focus on three broader time periods in Lebanon's history (during the civil war, after the civil war but prior to state failure, and after state failure) and how these time periods effect terrorist targeting strategies. Appendix B provides a summary timeline of key moments in Lebanese history and the time periods these events occurred. During the civil war, tension primarily existed between different religious groups, militias, and terrorist organizations, resulting in the major historical events and violent conflicts occurring between these different groups. After the civil war (but before state failure), the conflict and tension was resolved between the groups due to the Lebanese government fixing the power imbalances between the Maronite Christians, Sunnis, and Shias. However, the tension and conflict between foreign



governments and Lebanese citizens increased due to the continued occupation and control by foreign governments in Lebanon. The major historical events and violent conflicts during this time were primarily based on driving foreign governments from the country. For example, previous enemies (Maronite Christians, Sunnis, and Shias) worked together in 2005 to engage in daily protests of Syria's continued occupation of Lebanon (Maksoud et al., 2020). After the foreign governments ended their occupation of Lebanon, the conflict and tension between foreign governments and the Lebanese was resolved. However, the tension and conflict between the Lebanese government and other Lebanese ruling forces increased due to the need to fill the vacated positions of power that was formerly controlled by foreign governments.

The major historical events and violent conflicts during this time were focused on different groups gaining political power. Each time period is defined by a conflict between different groups, resulting in similar historical events revolving around the primary conflict of the time. Due to each time period having a similar pattern in historical events, I am using the broader time periods instead of specific historical events in my study. I want to observe how the overall conflict of each time period influences the overall terrorist targeting strategies rather than focusing on individual historical events and how these events affect individual terrorist organizations in different ways.

### Control Variables

The proposed control variables are characteristics of terrorist organizations that influence the choices these organizations make, which need to be controlled to better understand the relationship between the dependent and independent variables.

Ideally, I would like to control for a variety of terrorist organization level characteristics such as size, primary ideology, lethality, age, and duration of organization. However, due to the large number of terrorist attacks that are unattributed to a perpetrator, I am unable to control for many of these organization characteristics.<sup>2</sup> Based on the available GTD data, I include control variables for if the perpetrator is unknown, the ideology of the terrorist organization, and the GTD data collection periods. Detailed descriptions and operationalizations of the control variables can be found above in table 2.

The first proposed control variable included in the analysis is if the terrorist attack is unattributed to a perpetrator. I will create a dichotomous measure for the perpetrator variable, in which 0 indicates that the perpetrator of the terrorist attack is known and 1 indicates that there is no perpetrator attributed to the attack. There are many terrorist incidents included in the GTD that do not have a perpetrator. As previously mentioned, I am interested in changes to the collective targeting strategies rather than a specific terrorist organization's strategies. By controlling for the types of organizations, I will be able to focus my analysis on the similar targeting decisions for all terrorist organizations. By controlling for the unattributed perpetrator, my results will not be negatively influenced by this variable, which is not contributing to my hypotheses.

Another control variable is the ideology of the terrorist organization including the categories of religious, nationalist, and political. I will create dichotomous

---

<sup>2</sup> I attempted to include information from the Big Allied and Dangerous (BAAD) database on organization level characteristics (Asal & Rethemeyer, 2015). However, the database only had systemic information on 22 of the 89 identified terrorist organization operating in Lebanon.

measures for each of the primary ideologies, in which 0 indicates that the terrorist organization is not the specific ideology and 1 indicates that the organization is the specific ideology. These variables are not mutually exclusive, due to terrorist organizations potentially identifying as multiple ideologies. Tension and conflict between different ideologies has had a major impact on Lebanon's history, specifically the conflict between the religious groups of Maronite Christians, Sunnis, and Shias which lead to Lebanon's civil war. A terrorist organization's ideology has a direct impact on which targeting categories appear to be in opposition to the organizations' goals, thus resulting in target selection of the individuals who appear to be an enemy of the organization and most threaten their primary goal of survival (Drake, 1998). Also, the targeting patterns of different ideology groups may vary over time due to changes in which targeting categories are viewed as the organizations' enemies.

The final control variable is related to the GTD collection periods. Throughout the GTD's history, there has been four different data collection teams, leading to differences in how the data were collected. I will create dichotomous measures for each of the data collection time periods, in which 0 indicates that the specific data collection team did not compile information on the terrorist incident and 1 indicates it was the specific the data collection team. Information on each terrorist attack will vary based on which collection team researched the incident, meaning that the differences in collection teams and types of collection are related to terrorist targeting strategies and the time period the incident occurred.

## Methods

Because the dependent variable is a categorical variable, the proposed thesis will use multinomial logistic regression models to analyze the relationship between terrorist targeting choices and the time period of the terrorist attack, while controlling for other possible explanations. Multinomial logistic regression models are used to estimate the marginal effects of the primary independent variables on the probability of the different outcomes for the dependent variable. In the context of this thesis, I will estimate how the predicted probabilities of targeting choices change for each time period. The dependent variable of targeting choices is coded as:

$$Y_i = \begin{cases} 0 & \text{if soft target} \\ 1 & \text{if terrorist organization} \\ 2 & \text{if foreign entity} \\ 3 & \text{if government} \end{cases}$$

I will test the hypotheses using the following logistic model,

$$\Pr(Y=k) = \frac{\exp(\mathbf{X}\boldsymbol{\beta}_k)}{1 + \sum_{k=1}^K \exp(\mathbf{X}\boldsymbol{\beta}_k)}, \quad k=1,2,3 \quad (3)$$

where

$$\mathbf{X}\boldsymbol{\beta}_k = \beta_{0k} + \beta_{1k} \textit{Time Period 1} + \beta_{2k} \textit{Time Period 2} + \beta_{3k} \textit{Time Period 3} + \beta_{4k} \textit{Controls}$$

Time period 1 includes terrorist attacks occurring during the civil war. Time period 2 includes terrorist attacks occurring after the civil war. Time period 3 includes terrorist attacks occurring after state failure. Controls include unattributed perpetrator, the ideology of the terrorist organization, and the GTD data collection periods. To test hypothesis 1, the estimate would appear as:

$$\Pr(Y=1) = \beta_1 \textit{Time Period 1} > (\beta_2 \textit{Time Period 2} \& \beta_3 \textit{Time Period 3}) \quad (4)$$

If hypothesis 1 is supported, the predicted probability of target type 1 (terrorist organizations) will be the greatest for time period 1, when compared to all other time periods ( $\beta_2$  &  $\beta_3$ ). To test hypothesis 2, the estimate would appear as:

$$\Pr(Y=2) = \beta_2 \text{Time Period 2} > (\beta_1 \text{Time Period 1} \& \beta_3 \text{Time Period 3}) \quad (5)$$

If hypothesis 2 is supported, the predicted probability of target type 2 (foreign entity) will be the greatest for time period 2, when compared to all other time periods ( $\beta_1$  &  $\beta_3$ ). To test hypothesis 3, the estimate would appear as:

$$\Pr(Y=3) = \beta_3 \text{Time Period 3} > (\beta_1 \text{Time Period 1} \& \beta_2 \text{Time Period 2}) \quad (6)$$

If hypothesis 3 is supported, the predicted probability of target type 3 (government) will be the greatest for time period 3, when compared to all other time periods ( $\beta_1$  &  $\beta_2$ ).

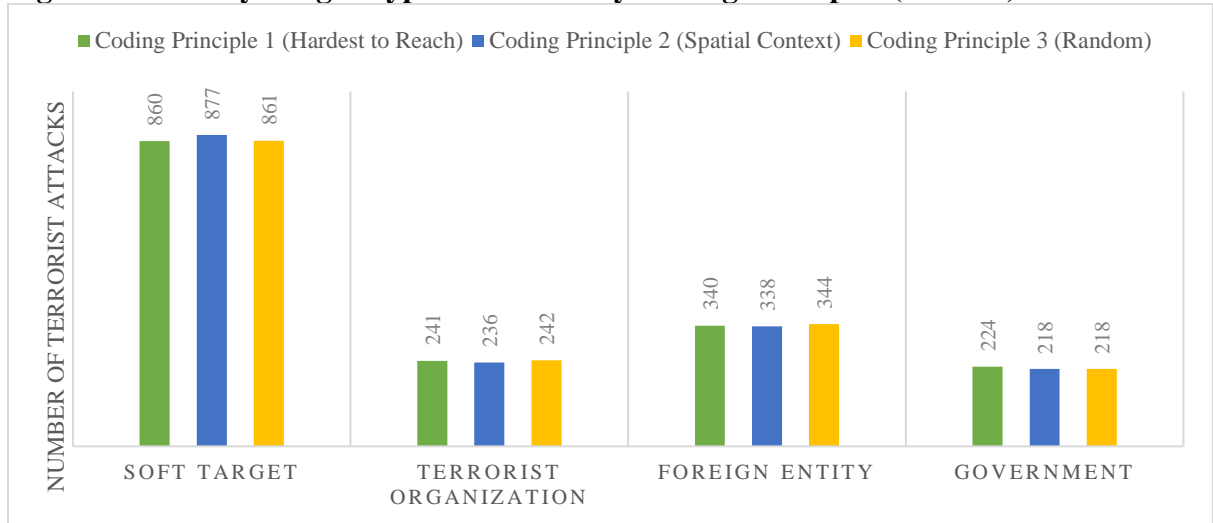
## Chapter 4: Results

In this chapter, I discuss the coding principles and the number of terrorist attacks classified by each of the primary targeting types. I present the descriptive statistics to summarize the primary dependent and independent variables. I then present the results of the multinomial logistic regression models. The results are then interpreted and applied to the three hypotheses.

### *Application of Coding Principles*

As identified in the data section, I applied the three coding principles to determine the primary target type of the terrorist attacks which included multiple target types. There were 63 terrorist attacks that were missing the target type identification, resulting with the total number of valid values for the dependent variable equaling 1,665. Figure 2 displays the number of terrorist attacks classified by the primary targeting type, according to each coding principle. Overall, the number of terrorist attacks by targeting type were somewhat consistent over the three coding principles, suggesting that the coding principle used should not impact the analysis. Due to these consistencies, I discuss the model results for coding principle 1 (hardest to reach) below and include the results for coding principles 2 (spatial context) and 3 (random) in Appendices C-E.

