# The Effects of Democratic Presidential and Parliamentary Systems on Hostage-Taking Terrorism

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## **Chapter 1: Introduction**

Terrorism has existed for centuries, dating back as far as the thirteenth century to the time of the Hindu Thugs, who sacrificed for their god, Kali (Rapoport, 1984). Hostage taking as a strategy of terrorism has been around for as long, the oldest recorded incident taking place in 1269 BC in Egypt (Griffiths, 2003). Hostagetaking missions are a form of intimidation used by terrorist groups to further their goals by gaining concessions, usually in the form of ransom payments or hostage swaps, from established states. While there has been much research done on the propensity of democracies to be targeted by terrorist groups at large (Gause, 2010, Eubank and Weinberg, 2001, etc.), and some research focusing specifically on hostage-taking missions (Lee, 2013), the literature has yet to examine the effects of government regime type on citizens' likelihood to be targeted by hostage seizures.

In this thesis, I am interested in observing the effects of governmental systems on the likelihood that citizens will be targeted for hostage attacks. The two systems I am observing are democratic presidential and parliamentary systems. These two are used in my analysis because while it is generally accepted that democracies as a broader system of governing are more frequently targeted by terrorism, there has been little effort to identify differences within types of democracies that may make them more vulnerable to terrorist attacks. I hypothesize that citizens of democratic parliamentary systems experience a greater risk of kidnapping than citizens of democratic presidential systems because, in the

former, the executive is more directly accountable to the legislature and the constituency. In parliamentary systems, the executive is appointed by and can be dismissed by the legislature (Dicey, 2013). In such systems, the executive must be more careful to cede to the demands of the legislature and the constituents to ensure they maintain their office. In presidential systems, the executive is often given much more flexibility and discretion to make decisions independently and without fear of losing office in the short term (concerns of losing office are much more prevalent closer to the time of an election). The level of responsibility the executive holds to the legislators and constituents in turn affects their willingness to negotiate. From the perspective of the terrorist groups, executives that are more directly accountable to their legislators and constituents – executives of parliamentary systems – will be more easily convinced to negotiate due to public pressure and the risk of losing office.

The results of this analysis show that citizens of democratic parliamentary systems, once targeted by terrorist attacks, are in fact significantly more at risk to be chosen as hostage victims than citizens of other governmental systems. The specificity of this analysis and the consistency of the results lend credence to the argument that terrorist groups are rational actors. The differences in democratic presidential and parliamentary systems are subtle, but the discrepancies between the levels of risk faced by citizens of the two systems exceed one thousand percent. This would suggest that terrorist groups are consciously identifying and targeting citizens of democratic parliamentary regimes, and may also suggest that the

decision-making process of the two systems is easily manipulated by terrorist groups.

## **Chapter 2: Literature Review**

The premise for this thesis evolves out of existing literature on the relationship between terrorist attacks and democracy and, more specifically, from research on the correlation between hostage-attacks by terrorist groups and democracies. All of this literature fits into a broader context of understanding whether or not terrorist groups are rational actors and whether democracies or democratic characteristics deter or attract terrorism. My focus on specific types of democracies and a specific subset of terrorist attacks will further add to that knowledge.

Democracy and Terrorism

Much of the existing literature on the relationship between democracies and terrorism developed after the attacks on the United States on September 11, 2001. President George W. Bush articulated his belief that in order to protect the United States from further acts of terrorism, it was necessary to get rid of the conditions that promoted the development of terrorist groups in the Middle East. He argued,

"Parts of that region have been caught for generations in a cycle of tyranny and despair and radicalism. When a dictatorship controls the political life of a country, responsible opposition cannot develop, and dissent is driven underground and toward the extreme. And to draw attention away from their social and economic failures, dictators place blame on other countries and other races, and stir the hatred that leads to violence." By that logic, people started assuming that the characteristics of democracies, a system that is at the opposite end of the political spectrum from autocracies, should therefore deter terrorism. However, many argue that in fact there is not enough to evidence to conclude that increased levels of democracy correlate with decreased levels of terrorism. F. Gregory Gause points to the development of several terrorist groups in democratic countries in the 1970s and 1980s, including the Red Brigades in Italy and the Irish Republican Army (IRA) in the United Kingdom. He argues that the focus on international incidents of terrorism prevents thorough examination of whether or not democracy actually prevents the formation of terrorist groups, and uses the IRA and Red Brigades as an example of the fact that terrorist groups can and do in fact develop in democracies (Gause, 2010).