**Figure 2: Primary Target Types Identified by Coding Principles (N=1665)**



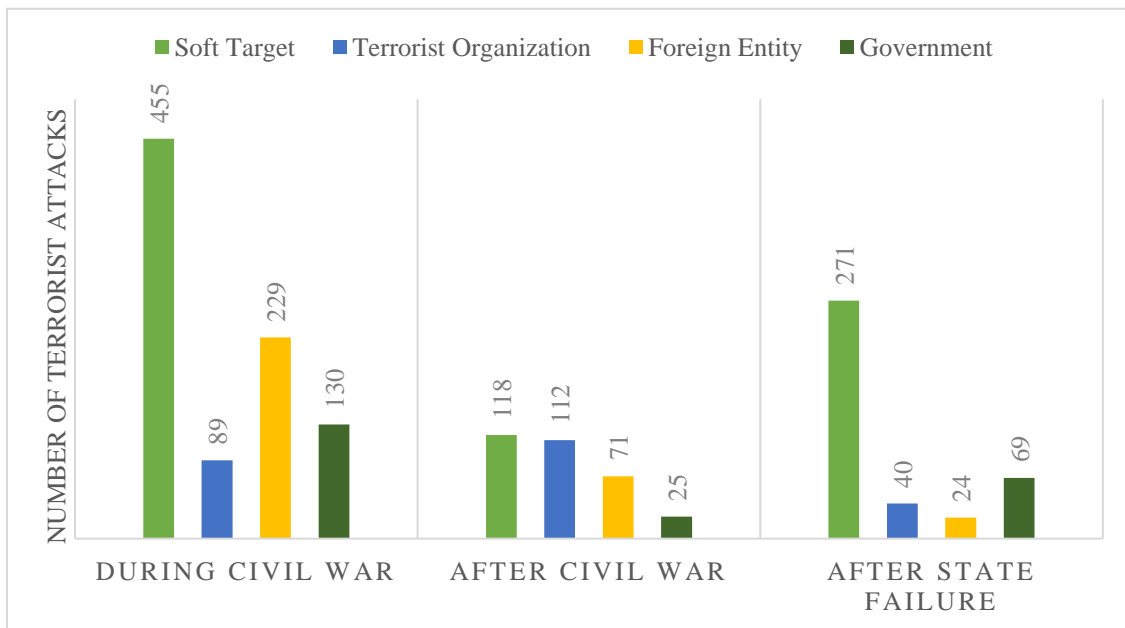
Descriptive Statistics

Figures 3 displays the changes in the dependent variable (targeting types) across the three time periods for coding principle 1 (hardest to reach). Figure 4 presents the proportions of total terrorist attacks during each time period that are attributed to each target type. Appendix C includes the changes in targeting types across the three time periods and the proportions of total terrorist attacks during each time period by target type for coding principles 2 (spatial context) and 3 (random). Overall, the number of terrorist attacks for each target type across time periods are approximately the same for each of the three coding principles.

The number of attacks against soft targets during the civil war was 455, decreased to 118 attacks after the civil war, and increased to 271 attacks after state failure. The number of attacks against terrorist organizations during the civil war was 89, increased to 112 attacks after the civil war, and decreased to 40 attacks after state failure. The number of attacks against foreign entities during the civil war was 229, decreased to 71 attacks after the civil war, and decreased to 24 attacks after state

failure. The number of attacks against the government during the civil war was 130, decreased to 25 attacks after the civil war, and increased to 69 attacks after state failure. The targeting patterns for each time period do not appear to align with the hypotheses, except for the government target type. As identified in figure 4, the proportion of terrorist attacks against the government target type was the largest after state failure, when compared to attacks against terrorist organizations and foreign entities, as predicted in hypothesis 3.

**Figure 3: Changes in Targeting Types for Each Time Period (N=1665)**





**Figure 4: Proportion of Total Terrorist Attacks During Each Time Period Attributed to Target Type (Coding Principle 1 - Hardest to Reach)**

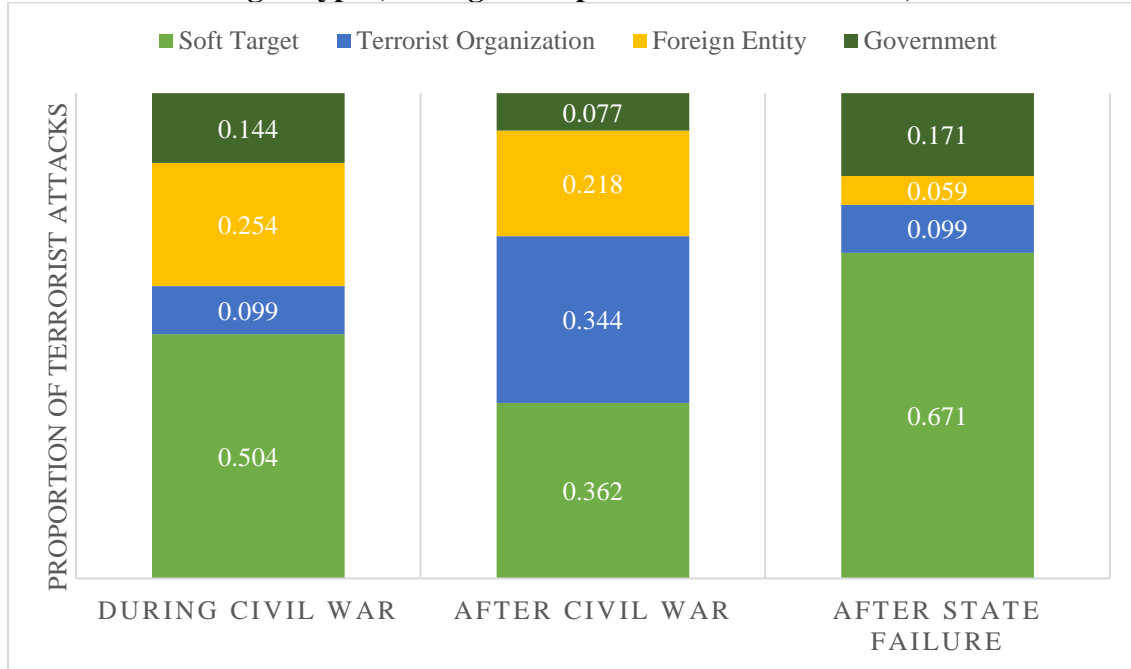


Table 3 provides descriptive statistics which consists of the means, standard deviations, and the minimum and maximum values for the primary independent variables. Time period 1 variable (during the civil war) has a mean of 0.542 and a standard deviation of 0.498. These descriptive statistics suggest that 54.2% of the total number of terrorist attacks included in the sample occurred during the civil war. Time period 2 variable (after civil war) has a mean of 0.198 and a standard deviation of 0.397 – indicating that 19.8% of the total terrorist attacks occurred after the civil war but prior to state failure. Time period 3 (after state failure) has a mean of 0.263 and a standard deviation of 0.429 – indicating that 26.3% of the total terrorist attacks occurred after state failure.

**Table 3: Descriptive Statistics of Independent and Control Variables**

Variable	N	Mean	SD	Min	Max
Time Periods					
During Civil War	1665	0.542	0.498	0	1
After Civil War	1665	0.198	0.397	0	1

After State Failure	1665	0.263	0.429	0	1
Unattributed Ideology	1665	0.704	0.456	0	1
Religious	1665	0.194	0.396	0	1
Political	1665	0.028	0.165	0	1
Nationalist	1665	0.074	0.262	0	1
Collection Periods					
GTD1	1665	0.697	0.460	0	1
GTD2	1665	0.086	0.280	0	1
GTD3	1665	0.040	0.197	0	1
GTD4	1665	0.177	0.382	0	1

---

Table 3 also provides the descriptive statistics for the control variables. The unattributed variable (the perpetrator is unknown) has a mean of 0.704 and a standard deviation of 0.456 – indicating that 70.4% of the total terrorist attacks had an unattributed perpetrator. The religious ideology variable has a mean of 0.194 and a standard deviation of 0.396 – indicating that 19.4% of the total terrorist attacks were conducted by a religious terrorist organization. The political ideology variable has a mean of 0.028 and a standard deviation of 0.165 – indicating that 2.8% of the total terrorist attacks were conducted by a political terrorist organization. The nationalist ideology variable has a mean of 0.074 and a standard deviation of 0.262 – indicating that 7.4% of the total terrorist attacks were conducted by a nationalist terrorist organization. When the perpetrator was known for 493 terrorist attacks, 323 (63.09%) of the attacks were by a religious group, 47 (9.53%) of the attacks were by a political group, and 123 (24.95%) of the attacks were by a nationalist group. The GTD collection period 1 has a mean of 0.697 and a standard deviation of 0.460 – indicating that 69.7% of the total terrorist attacks occurred during collection period 1. The GTD collection period 2 has a mean of 0.086 and a standard deviation of 0.280 – indicating

that 8.6% of the total terrorist attacks occurred during collection period 2. The GTD collection period 3 has a mean of 0.040 and a standard deviation of 0.197 – indicating that 4.0% of the total terrorist attacks occurred during collection period 3. The GTD collection period 4 has a mean of 0.177 and a standard deviation of 0.382 – indicating that 17.7% of the total terrorist attacks occurred during collection period 4.

Multinomial Logistic Results

Table 4 presents the coefficient estimates and standard errors for the multinomial logistic regression model for coding principle 1 (hardest to reach). Within the table is a set of estimates for each targeting outcome, indicating the changes in predicted logged odds for the targeting types based on each of the independent and control variables. Results are interpreted using marginal effects and standard errors in table 5 to estimate the probability of each targeting outcome during the civil war, after the civil war, and after state failure. Comparing the results for coding principles 1 through 3, the patterns in predicted target types and application to the hypotheses remained consistent for all coding principles. Due to the consistencies, I include the coefficient estimates, marginal effects, and standard errors for the multinomial logistic regression models for coding principles 2 (spatial context) and 3 (random) in Appendix D and focus on interpreting results for coding principle 1 (hardest to reach) for the hypotheses and control variable interpretation sections. For all three analyses, the base outcome for the dependent variable is soft target. The results are interpreted and applied to my hypotheses.

**Table 4: Multinomial Logistic Coefficients and (SE) Predicting Target Types – Coding Principle 1 (Hardest to Reach)**

	Terrorist Organization	Foreign Entity	Government
	$\beta$	$\beta$	$\beta$

	(SE)	(SE)	(SE)
<b>Time Periods</b>			
During Civil War	15.305 (1051.847)	-0.503 (0.379)	15.464 (1073.535)
After Civil War	16.874 (1051.847)	-0.696 (0.429)	14.987 (1073.535)
After State Failure	14.694 (1051.847)	-1.100 (0.653)	16.383 (1073.535)
<b>Control Variables</b>			
Unattributed	0.382 (0.426)	-0.724** (0.233)	0.110 (0.329)
Religious Ideology	1.236** (0.448)	0.008 (0.279)	0.202 (0.378)
Political Ideology	1.309* (0.578)	-0.253 (0.403)	0.467 (0.521)
Nationalist Ideology	0.882* (0.494)	0.039 (0.290)	-0.581 (0.489)
Collection Period 2	-0.426 (0.317)	0.944** (0.323)	0.409 (0.469)
Collection Period 3	0.617 (1.151)	-0.689 (0.717)	-0.571 (0.660)
Collection Period 4	0.124 (1.102)	-1.812** (0.629)	-1.525* (0.619)

Note: \* p-value ≤ 0.05; \*\*p-value ≤ 0.01 (one-tailed tests).

**Table 5: Marginal Effects and (SE) of Predicted Target Types – Coding Principle 1 (Hardest to Reach)**

	Terrorist Organization ME (SE)	Foreign Entity ME (SE)	Government ME (SE)
<b>Time Periods</b>			
During Civil War	0.466 (163.54)	-0.294 (0.211)	0.530 (163.63)
After Civil War	0.807 (180.94)	-0.263 (0.522)	0.181 (181.38)
After State Failure	0.205 (183.62)	-0.291 (0.784)	0.789 (183.45)
<b>Control Variables</b>			
Unattributed	0.048 (0.785)	-0.128** (0.198)	0.022 (0.395)
Religious Ideology	0.153** (2.117)	-0.035 (0.436)	-0.001 (1.023)
Political Ideology	0.188* (1.102)	-0.077 (0.629)	0.025 (0.619)

	(2.39)	(0.303)	(0.694)
Nationalist Ideology	0.119*	-0.010	-0.057
	(1.644)	(0.475)	(0.974)
Collection Period 2	-0.055	0.174**	0.018
	(0.932)	(0.526)	(0.303)
Collection Period 3	0.099	-0.090	-0.045
	(1.405)	(0.315)	(0.770)
Collection Period 4	0.055	-0.181**	-0.092*
	(0.865)	(0.663)	(1.574)

---

Note: \* p-value  $\leq$  0.05; \*\*p-value  $\leq$  0.01 (one-tailed tests).

### Hypothesis 1

For hypothesis 1 to be supported, during the civil war, terrorist organizations must have the highest probability of being targeted, net other factors. To test hypothesis 1, I conduct Wald hypothesis tests to compare the coefficients of table 4 for terrorist organization target type to the coefficients for target types foreign entity and government. The hypothesis tests were not statistically significant, indicating that attacks occurring during the civil war were not more likely to have a target type of terrorist organization compared to the target types of foreign entity or government. These results indicate that hypothesis 1 is not supported. Even though hypothesis 1 is not supported, I compare the marginal effects reported in table 5 of terrorist organization to foreign entity and government during the civil war to see if hypothesis 1 would have been supported if the results were statistically significant.

To assess whether the marginal effects are aligned with hypothesis 1, the marginal effects of the predicted probabilities for terrorist organizations must be highest during the civil war, compared to the predicted probabilities of target types foreign entity and government. Based on the results of table 5, during the civil war, the probability that a terrorist organization was targeted increased by 0.466, it

decreased by 0.294 for a foreign entity, and increased by 0.53 for the government. This indicates that hypothesis 1 is not supported because during the civil war, the government target type is the most likely to be targeted when compared to the other target types, instead of terrorist organization being the most likely to be targeted as predicted by hypothesis 1. Also, when comparing the marginal effects of terrorist organization across the time periods relative to soft targets, terrorist organizations are most likely to be targeted after the civil war when compared to during the civil war and after state failure, instead of being most likely to be targeted during the civil war as predicted by hypothesis 1.

#### Hypothesis 2

For hypothesis 2 to be supported, after the civil war, foreign entities must have the highest probability of being targeted, net other factors. To test hypothesis 2, I conduct Wald hypothesis tests to compare the coefficients of table 4 for foreign entity target type to the coefficients for target types terrorist organization and government. The hypothesis tests were not statistically significant, indicating that attacks occurring after the civil war were not more likely to have a target type of foreign entity compared to the target types of terrorist organization or government. These results indicate that hypothesis 2 is not supported. Even though hypothesis 2 is not supported, I compare the marginal effects reported in table 5 of foreign entity to terrorist organization and government after the civil war to see if hypothesis 2 would have been supported if the results were statistically significant.

To assess whether the marginal effects are aligned with hypothesis 2, the marginal effects of the predicted probabilities for foreign entities must be highest

after the civil war, compared to the predicted probabilities of target types terrorist organization and government. Based on the results of table 5, after the civil war, the probability that a terrorist organization was targeted decreased by 0.263, it increased by 0.807 for a foreign entity, and increased by 0.181 for the government. This indicates that hypothesis 2 is not supported because after the civil war, the terrorist organization target type is the most likely to be targeted when compared to the other target types, instead of foreign entity being the most likely to be targeted as predicted by hypothesis 2. Also, when comparing the marginal effects of foreign entity across the time periods relative to soft targets, the probabilities that foreign entities were targeted were lower for all three time periods, instead of being more likely to be targeted after the civil war as predicted by hypothesis 2.

### Hypothesis 3

For hypothesis 3 to be supported, after state failure, the government must have the highest probability of being targeted, net other factors. To test hypothesis 3, I conduct Wald hypothesis tests to compare the coefficients of table 4 for government target type to the coefficients for target types terrorist organization and foreign entity. The hypothesis tests were not statistically significant, indicating that attacks occurring after state failure were not more likely to have a target type of government compared to the target types of terrorist organization or foreign entity. These results indicate that hypothesis 3 is not supported. Even though hypothesis 3 is not supported, I compare the marginal effects reported in table 5 of government to terrorist organization and foreign entity after state failure to see if hypothesis 3 would have been supported if the results were statistically significant.

To assess whether the marginal effects are aligned with hypothesis 3, the marginal effects of the predicted probabilities for the government must be highest after state failure, compared to the predicted probabilities of target types terrorist organization and foreign entity. Based on the results of table 5, after state failure, the probability that the government was targeted increased by 0.789, it increased by 0.205 for terrorist organization, and decreased by 0.291 for foreign entity. This indicates that hypothesis 3 would have been supported if the results were statistically significant because after state failure, the government target type is the most likely to be targeted when compared to the other target types. Also, when comparing the marginal effects of government across the time periods relative to soft targets, the government is most likely to be targeted after state failure when compared to during the civil war and after the civil war, as predicted by hypothesis 3.

#### Model Results of Control Variables

Next, I discuss the control variables and identify which variables are significant in the models. I conduct Wald hypothesis tests to compare the coefficient estimates from table 4 for each control variable to determine if there are any statistically significant differences between the three different target types. I also tested to see if the effects on terrorist organizations compared to foreign entities, terrorist organizations compared to the government, and foreign entities compared to the government were significantly different for each of the control variables. Results are interpreted using marginal effects and standard errors in table 5 to estimate the probability of each targeting outcome for all control variables.



Based on the marginal effects of table 5, the unattributed attacks are most likely to target terrorist organizations and least likely to attack foreign entities. The Wald hypothesis tests are statistically significant, indicating that the relationship between terrorist organizations, foreign entities, and government target types represented in the model for unattributed attacks is statistically significant. All three ideologies are more likely to target other terrorist organizations relative to foreign entities and government. The Wald hypothesis tests are statistically significant when comparing the coefficient estimates of terrorist organization to foreign entity. This means that the relationship between terrorist organizations and foreign entities represented in the model for all ideology groups is statistically significant. Finally, attacks occurring in GTD collection period 2 are most likely to target foreign entities relative to terrorist organizations and government. The Wald hypothesis tests are statistically significant when comparing the coefficient estimates of foreign entity to terrorist organization. This means that the relationship between terrorist organizations and foreign entities represented in the model for GTD collection period 2 is statistically significant. Attacks occurring in GTD collection periods 3 and 4 are most likely to target terrorist organizations relative to foreign entities and government, but the hypothesis tests are not statistically significant.

## Chapter 5: Discussion

Expanding upon previous research that examined terrorist targeting strategies, this study used Becker's (1968) concept of utility functions and Crenshaw's (1987) arguments to determine if terrorist organizations operating in Lebanon changed their targeting decisions based on which entity was the most threatening to their survival. Overall, there was no support found for any of the hypotheses and the results were not statistically significant. No support was found for the first hypothesis that predicted terrorist organizations would have the highest probability of being targeted during the civil war. No support was found for the second hypothesis that predicted foreign entities would have the highest probability of being targeted after the civil war (but prior to state failure). No support was found for the third hypothesis that predicted the Lebanese government would have the highest probability of being targeted after state failure. Even though my hypotheses were not supported or statistically significant, I decided to analyze the targeting patterns of attacks with a known perpetrator to determine if the hypothesized patterns existed for these groups.

### *Additional Descriptive Analysis for Known Perpetrators*

Many of the cases included in the analysis had an unknown perpetrator (1,041 terrorist attacks had an unknown perpetrator out of 1,665 total attacks). For the purposes of my analysis, I controlled for the unknown perpetrator but was unable to study individual terrorist organizations and how their targeting decisions may be different than the hypothesized patterns. The targeting decisions of terrorist organizations may not be rational or different terrorist organizations may have other incentives that would result in the organizations following a different targeting

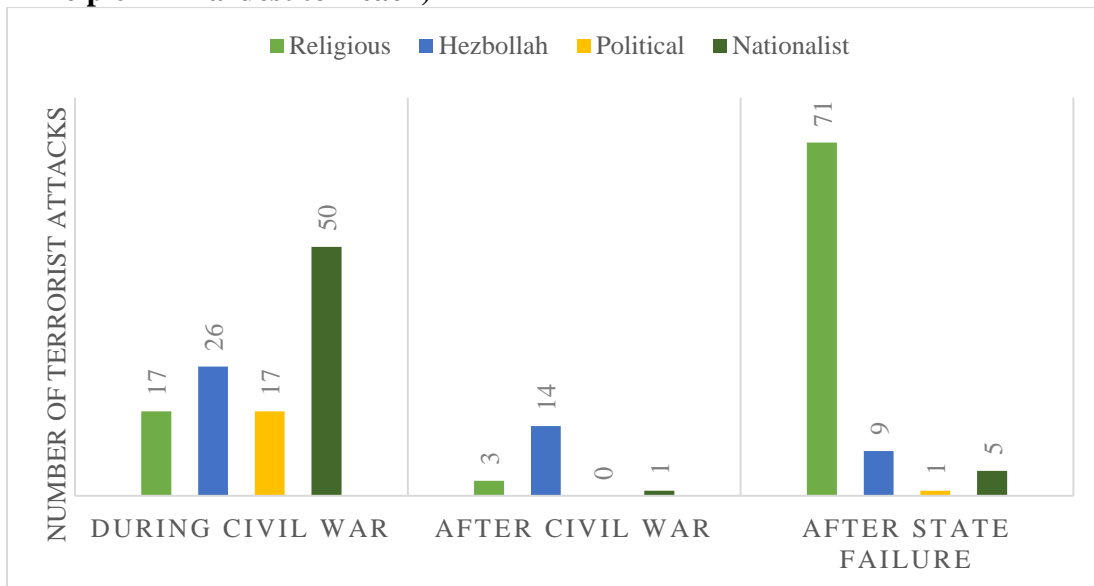
pattern. I studied the patterns of targeting for each of the ideologies (religious, political, and nationalist) by observing the number of terrorist attacks for the primary target types during each of the time periods. I also analyzed the targeting patterns for the terrorist organization Hezbollah because of its substantial engagement in terrorist activity throughout Lebanon's history and its unusual connection to Iran, leading to different incentives of this terrorist organization compared to other religious based terrorist organizations. In order to analyze attacks by Hezbollah, I created a new dichotomous variable called Hezbollah, which coded all attacks perpetrated by Hezbollah as 1 and all other attacks as 0.

Figures 5-8 present the changes across time periods in number of terrorist attacks by each ideology group (Religious, Hezbollah, Political, and Nationalist) for each target type. I then conducted Wald hypothesis tests to compare target types for each of the ideology variables to see if any of the relationships were statistically significant. Tables 6-9 present the proportion of terrorist attacks with a specific target type across time period, conditional on the ideology group. Comparing the results for coding principles 1 through 3, the patterns in predicted target types remained consistent for all coding principles. Due to the consistencies, I include the figures and predicted proportions for coding principles 2 (spatial context) and 3 (random) in Appendix E and focus on interpreting results for coding principle 1 (hardest to reach).

Before presenting the results of the descriptive analyses, I indicate how the predicted probabilities of targeting types should change across time periods for the ideology variables. As discussed previously, tension and conflict between religious and terrorist organizations was predicted to be the highest during the civil war. Based

on hypothesis 1, religious groups and Hezbollah must target terrorist organizations the most during the civil war. Nationalist terrorists' objectives focus on gaining autonomy and could result in the organizations fighting against foreign groups that hold political or economic power in the nationalists' country (Joyce & Wain, 2014). This objective aligns perfectly with the predicted shift in tension and conflict for Lebanon after the civil war due to the continued occupation by foreign governments. Based on hypothesis 2, nationalist groups must target foreign entities the most after the civil war. After state failure, tension and conflicted was predicted to shift between terrorist organizations and the Lebanese government due to terrorist organizations attempting to gain political power and control. Based on hypothesis 3, political groups must target the government the most after state failure.