Gause also points to research done by Eubank and Weinberg to corroborate his theory. Eubank and Weinberg observed multiple components of terrorist attacks using the ITERATE database. They specifically focused on the location of the terrorist attack, the nationality of the perpetrators, and the nationality of the victims to determine the strength of the relationship between democracy and terrorism. They found that terrorist incidents occur more frequently in democracies than any other types of regime, that perpetrators of terrorism are more frequently from democratic states than any others, and the victims of terrorism are also most frequently citizens of democracies. To determine the strength of this relationship, they categorized democracies into stable, insecure, and partial democracies. In the incidents observed, the location, perpetrators, and victims of terrorist attacks most

frequently occurred in or were citizens of stable democratic countries. These findings lead them to conclude, *"the more democracy, the more terrorism"* (Eubank & Weinberg, 2001).

Erica Chenoweth furthers the research by accepting the conclusions of Eubank and Weinberg, and attempting to determine what features of democracy encourage the presence of terrorism. Chenoweth examines both domestic and international incidents of terrorism and finds a number of factors that produce terrorism within democracies. The first is the level of political competition. Chenoweth argues that the limited range of issues the public focuses its attention on fuels the competitive nature of interest groups in democracies. Interest groups in these types of highly competitive environments may be pushed to extreme means to gain publicity for their specific goal, and in some cases resort to terrorism in order to gain that attention. Chenoweth also finds that governments with more resources tend to breed higher levels of terrorism. She stipulates that this is due to the increased range of resources terrorist groups have access to in wealthier countries.

Research conducted by Quan Li calls into question the consensus within a portion of the literature that democracy encourages terrorism. Li finds that different characteristics of democracy actually have competing effects on the likelihood of terrorist activity in democracies. He confirms Chenoweth's finding that government with greater resources experience more terrorist incidents, but also finds that increased levels of democratic participation decrease the level of international terrorist activity within those countries. This second claim runs almost directly

counter to Chenoweth's conclusion that higher levels of competition among interest groups increase the probability for terrorist activity.

Li also examines the role of institutional constraints on the frequency of terrorist attacks and finds that there is a positive and significant relationship. His argument is based on the idea that greater institutional constraints limit the ability of the government to fight terrorism, and strengthen the ability of terrorist groups to influence public opinion. He argues that because democracies are responsible to a wide range of interests, it is more costly to utilize forceful deterrence. Nondemocratic regimes are not held responsible to societal interests; this allows executives in these types of regimes to more swiftly and forcefully combat terrorism. Institutional constraints in democracies also strengthen terrorist groups because of the wide range of targets that are considered valuable. As Li puts it, *"the security of a vast number of citizens becomes the concern of the democratic government."* This component of Li's research strengthens the dominant consensus that democracies experience greater incidents of terrorism than non-democracies.

The consensus, however, is not unanimous, and there are some who argue that features of democracy reduce incidents of terrorism. Joe Eyerman identifies two competing schools of thought: the strategic school and the political access school. The strategic school argues that the price of violence is lower in democracies than in other regimes, and therefore encourages terrorism. The political access school argues that it is actually the lower price of non-violent expression in democracies that encourages the use of such expression, and therefore decreases the likelihood of terrorism. Eyerman analyzes the relationship between

democracies and terrorism by observing the number of terrorist events in established democracies, new democracies, and non-democracies. His results show that established democracies significantly decrease the likelihood of terrorism, supporting the political access school of thought. On the other hand new democracies experience higher rates of terrorism. Eyerman concludes that these findings demonstrate that states where non-violent expression is recognized as a productive option, namely, in democracies, the amount of violent expression is decreased. He argues that governments of new democracies have not had enough time to demonstrate that non-violent expression is a viable means for citizens, and that is why the same relationship is not found in those countries (Eyerman, 1998).

Nahla Shahrouri comes to the same conclusion as Eyerman, lending further support to the political access school. Shahrouri finds that as the level of democracy increases, the number of people killed due to terrorism decreases. Her rationalization echoes that of the political access school – because people have the ability to express themselves through non-violent means in democracies, such states experience lower levels of violence and terrorism (Shahrouri, 2010).

#### Democracy and Hostage-Taking

The consensus that has developed in the literature on democracy and terrorist attacks has lent itself to a new body of research focusing on specific acts of terrorism and their connection to democracy. The body of literature on the affects of democracy on hostage-taking is limited, so I will discuss the article here from which I am building my study.

Chia-yi Lee conducted a study to determine which features of democracies make their citizens more likely targets for hostage attacks than citizens of other governmental systems. While democracy as a variable did not reach statistical significance on the frequency of kidnappings, components of democracy, including civil liberty and press freedom both reached significant values and indicated a positive relationship with the number of kidnapping victims a country experiences. Lee summarizes these findings by asserting that countries in which people value personal and press freedom very highly will experience a higher number of citizens being taken hostage relative to countries in which the citizens place a lower value on such freedoms (Lee, 2013).

Lee however faces some problems in the results of her study based on the data she selected to observe and the way in which she aggregated her statistics. Within the ITERATE database from which Lee gathered her observations, she opted to selected only the HOSTAGE variable, which includes information only on those terrorist attacks in which individuals were kidnapped. Lee observes all recorded hostage attacks and various features of those attacks, but fails to include terrorist attacks that were not hostage attacks. Her results demonstrate that of hostages taken, more come from systems in which there is a higher value placed on personal and press freedom. Her results however do not show that a higher value on personal and press freedom is what causes the greater number of hostages taken.

Additionally, Lee's dependent variable is a count variable that records the total number of countries targeted by hostage attacks per year. In Lee's model, the assumption is that all countries are possible targets of hostage attacks. The way her

data is structured does not allow us to determine why certain countries are not being targeted by hostage attacks. For example, it could be that a country is not targeted because a terrorist group does not see that country as an enemy, and therefore does not have motivation to attack the country. It also could be the case that terrorist groups are targeting a country but the group is using alternative methods of violence rather than kidnapping citizens of the state. In order for Lee to have obtained the most conclusive results it would have been useful to include terrorist attacks other than hostage attacks. This information provides the background to determine whether or not a particular terrorist group has a conflict with a country, and therefore has motivation to conduct a kidnapping. The structure of Lee's data presumes that the risk of kidnapping is the same for citizens of every democracy, but in fact that is not the case. By including terrorist attacks of all types, my study identifies first whether or not a terrorist group is in conflict with a country, and only then whether or not certain characteristics of that country motivate terrorist groups to choose kidnapping as a form of violence to coerce that country.

Lee mentions that she did also run tests comparing executives in different democratic systems, however she ran tests only on parliamentary and proportional representation systems. This is problematic for a couple reasons. First, these two types of systems frequently overlap.<sup>1</sup> Second, she also excludes democratic presidential systems and majoritarian systems, which are accompanied by different levels of constraints on the executive, and with the inclusion of which Lee might

<sup>&</sup>lt;sup>1</sup> Israel, Germany, and Estonia just to name a few examples.

have found different results. My study specifically focuses on this gap, and will provide a more accurate evaluation of differing executive constraints and their affect on the likelihood of citizens' kidnapping.

## **Chapter 3: Theory**

My research hinges on two central assumptions: terrorist groups are rational actors and citizens of democratic regimes want to negotiate for the return of hostages and are capable of exerting enough pressure to force executives to negotiate with terrorist groups.

The first assumption is necessary in order to draw the distinction between democratic presidential and parliamentary systems as a premise for this research. Without the belief that terrorist groups can identify differences in the two systems, any results could be attributed to chance, or the prevalence of one system over the other. The purpose of this analysis is to determine whether the differences in the two systems are clear enough that a group aiming to gain concessions by taking a hostage can choose which system is more amenable to its demands.