**Figure 5: Soft Targets by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach)**

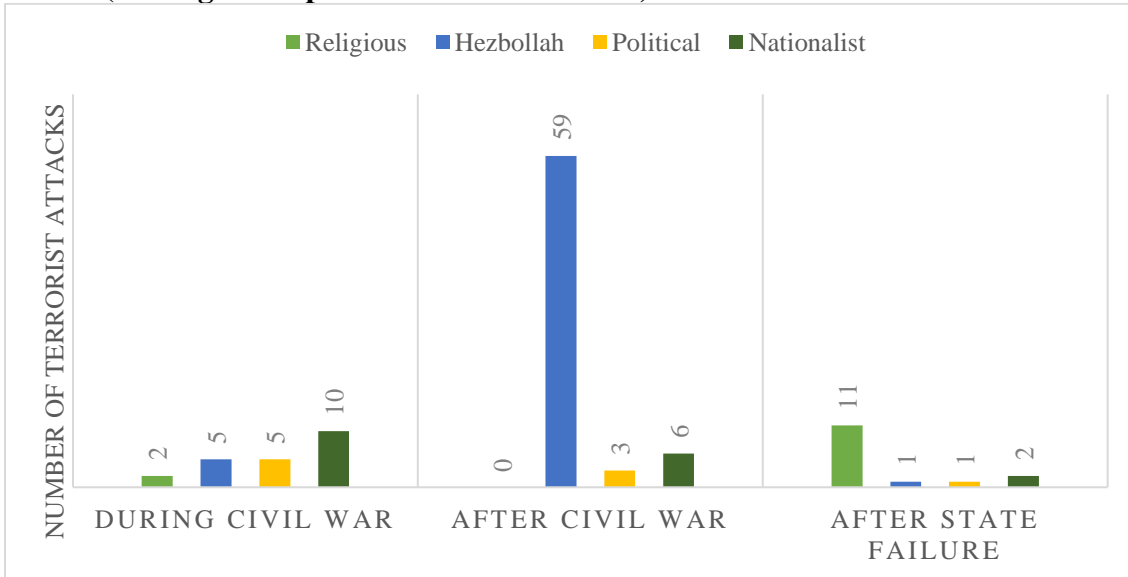


**Table 6: Proportion of Terrorist Attacks with a Soft Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 - Hardest to Reach)**

	During Civil War	After Civil War	After State Failure
Religious	0.187	0.033	0.780
Hezbollah	0.531	0.286	0.184

Political	0.944	0.000	0.056
Nationalist	0.893	0.018	0.089

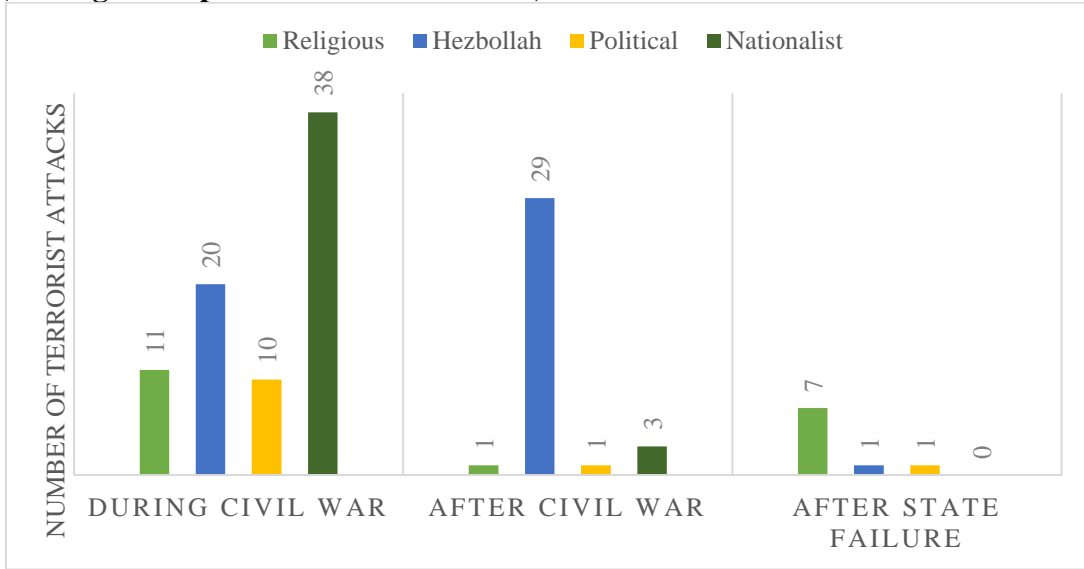
**Figure 6: Terrorist Organization Target Type by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach)**



**Table 7: Proportion of Terrorist Attacks with a Terrorist Organization Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 - Hardest to Reach)**

	During Civil War	After Civil War	After State Failure
Religious	0.154	0.000	0.846
Hezbollah	0.077	0.908	0.015
Political	0.556	0.333	0.111
Nationalist	0.555	0.333	0.111

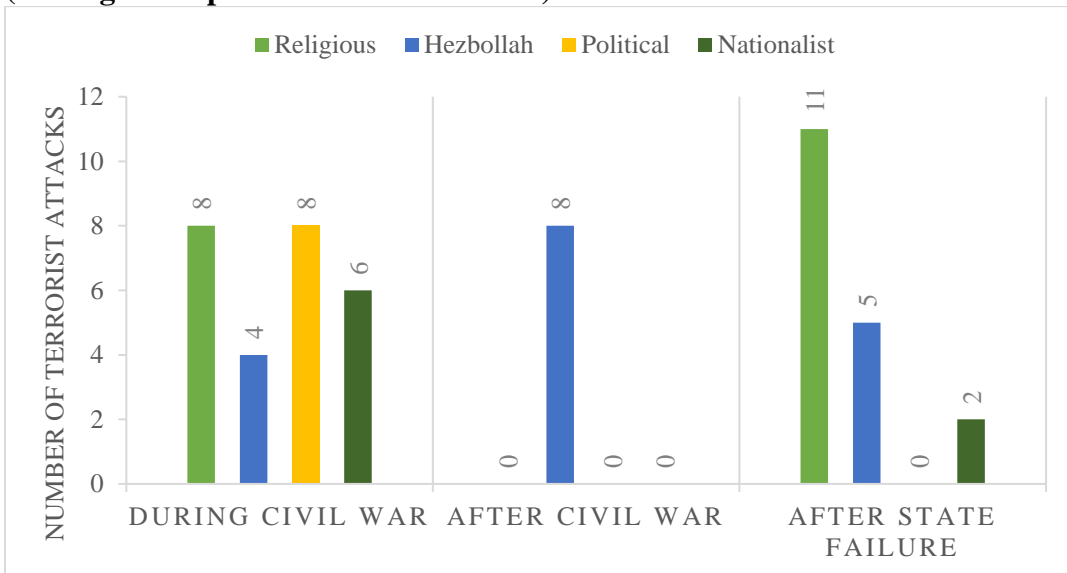
**Figure 7: Foreign Entity Target Type by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach)**



**Table 8: Proportion of Terrorist Attacks with a Foreign Entity Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 - Hardest to Reach)**

	During Civil War	After Civil War	After State Failure
Religious	0.579	0.053	0.368
Hezbollah	0.400	0.580	0.020
Political	0.833	0.083	0.083
Nationalist	0.927	0.073	0.000

**Figure 8: Government Target Type by Ideology Group for Each Time Period (Coding Principle 1 – Hardest to Reach)**



**Table 9: Proportion of Terrorist Attacks with a Government Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 1 - Hardest to Reach)**

	During Civil War	After Civil War	After State Failure
Religious	0.421	0.000	0.579
Hezbollah	0.235	0.471	0.294
Political	1.000	0.000	0.000
Nationalist	0.750	0.000	0.250

After conducting the Wald hypothesis tests to compare the targeting types for each ideology variable, the hypothesis tests were not statistically significant. This indicates that any results found to support the hypotheses are not statistically significant. Even though my results are not significant, I will compare the ideology groups to determine if they followed the predicted targeting patterns of hypotheses 1 through 3. The predicted targeting patterns are not supported for any of the ideology groups. Based on the results of figure 7, the nationalist groups targeted terrorist organizations the most during the civil war, instead of religious groups and Hezbollah as predicted by hypothesis 1. Religious groups targeted terrorist organizations the most after state failure and Hezbollah targeted terrorist organizations the most after the civil war. Based on the results of figure 8, Hezbollah targeted foreign entities the most after the civil war, instead of nationalist groups as predicted by hypothesis 2. Nationalist groups targeted foreign entities the most during the civil war. Based on the results of figure 9, religious groups targeted the government the most after state failure, instead of political groups as predicted by hypothesis 3. Political groups targeted the government the most during the civil war.

Conclusions

As previously discussed, some researchers suggest that the decision to engage in terrorism is not rational because the cost of committing the attack is high and the benefit gained from the attack is low (Abrahms, 2004, 2006, 2008; Calhoun, 2002; Gupta, 2008; Jenkins, 2006). For example, researchers indicate that individuals who sacrifice themselves as suicide bombers are irrational. Based on a rationality perspective, the cost of committing the crime (losing their life) is much greater than the potential benefits of the crime (the individual sacrifices themselves for a higher cause or to help the terrorist organization spread their message) (Perry & Hasisi, 2015). However, Perry and Hasisi (2015) applied the rational choice theory to understand the motivations of jihadist suicide terrorism. They found that the behavior was driven by maximizing the future self-gratifying benefits rather than the individual committing the attack for altruistic reasons (Perry & Hasisi, 2015). Thus, the terrorist behavior that appears to lack any rational reasoning can be explained using the rational choice arguments.

Related to the rationality argument, the results of my thesis suggest that the predicted targeting patterns of terrorist organizations operating in Lebanon were not proven correct. My thesis showed that the target types that appeared to be the most threatening to the terrorist organizations' survival in each time period did not have an impact on targeting strategies. Even though my results did not support my hypothesized targeting patterns, this does not indicate that targeting strategies or terrorism in general is irrational. Instead, my results suggest that there could be other factors that influence target selection besides threats to survival or the predicted targeting patterns do not exist for Lebanese terrorist organizations but could exist for



terrorist organizations operating in other countries. More research is needed to determine the rationality of terrorism and how ideas from the rational choice theory are related to terrorist targeting decisions.

Suggestions for a stronger analysis include incorporating more variables to control for group characteristics. Currently, my analysis only includes group level control variables for if there is an unattributed perpetrator and organization's ideology. Even with these control variables, many of the terrorist attacks in the analysis have an unknown perpetrator, resulting in a lack of information on group characteristics. Although I performed descriptive analyses for terrorist attacks with a known perpetrator to help account for group differences, I still do not have enough information to determine how nuanced differences between groups impacts targeting strategies.

Future analyses should incorporate other datasets with terrorist group characteristics. One potential database is the newly created Extended Data on Terrorist Groups (EDTG) (Hou, Gaibullov, and Sandler, 2019). This dataset is linked to terrorist groups and attacks in the GTD and provides terrorist group variables. Group variables include ideology, main goals, start date, duration, base country, attack diversity, peak size, state sponsorship of groups, interface with other terrorist groups, supply of social services, holding of territory, and group lethality and productivity. Incorporating these measures would allow me to account for differences in group characteristics between terrorist organizations, allowing for better predictions of targeting decisions.

Additional suggestions include incorporating more measures for state failure. The current analysis includes a dichotomous measure of state failure to determine which terrorist attacks will be classified under the third time period (after state failure). State failure does not occur overnight, but instead the progression to state failure takes years to occur. Future analyses should include a measure to track the progression of state failure over time in Lebanon to see how this impacts targeting strategies. I would predict that further progression to state failure would result in weakened control by the government and other ruling parties, thus resulting in increased chances of survival for terrorist organizations and more opportunities for these organizations to gain power and control in Lebanon by engaging in more terrorist attacks.

Future research should test to see if the hypothesized patterns in targeting decisions can be applied to other countries. Potential countries for future analyses include Afghanistan, Somalia, Syria, and Turkey due to similar country characteristics. These countries have all faced or are currently facing massive internal conflicts, have a substantial number of terrorist attacks, and have characteristics predictive of state failure. Even though the hypotheses were not supported for terrorist behavior in Lebanon, the targeting strategies could be significant for another country that shares similar characteristics to Lebanon, especially if the analyses control for more group characteristics.

Nonetheless, while this analysis is limited, this thesis highlights the importance of understanding terrorist targeting decisions. This thesis also brings a unique contribution by assessing targeting strategies of Lebanese terrorist

organizations and how they change based on which target appears the most threatening to terrorist organization's survival. While the causal mechanisms are still unclear, understanding how threats to a terrorist organizations' survival impacts terrorist targeting strategies should be tested further in analyses with more terrorist group characteristics and for other countries. If proven correct, this relationship should be taken into consideration when creating counter-terrorism policies for other failed state countries.

## Appendices

### **Appendix A: Extended Details on the Incidents Leading to Lebanon's Civil War**

*1958 Lebanon Crisis:* Sunnis and Shias wanted the Lebanese government to join the United Arab Republic (the proposed country based on the unification of Syria and Egypt) (Harris, 2012). Maronite Christians wanted Lebanon to remain independent and keep Lebanon aligned with Western powers. Fearing the overthrow of the government by Lebanese Muslims, President Camille Chamoune asked for U.S. intervention to preserve Lebanon's independence under the new Eisenhower Doctrine. This led to U.S. marines landing in Beirut and to the election of General Fuad Chehab as the next Lebanese president, in an attempt to appease Muslim anger over the invasion by the U.S.

*1968 Attacks against Israel:* In July 1968, a faction of the Popular Front for the Liberation of Palestine (PFLP) hijacked an Israeli El Al civilian plane. In December 1968, two PFLP gunmen shot at an El Al plane, resulting in the death of an Israeli. In retaliation, an Israeli commando flew into Beirut's international airport and destroyed more than a dozen civilian airliners belonging to various Arab carriers. Israel stated that their actions were justified because the Lebanese government was responsible for encouraging the PFLP. This resulted in dividing Lebanese society on how much Lebanon should interfere with Palestinian militant groups. The Sunni and Shia groups were pro-Palestinian factions and Maronite Christians were anti-Palestinian factions, leading to greater political tension between these religious groups.

*1969 Cairo Agreement:* Maronite Christians had issues with the Cairo Agreement. They believed that the agreement gave too much power to Palestinians groups and formed pro-Maronite paramilitary groups (such as Phalange) in retaliation of the agreement. PLO used its new control to establish a "mini-state" in southern Lebanon and increased the number of attacks on settlements in northern Israel, which furthered the hostility between PLO and Maronite Christian groups.

*Bus Massacre on April 13, 1975* (Harris, 2012): The Bus Massacre was a series of fights between the Phalangists (a faction of the Christian Maronites) and the Popular Front for the Liberation of Palestine (PLO). First, a group of PLO fighters carried out a drive-by shooting on a Greek Orthodox church in Ain al-Rammaneh, in which the majority of the church members were Phalangists. In retaliation, a group of Phalangists attacked a bus carrying Palestinian fighters and civilians on its way to a refugee camp at Sabra.

## Appendix B: Summary Timeline of Key Moments in Lebanese History

### *Before Civil War*

1516-1918: Ottoman Empire ruled over Lebanon

1920-1943: France ruled over Lebanon

1943: Lebanon gained independence

1948: Arab-Israeli War

1958: Lebanese Crisis

1967: Israeli Six Day War

1969: Cairo Agreement

April 13, 1975: Bus Massacre (Official beginning of civil war)

### *During Civil War*

December 6, 1975: Black Saturday

October 1976: Syria began occupation of Lebanon

February 7, 1978-April 1978: Hundred Days War

1978: Coastal Road Massacre

March 14, 1978: Operation Litani

March 19, 1978: Establishment of the UN Interim Force in Lebanon (UNIFIL).

Israel began providing financial resources and weaponry to the South Lebanese Army.

June 6, 1982: Israel invaded Lebanon

June 15, 1982: Israeli units entrenched outside Beirut and the U.S. began calling for the PLO withdrawal from Lebanon

August 21, 1982: First troops of a multinational force landed in Beirut

May 17, 1983: May 17 peace agreement (Israel would withdraw its troops conditional on the departure of Syrian troops)

October 23, 1983: Suicide bombing on French and American military barracks

March 5, 1984: May 17 peace agreement cancelled. U.S. Marines withdrawn from Lebanon.

1985-1989: Attempts at national reconciliation failed and sectarian conflict worsened.

September 1989: Taif Agreement

October 13, 1990: 1990 Massacre (Official end of civil war)

### *After Civil War*

May 22, 1991: Treaty to extend Syria's occupation of Lebanon

May 1991: Dissolution of all militias, except for Hezbollah

1992: First free elections since 1972

April 1996: Operation Grapes of Wrath

May 23, 2000: Israel ended its occupation of Lebanon

September 2, 2004: UN Security Council Resolution

February 21, 2005-April 25, 2005: Daily protests of Syria's occupation

April 26, 2005: Syria ended its occupation of Lebanon

### *After State Failure*

November 2007-May 21, 2008: March 9 bloc group (including Hezbollah) delayed the election of a new Lebanese president

April 2008-May 21, 2008: Hezbollah's Coup Attempt

May 21, 2008: Doha Agreement

January 2011: Collapse of Lebanese government

June 2011: Lebanese Government is reconvened

May 25, 2014: President Suleiman resigned from office

May 25, 2014-October 2016: Hezbollah delayed the election of a new president until Hezbollah's choice (Michel Aoun) was elected

November 3, 2017: Prime Minister Saad Hariri resigned

November 22, 2017: Prime Minister Saad Hariri rescinds resignation

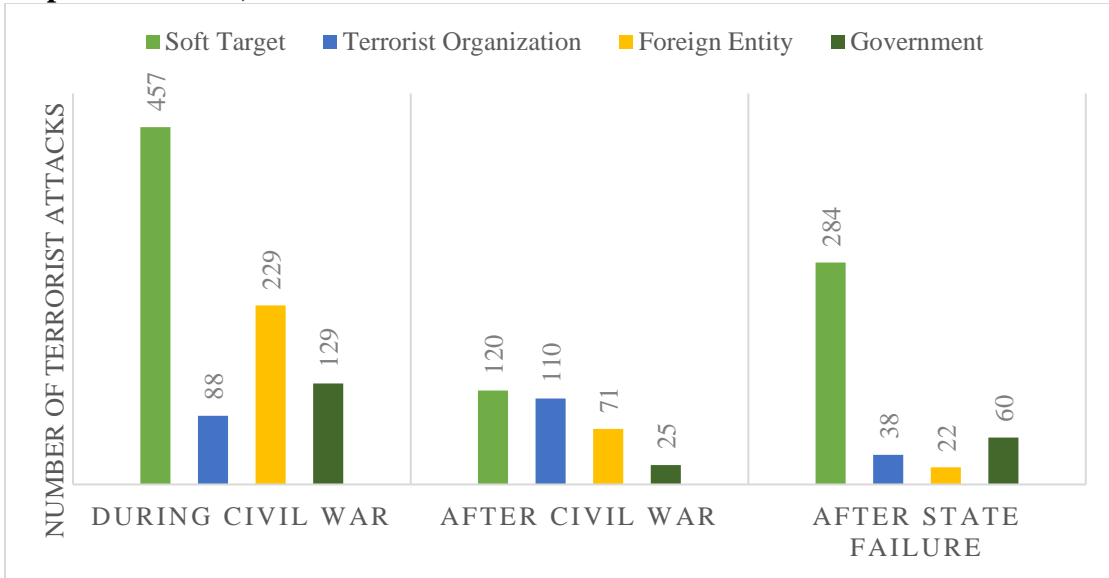
May 6, 2018: First legislative election since 2009 was held. Hezbollah and allies win the majority of seats in Lebanon's parliament.

May 6, 2018-January 31, 2019: Formation of new government is delayed

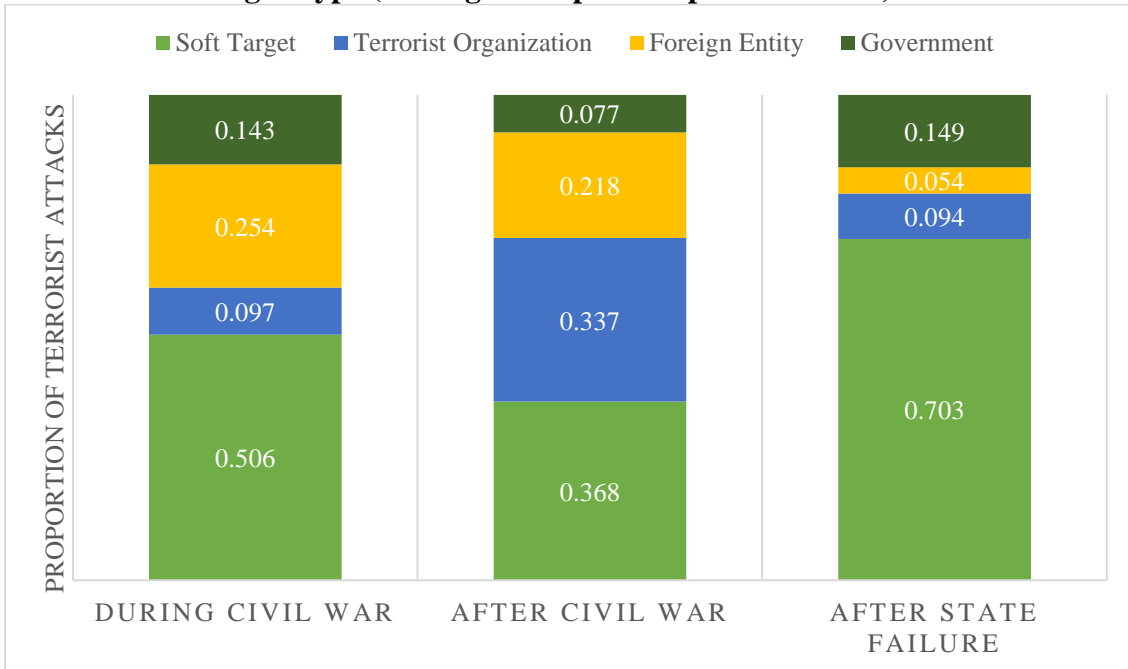


**Appendix C. Figures Displaying the Number of Terrorist Attacks by Targeting Types Across Each Time Period for Coding Principles 2 and 3**