My second assumption is that citizens in democratic governments will vocalize their desire to negotiate for hostages, and the level of pressure exerted by society will be enough to force executives to negotiate. My initial basis for this assumption came from the case of Gilad Shalit in Israel.

Gilad Shalit was a sergeant in the Israeli Defense Forces when he was captured by Hamas in June 2006. He was held captive for five years until Israel and Hamas negotiated terms for his release in 2011. Throughout Shalit's five-year tenure in Hamas captivity, his family and Israeli society at large were vocal about their desires to rescue him. In 2010, thousands of Israeli citizens marched over the

course of twelve days from Shalit's home to Jerusalem to gain publicity for the soldier. A mother whose son had died while in Hamas captivity was quoted once it became evident Shalit would return home as saying, "...Aviva Shalit has a chance to see her son Gilad. And even if this is a tough deal, a living boy must be returned home at all costs." (Bronner, 2011). It is clear that a significant portion of Israeli society felt it necessary to negotiate for Shalit's release, even if that meant possible danger for Israelis in the future. The final deal, in which Israel agreed to release more than 1,000 Palestinian prisoners for Shalit's return, was received with mixed support by Israeli society. Nonetheless, the example from Shalit's case demonstrated that with enough public rallying, and despite the danger posed by the released Palestinian prisoners, there was enough support in Israeli society to convince the Prime Minister and his cabinet to negotiate.

Without this pressure from society, the executive of a democratic parliamentary system will not be any more likely to negotiate for a hostage than will the executive of any other regime type, democratic or not. This level of pressure serves as a constraint on the executive, because their immediate interest is to maintain their office. I believe it is the desired policy of executives to maintain a nonegotiation policy as a means of securing their citizens' safety and serving as a deterrent for future terrorist groups who seek to take hostages and gain concessions. However, if enough pressure by the society is exerted and the executive feels that their office is at risk, they will be forced to meet demands of terrorist groups in exchange for bringing the hostage home.

That idea runs in opposition to opinions presented in much of the current literature. For example, Lee states that,

"the more institutional constraints that are placed on the decisionmaker, the more likely that the no-negotiation or non-concession policy would be obeyed, and the less likely terrorists would resort to hostage-taking."

I think it is, in fact, the executive that prefers a no-negotiation policy, and the citizenry that favors negotiations. My rationale for this is based primarily on the tendency for society to react in large part based on emotion, both to everyday politics and terrorist acts (Tuman, 2009). Tuman explains that society responds to terrorist groups with hate, which is generally classified as an emotion. An emotion, according to Tuman "is something we can and want to control" (p. 56). I argue that it is this manifestation of hate, and society's desire to control it, that prompts the willingness to negotiate. While there may not be an immediately effective response to destroy the terrorist group that is holding the hostage, a return of that victim would be a tangible victory for society.

The question then becomes why the word of the executive is not enough to convince the citizenry of the dangers of negotiating. For many, a no-negotiation policy is seen as the most successful and full proof way of deterring terrorist groups from kidnapping. Negotiating is perceived to be a sign of weakness, and a signal that the government will continue to negotiate for hostages taken in the future. This being the case, terrorist groups then perceive kidnapping as a successful means by which to fund operations.

However, I believe the inability of the executive to convince society stems from the fact that there are governments in the democratic world that do negotiate for hostages, and their citizens do not appear to be in constant threat after successful negotiations. For example, Germany, Switzerland, and France have historically paid ransoms for their citizens being held by al-Qaeda (Callimachi, 2014). In the time period covered by the Global Terrorism Database, (1970-2013), those three countries have respectively had six, two, and fifteen of their citizens held hostage. Compare those numbers to those of the United Kingdom and United States, the only two countries to explicitly state no negotiation policies, which have had six and twenty-seven hostages taken respectively. The numbers do not appear to vary significantly between the groups of countries with different policies, and therefore society does not perceive the costs of negotiating to be above the threshold which can be accepted.