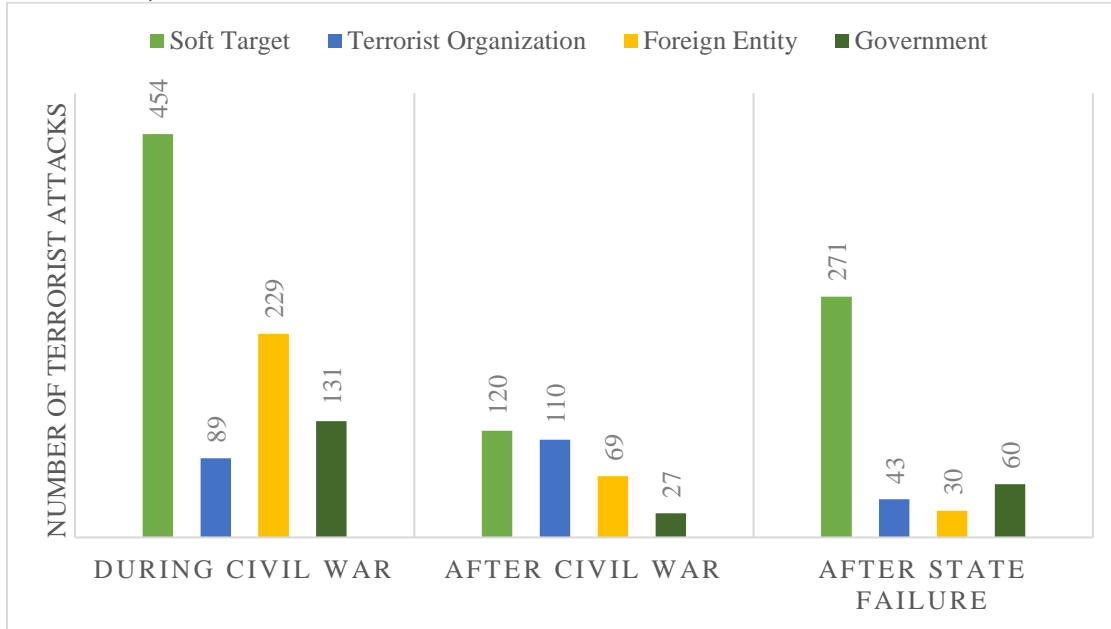
**Figure 1: Changes in Targeting Types for Each Time Period (Coding Principle 2 – Spatial Context)**



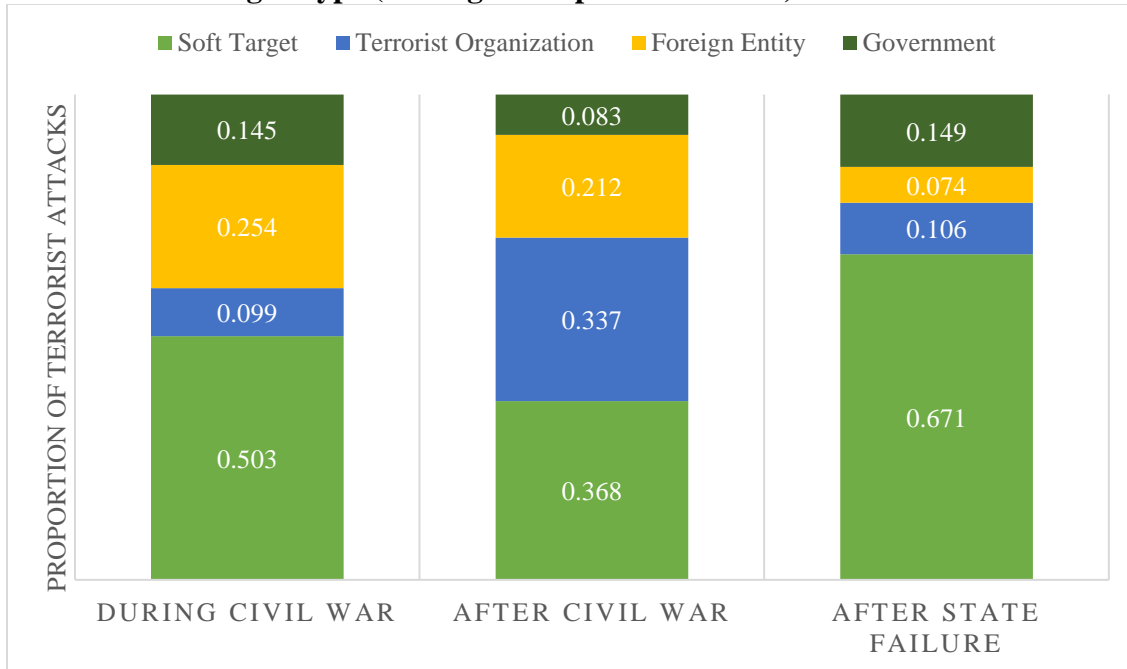
**Figure 2: Proportion of Total Terrorist Attacks During Each Time Period Attributed to Target Type (Coding Principle 2 – Spatial Context)**



**Figure 3: Changes in Targeting Types for Each Time Period (Coding Principle 3 – Random)**



**Figure 4: Proportion of Total Terrorist Attacks During Each Time Period Attributed to Target Type (Coding Principle 3 - Random)**



**Appendix D. Tables Displaying the Multinomial Logistic Coefficients, Marginal Effects, and Standard Errors for Coding Principles 2 and 3**

**Table 1: Multinomial Logistic Coefficients and (SE) Predicting Target Types – Coding Principle 2 (Spatial Context)**

	Terrorist Organization $\beta$ (SE)	Foreign Entity $\beta$ (SE)	Government $\beta$ (SE)
<b>Time Periods</b>			
During Civil War	15.120 (1007.995)	-0.505 (0.379)	15.402 (1042.389)
After Civil War	16.781 (1007.995)	-0.690 (0.429)	14.936 (1042.389)
After State Failure	14.511 (1007.995)	-1.399 (0.651)	15.976 (1042.389)
<b>Control Variables</b>			
Unattributed	0.374 (0.426)	-0.720** (0.233)	0.087 (0.329)
Religious Ideology	1.222** (0.449)	-0.033 (0.280)	0.212 (0.379)
Political Ideology	1.320* (0.578)	-0.250 (0.403)	0.478 (0.521)
Nationalist Ideology	0.809 (0.497)	0.026 (0.290)	-0.587 (0.489)
Collection Period 2	-0.579* (0.320)	0.889** (0.320)	0.339 (0.467)
Collection Period 3	0.656 (1.145)	-0.435 (0.714)	-0.400 (0.664)
Collection Period 4	0.114 (1.097)	-1.637** (0.636)	-1.321* (0.620)

Note: \* p-value  $\leq$  0.05; \*\*p-value  $\leq$  0.01 (one-tailed tests).

**Table 2: Marginal Effects and (SE) of Predicted Target Types – Coding Principle 2 (Spatial Context)**

	Terrorist Organization ME (SE)	Foreign Entity ME (SE)	Government ME (SE)
<b>Time Periods</b>			
During Civil War	0.464 (157.64)	-0.286 (0.212)	0.533 (157.75)
After Civil War	0.804 (177.14)	-0.256 (0.478)	0.185 (177.56)
After State Failure	0.236 (195.67)	-0.298 (0.694)	0.758 (195.54)

Control Variables			
Unattributed	0.046 (0.727)	-0.124** (0.191)	0.019 (0.335)
Religious Ideology	0.149** (2.001)	-0.039 (0.383)	0.002 (0.316)
Political Ideology	0.187* (2.298)	-0.075 (0.285)	0.026 (0.665)
Nationalist Ideology	0.105 (1.432)	-0.008 (0.405)	-0.055 (0.907)
Collection Period 2	-0.060* (0.986)	0.166** (0.451)	0.014 (0.245)
Collection Period 3	0.095 (1.305)	-0.065 (0.261)	-0.034 (0.584)
Collection Period 4	0.048 (0.735)	-0.167** (0.570)	-0.080* (1.331)

Note: \* p-value  $\leq 0.05$ ; \*\* p-value  $\leq 0.01$  (one-tailed tests).

**Table 3: Multinomial Logistic Coefficients and (SE) Predicting Target Types – Coding Principle 3 (Random)**

	Terrorist Organization $\beta$ (SE)	Foreign Entity $\beta$ (SE)	Government $\beta$ (SE)
Time Periods			
During Civil War	14.264 (631.669)	-0.508 (0.378)	14.488 (655.900)
After Civil War	15.816 (631.669)	-0.698 (0.428)	14.006 (655.900)
After State Failure	14.580 (631.669)	-0.832 (0.647)	15.269 (655.900)
Control Variables			
Unattributed	0.379 (0.425)	-0.666** (0.234)	0.039 (0.321)
Religious Ideology	1.298** (0.447)	-0.019 (0.280)	0.117 (0.374)
Political Ideology	1.311* (0.578)	-0.230 (0.403)	0.392 (0.518)
Nationalist Ideology	0.800 (0.497)	0.043 (0.290)	-0.663 (0.483)
Collection Period 2	-0.605* (0.320)	0.834** (0.322)	0.551 (0.445)
Collection Period 3	-0.149 (0.906)	-0.569 (0.671)	-0.449 (0.655)
Collection Period 4	-0.814	-1.824**	-1.619**

(0.850)

(0.604)

(0.614)

---

Note: \* p-value ≤ 0.05; \*\*p-value ≤ 0.01 (one-tailed tests).

**Table 4: Marginal Effects and (SE) of Predicted Target Types – Coding Principle 3 (Random)**

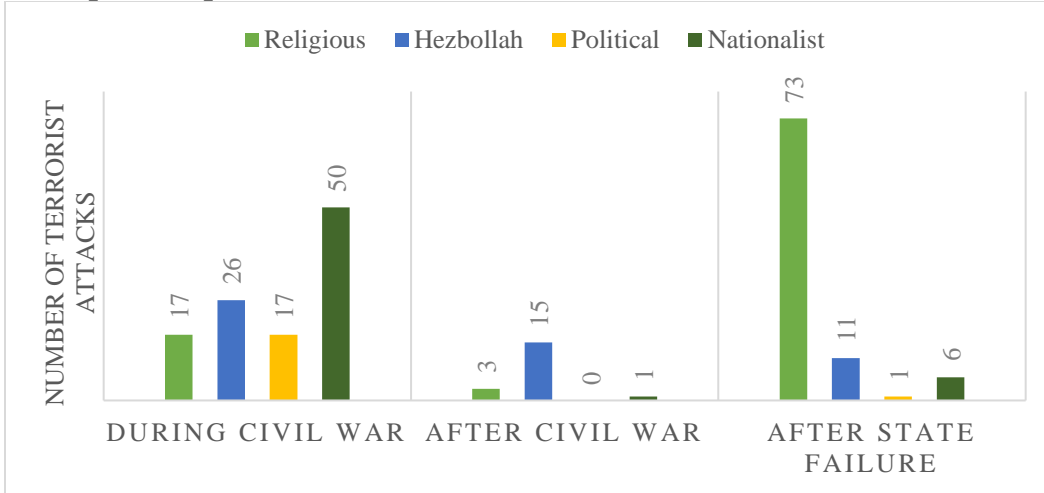
	Terrorist Organization ME (SE)	Foreign Entity ME (SE)	Government ME (SE)
<b>Time Periods</b>			
During Civil War	0.469 (98.987)	-0.307 (0.213)	0.526 (99.076)
After Civil War	0.803 (110.98)	-0.275 (0.398)	0.182 (111.28)
After State Failure	0.366 (157.02)	-0.291 (0.246)	0.627 (156.99)
<b>Control Variables</b>			
Unattributed	0.049 (0.477)	-0.120** (0.129)	0.015 (0.169)
Religious Ideology	0.168** (1.363)	-0.042 (0.299)	-0.010 (0.219)
Political Ideology	0.194* (1.451)	-0.077 (0.214)	0.016 (0.351)
Nationalist Ideology	0.108 (0.907)	-0.006 (0.291)	-0.060 (0.628)
Collection Period 2	-0.065* (0.667)	0.152** (0.378)	0.039 (0.375)
Collection Period 3	0.0004 (0.093)	-0.068 (0.183)	-0.028 (0.293)
Collection Period 4	-0.033 (0.359)	-0.181** (0.452)	-0.088** (0.936)

---

Note: \* p-value ≤ 0.05; \*\*p-value ≤ 0.01 (one-tailed tests).

**Appendix E. Tables and Figures Displaying the Changes in Targeting Types by Ideology Groups for Each Time Period**

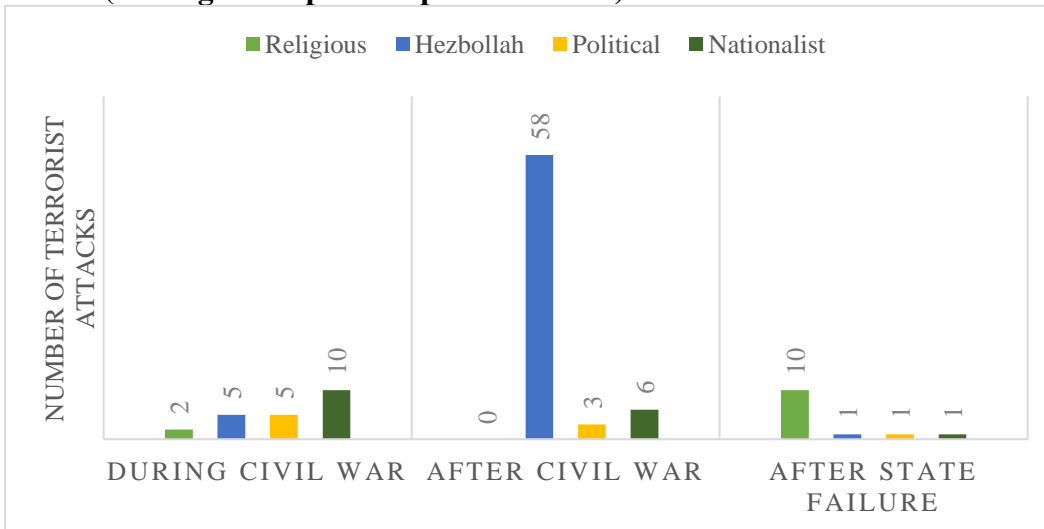
**Figure 1: Soft Targets by Ideology Group for Each Time Period (Coding Principle 2 – Spatial Context)**



**Table 1: Proportion of Terrorist Attacks with a Soft Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 2 – Spatial Context)**

	During Civil War	After Civil War	After State Failure
Religious	0.183	0.032	0.785
Hezbollah	0.500	0.288	0.212
Political	0.944	0.000	0.056
Nationalist	0.877	0.018	0.105

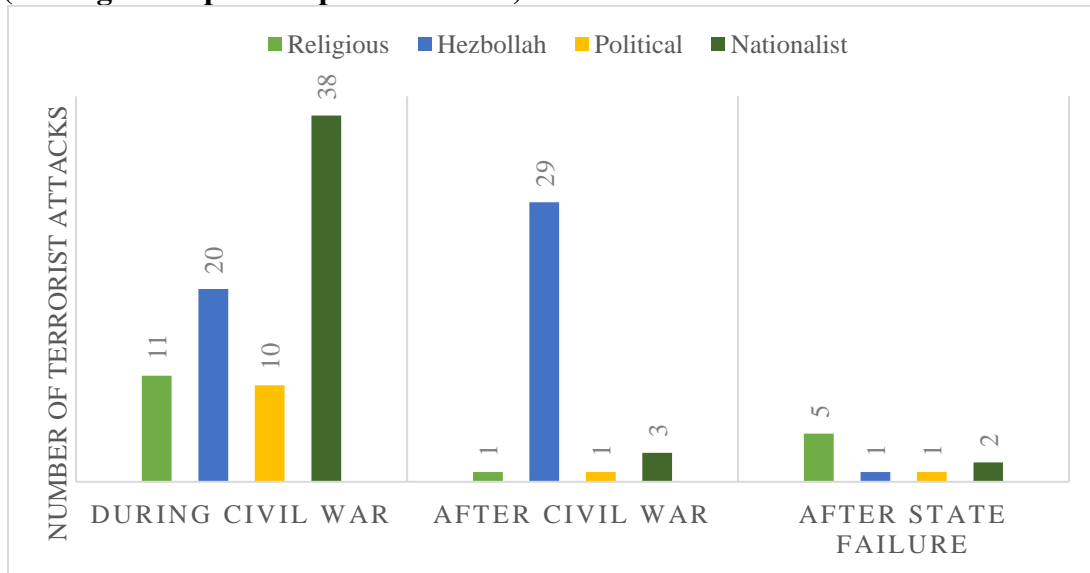
**Figure 2: Terrorist Organization Target Type by Ideology Group for Each Time Period (Coding Principle 2 – Spatial Context)**



**Table 2: Proportion of Terrorist Attacks with a Terrorist Organization Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 2 – Spatial Context)**

	During Civil War	After Civil War	After State Failure
Religious	0.167	0.000	0.833
Hezbollah	0.078	0.906	0.016
Political	0.556	0.333	0.111
Nationalist	0.588	0.353	0.059

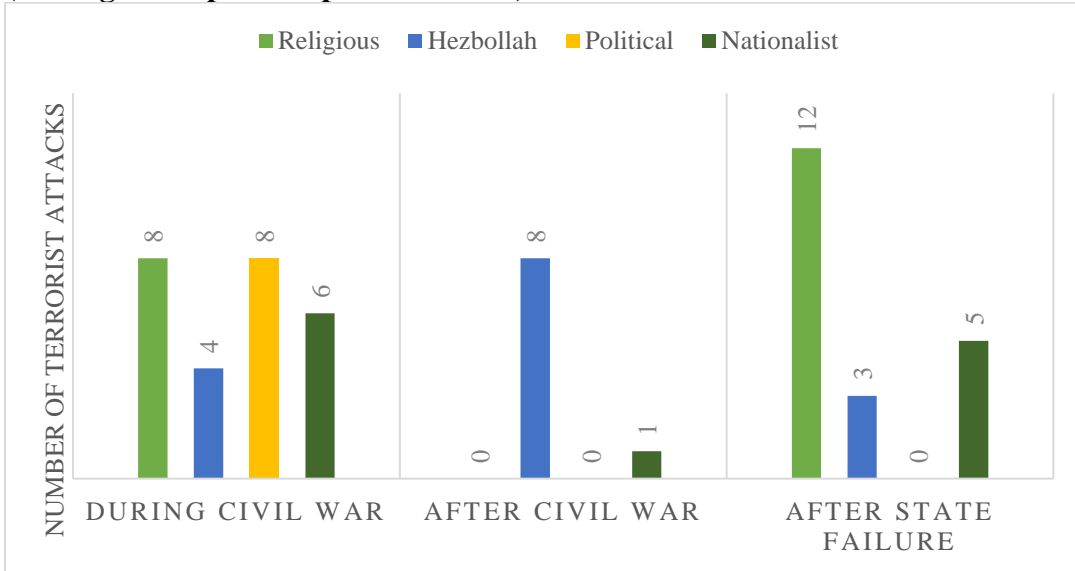
**Figure 3: Foreign Entity Target Type by Ideology Group for Each Time Period (Coding Principle 2 – Spatial Context)**



**Table 3: Proportion of Terrorist Attacks with a Foreign Entity Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 2 – Spatial Context)**

	During Civil War	After Civil War	After State Failure
Religious	0.647	0.059	0.294
Hezbollah	0.400	0.580	0.020
Political	0.833	0.083	0.083
Nationalist	0.884	0.070	0.047

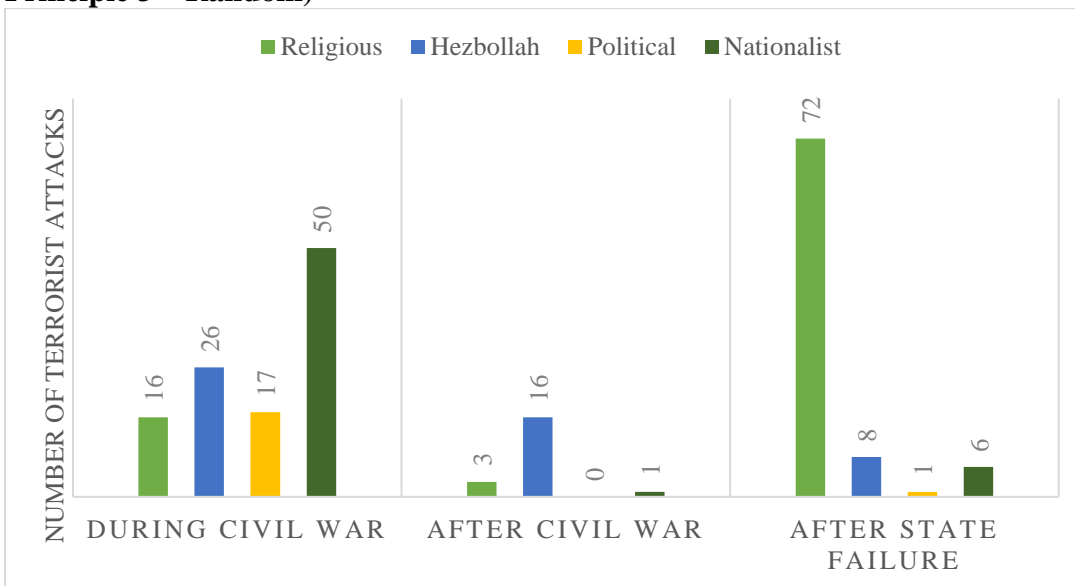
**Figure 4: Government Target Type by Ideology Group for Each Time Period (Coding Principle 2 – Spatial Context)**



**Table 4: Proportion of Terrorist Attacks with a Government Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 2 – Spatial Context)**

	During Civil War	After Civil War	After State Failure
Religious	0.400	0.000	0.600
Hezbollah	0.267	0.533	0.200
Political	1.000	0.000	0.000
Nationalist	1.000	0.000	0.000

**Figure 5: Soft Targets by Ideology Group for Each Time Period (Coding Principle 3 – Random)**

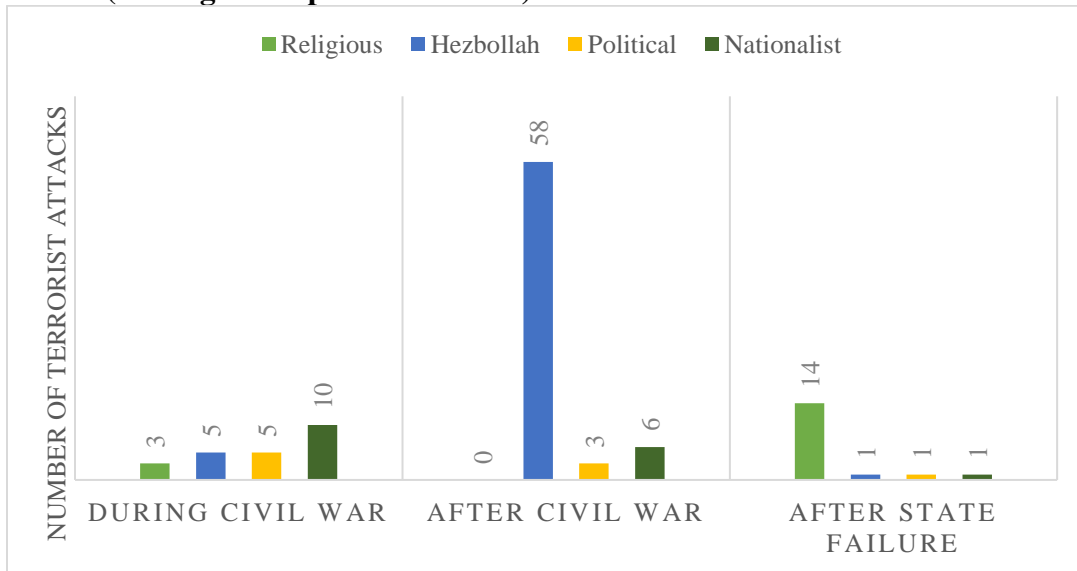




**Table 5: Proportion of Terrorist Attacks with a Soft Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 3 - Random)**