## **Chapter 4: Hypothesis and Research Design**

#### Hypothesis

In this thesis, I examine the effects of democratic presidential and parliamentary systems on the risk of being targeted by hostage attacks by terrorist groups. My primary assumption is that the greater level of accountability executives in democratic parliamentary states feel to their legislators and constituents, the more vulnerable they will be to pressures to negotiate due to the risk that they may lose office if they do not act on society's demands correctly. In the presidential system, the executive's office is not in continual risk, the way it is in a parliamentary system, but rather only during election season. This variance in the stability of the executive office affects a country's likelihood of negotiating, and therefore impacts the actions of terrorist groups looking to gain concessions from hostage attacks. I therefore hypothesize that democratic parliamentary systems can more easily be pressured to negotiate, and consequently terrorist groups will more often target democratic parliamentary governments with hostage attacks.

H1: Given that a terrorist group has motive to attack a democratic parliamentary or democratic presidential system, parliamentary systems will experience a greater risk of kidnappings than democratic presidential systems.

#### Data Collection

The basis for my data on terrorist attacks comes from the Global Terrorism Database (GTD) compiled by the National Consortium for the Study of Terrorism and Response to Terrorism (START). The data in GTD is assembled from the millions of articles collected by the Metabase Application Programming Interface (API). API collects articles written in English, and supplements those with Englishlanguage translations of articles from the Open Source Center. After limiting the pool of articles to include only news related to terrorism using language-processing software, the GTD team manually reviews and determines which information to include in the database. GTD uses the following definition of terrorism to determine which acts of violence are to be included in the database: *"the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation."*<sup>2</sup>

#### **Variables**

#### Dependent Variable

The dependent variable of this study is whether or not a citizen of a given country was taken hostage in a given year (*HOSTAGE*). This is a binary, not count, variable. GTD codes for nine different types of terrorist attacks: Assassination,

<sup>&</sup>lt;sup>2</sup> GTD further explains what criteria an incident must meet to be included in the database: "*The incident must be intentional, the incident must entail some level of violence or threat of violence, and the perpetrators of the incidents must be sub-national actors.*" GTD then lists three more criteria and requires that at least two more of them be met in order for an attack to be included in the database: "Criterion 1: The act must be aimed at attaining a political, economic, religious, or social goal. Criterion 2: There must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims. Criterion 3: The action must be outside the context of legitimate warfare activities." All of the above criteria are explained in more detail in the GTD codebook.

Armed Assault, Bombing/Explosion, Hijacking, Hostage Taking (Barricade Incident), Hostage Taking (Kidnapping), Facility/Infrastructure Attack, Unarmed Assault, and Unknown. Based on these categorizations, I created a dummy variable to denote whether or not the attack type was a hostage attack. All hostage attacks were coded as a '1' and all other types of attacks were coded as a '0.' For my dataset both Barricade Incidents and Kidnappings were coded '1' for hostage attacks. GTD distinguishes the two types of attacks based on the motivation of the terrorist group to transport a hostage and hold them for an extended period of time – this goal does not exist in Barricade Incidents while it does exist in Kidnappings. However, given that in both types of attacks the terrorist group does seek to achieve a political objective I felt it best to include both categorizations as hostage attacks.

GTD includes up to three victim nationalities for each of their attacks. I reorganized the dataset to include a separate entry for each nationality listed and then minimized the number of nationalities to include only one per attack. The nationality of the victim, rather than the country from where the hostage was taken, is the country I used to code the *PRES*, *PARL*, and *HOSTAGE* variables. This is because the area of interest of this research is whether or not the country of which the hostage is a citizen is a democratic presidential or parliamentary system, rather than whether or not hostages are kidnapped directly from those countries.