	During Civil War	After Civil War	After State Failure
Religious	0.176	0.033	0.791
Hezbollah	0.520	0.320	0.160
Political	0.944	0.000	0.056
Nationalist	0.877	0.018	0.105

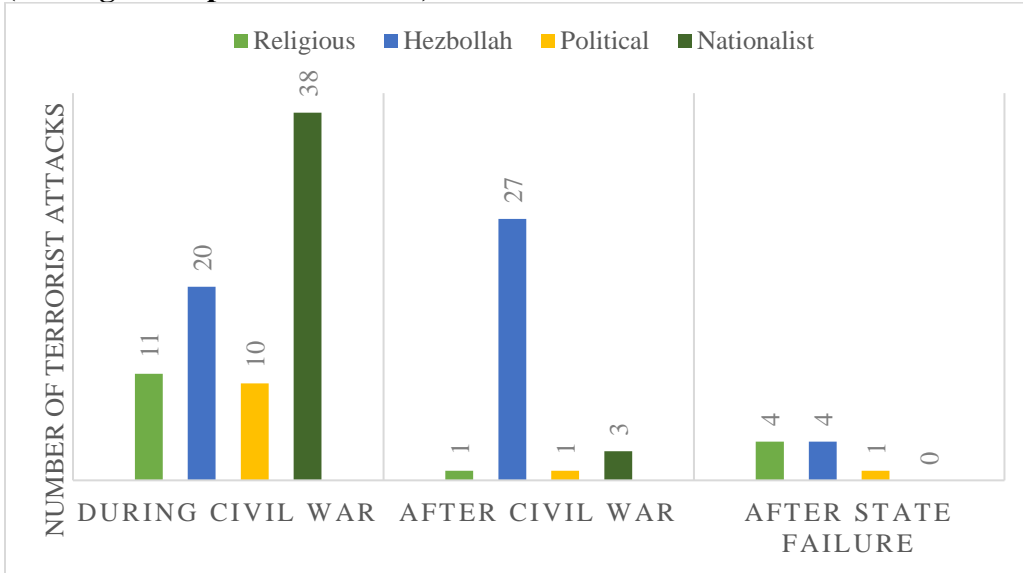
**Figure 6: Terrorist Organization Target Type by Ideology Group for Each Time Period (Coding Principle 3 – Random)**



**Table 6: Proportion of Terrorist Attacks with a Terrorist Organization Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 3 - Random)**

	During Civil War	After Civil War	After State Failure
Religious	0.176	0.000	0.824
Hezbollah	0.078	0.906	0.016
Political	0.556	0.333	0.111
Nationalist	0.588	0.353	0.059

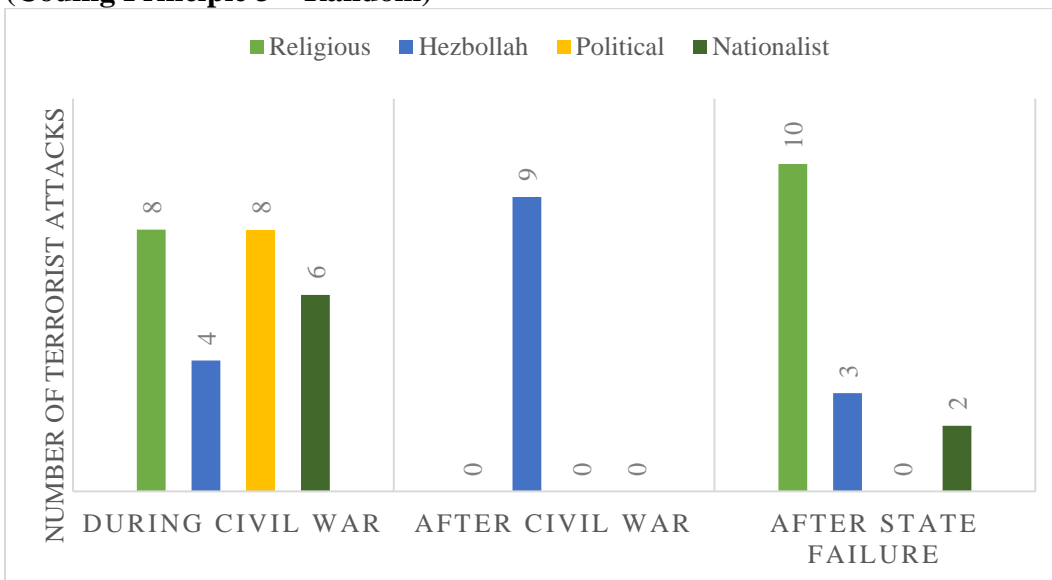
**Figure 7: Foreign Entity Target Type by Ideology Group for Each Time Period (Coding Principle 3 – Random)**



**Table 7: Proportion of Terrorist Attacks with a Foreign Entity Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 3 - Random)**

	During Civil War	After Civil War	After State Failure
Religious	0.689	0.063	0.250
Hezbollah	0.392	0.529	0.078
Political	0.833	0.083	0.083
Nationalist	0.927	0.073	0.000

**Figure 8: Government Target Type by Ideology Group for Each Time Period (Coding Principle 3 – Random)**



**Table 8: Proportion of Terrorist Attacks with a Government Target Type by Time Period, Conditioned on Ideology Group (Coding Principle 3 - Random)**

	During Civil War	After Civil War	After State Failure
Religious	0.444	0.000	0.556
Hezbollah	0.250	0.563	0.188
Political	1.000	0.000	0.000
Nationalist	0.750	0.000	0.250

## References

- Abrahms, M. (2004). Are terrorists really rational? The Palestinian example. *Orbis*, 48(3), 533-549.
- Abrahms, M. (2006). Why terrorism does not work. *International Security*, 31(2), 42-78.
- Abrahms, M. (2008). What terrorists really want. Terrorist motives and counterterrorism strategy. *International Security*, 32(4), 78-105.
- Addis, C. L. (2011). *Lebanon: Background and U.S. relations*. Congressional Research Service report prepared for members and committees of congress (Report No. 7-5700).
- Al Jazeera. (2018). Syria's civil war explained from the beginning. *Al Jazeera Media Network*.
- Anderton, C. H. & Carter, J. R. (2005). On rational choice theory and the study of terrorism. *Defence and Peace Economics*, 16(4), 275-282.
- Asal, V. H., & Rethemeyer, R. K. (2015). *Big Allied and Dangerous Dataset Version 2* [Data file and code book]. Retrieved from <https://www.start.umd.edu/baad/database>
- Asal, V. H., Rethemeyer, R. K., Anderson, I., Stein, A., Rizzo, J., & Rozea, M. (2009). The softest of targets: A study on terrorist target selection. *Journal of Applied Security Research*, 4(3), 258-278.
- Barma, N. H. (2016). Failed state. In *Encyclopedia Britannica*. Retrieved from Encyclopedia Britannica online database.
- “Lebanon profile – Timeline”. (2018). *BBC*.

<https://www.bbc.com/news/world-middle-east-14649284>

- Becker, G. S. (1968). Crime and punishment: An economic approach. *Journal of Political Economy*, 76(2), 169-217.
- Calhoun, C., Price, P., & Timmer, A. (2002). *Understanding September 11*. The New York Press.
- Caplan, B. (2006). Terrorism: The relevance of the rational choice model. *Public Choice*, 128, 91-107.
- Counter extremism project. (2020). *Lebanon: Extremism and counter-extremism* [Press release]. <https://www.counterextremism.com/countries/lebanon>
- Crenshaw, M. (1981). The causes of terrorism. *Comparative Politics*, 13(4), 379-399.
- Crenshaw, M. (1987). Theories of terrorism: Instrumental and organizational approaches. *Journal of Strategic Studies*, 10(4), 13-31.
- Crenshaw, M. (1990). The logic of terrorism: Terrorist behaviour as a product of strategic choice. In W. Reich (Eds.), *Origins of terrorism: Psychologies, Ideologies, Theologies, States of mind* (pp. 7-24). Cambridge University Press.
- Drake, C. J. M. (1998) The role of ideology in terrorists' target selection. *Terrorism and Political Violence*, 10(2), 53-85.
- Dugan, L. & Chenoweth, E. (2012). Moving beyond deterrence: The effectiveness of raising the expected utility of abstaining from terrorism in Israel. *American Sociological Review*, 77(4), 597-624.
- Dugan, L. & Distler, M. (2016). Measuring terrorism. In G. LaFree & J. D. Freilich (Eds.), *The handbook of the criminology of terrorism* (pp. 189-205). John Wiley & Sons, Inc.

- Galey, P. (2012). Lebanon: Passing the Failed State Test. *Alakhbar*.
- Gupta, D. K. (2008). *Understanding terrorism and political violence. The life cycle of birth, growth, transformation, and demise*. Routledge.
- Hakim, S., Rengert, G. F., & Shachmurove, Y. (2005). Target search of burglars: A revised economic model. *Papers in Regional Science*, 80(2), 121-137.
- Harris, W. W. (2012). *Lebanon: A history, 600-2011*. Oxford University Press.
- Hoffman, B. (2006). *Inside terrorism*. Columbia University Press.
- Hou, D., Gaibullov, K., & Sandler, T. (2019). Introducing extended data on terrorist groups (EDTG), 1970 to 2016. *Journal of Conflict Resolution*, 64(1), 199-225.
- Israel Ministry of Foreign Affairs (2000). The war of attrition and the ceasefire introduction. 1-2.
- Jenkins, B. M. (2006). The new age of terrorism. In D. G. Kamien (Eds.), *The McGraw-Hill Homeland Security Handbook* (pp. 117-130). McGraw-Hill.
- Jensen, M. (2013). Discussion point: The benefits and drawbacks of methodological advancements in data collection and coding: Insights from the global terrorism database (GTD). *National Consortium for the Study of Terrorism and Responses to Terrorism*.
- Joyce, P. & Wain, N. (2014). Nationalist terrorist groups. In *Palgrave Dictionary of Public Order Policing, Protest, and Political Violence*. (pp. 180-181). Palgrave Macmillan, London.
- LaFree, G. & Dugan, L. (2007). Introducing the global terrorism database. *Terrorism and Political Violence*, 19(2), 181-204.

- LaFree, G., Dugan, L., & Miller, E. (2015). *Putting terrorism in context: Lessons from the Global Terrorism Database*. Routledge.
- Maksoud, C. F., Bugh, G. R., Barnett, R. D., Khalaf, S. G., Kingston, P., & Ochsenwald, W. L. (2020). Lebanon. In *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/place/Lebanon>.
- Nagin, D. S. & Paternoster, R. (1993). Enduring individual differences and rational choice theories of crime. *Law & Society Review*, 27(3), 467-496.
- Pape, R. A. (2005). *Dying to win: The strategic logic of suicide terrorism*. Random House Publishing Group.
- Perry, S. & Hasisi, B. (2015). Rational choice rewards and the jihadist suicide bomber. *Terrorism and Political Violence*, 27(1), 53-80.
- Pizaaz, J. A. (2008). Incubators of terror: Do failed and failing states promote transnational terrorism? *International Studies Quarterly*, 52(3), 469-488.
- Polo, S. (2019). The quality of terrorist violence: Explaining the logic of terrorist target choice. *Journal of Peace Research*, 57(2), 235-250.
- Shughart II., W. F. (2011). Terrorism in rational choice perspective. In C. J. Coyne & R. L. Mathers. (Eds.), *The Handbook on the Political Economy of War*. (pp. 126-153). Edward Elgar Publishing.
- Start: National Consortium for the Study of Terrorism and Responses to Terrorism (2019). *Global Terrorism Database* [Data file and code book]. Retrieved from <https://start.umd.edu/gtd/>
- Ṭarābulṣī, F. (2012). *History of modern Lebanon*. Pluto Press.