#### Independent Variables

The independent variable of this study is the governmental system of a country: democratic presidential or democratic parliamentary. The regime type of

each country in a given year was coded as presidential or parliamentary based on the Database of Political Institutions methodology (DPI). The DPI includes a variable called '*system*' which identifies each regime type as Parliamentary, Assembly-elected President, or Presidential. Systems are categorized as presidential when there is an unelected executive or when presidents are elected directly or by electoral college and there is no prime minister in the system. Systems are categorized as parliamentary when the executive is selected by the legislature. Where legislatures cannot recall the executive by less than a 2/3 vote the system is coded as an assembly-elected presidential system. For those systems with both a president and a prime minister the DPI uses the following features to determine the system type:

*"a) Veto power: president can veto legislation and the parliament needs a supermajority to override the veto.* 

*b)* Appoint prime minister: president can appoint and dismiss prime minister and / or other ministers.

c) Dissolve parliament: president can dissolve parliament and call for new elections.

d) Mentioning in sources: If the sources mention the president more often than the PM then this serves as an additional indicator to call the system presidential (Romania, Kyrgyzstan, Estonia, Yugoslavia). The system is presidential if (a) is true, or if (b) and (c) are true. If no information or ambiguous information on (a), (b), (c), then (d)." I created a dummy variable for presidential systems (*PRES*), coded '1' for presidential systems and '0' for all other systems. I also created a dummy variable for parliamentary systems (*PARL*), coded '1' for parliamentary systems and '0' for all other systems. I adjusted the coding by labeling semi-presidential regimes as both presidential and parliamentary. This means that some countries in my dataset receive both a '1' under the *PRES* variable and a '1' under the *PARL* variable. The determination of these semi-presidential systems was made using Professor Robert Elgie's research.<sup>3</sup>

In order to create a democracy dummy variable (*Dem\_NonDem*) I used the Polity IV Project's dataset. The Polity IV dataset includes a variable '*POLITY*' which ranks countries on a twenty-two-point scale (from -10 to +10) based on the features of a democracy and autocracy that exist in the system. Polity ranks the democratic features on an eleven-point scale (0-10) based on "*the competitiveness of political participation, the openness and competitiveness of executive recruitment, and constraints on the chief executive.*"<sup>4</sup> The autocratic features of a political system are also ranked on an eleven-point scale (0-10) based on "*the competitiveness of political participation, the regulation of participation, the openness and competitiveness of executive recruitment and constraints on the chief executive.*"<sup>5</sup> The *POLITY* variable for each country is then calculated by subtracting the autocracy score from the

<sup>&</sup>lt;sup>3</sup> Professor Robert Elgie teaches at Dublin City University in the Law and Government department. His research focuses on semi-presidentialism, political leadership, comparative politics, and French politics. The website which I used to code my systems can be found here: http://www.semipresidentialism.com/?cat=61.

 <sup>&</sup>lt;sup>4</sup> Each of the three components of democracy are broken up into multiple features and each of those are assigned a weight between one and four points. These divisions can be found in the appendix.
 <sup>5</sup> The weights assigned to the subdivisions of each of these components can also be found in the appendix.

democracy score. For my dataset countries receiving a six or higher on the POLITY score were coded as a '1' for being a democracy and all countries receiving lower than a six were coded as a '0'. This value was chosen in order to keep with the common practice of POLITY score usage in existing literature.<sup>6</sup>

In order to create my final independent variable, I interacted the democracy variables with the presidential and parliamentary systems to create the *Dem\_PRES* and *Dem\_PARL* variables. These variables are what I use as my measure in my final analysis to determine the effects of democratic presidential and parliamentary systems on hostage-taking terrorism.

#### **Control Variables**

My control variables were chosen based on the studies of other researchers on this topic, and in order to cover a wide spectrum of possible other issues that may motivate terrorist groups to select specific targets as their hostages. All of these variables measure statistics of the country from which the hostage is from, rather than the country from which they were taken.

#### Country Stability

The first category of control variables I selected relates to the stability of a country's government and population. I used measures of corruption (*Corruption*), ethnic tensions (*EthnicTens*), law and order (*LawOrder*), religious tensions (*RelinPol*), military in politics (*MilinPol*), internal conflict (*IntConf*), external conflict (*ExtConf*), the region of the world a country is located in (*region*) and general

<sup>&</sup>lt;sup>6</sup> Lee, Chenoweth, and Piazza to name a few.

government stability *(GovtStab).* These variables came from the political-risk rating component of the International Country Risk Guide (ICRG) created by the PRS Group and the regional categorizations used in the GTD. The political risk rating measures the political stability of countries based on twelve variables. My final analysis includes eight of those components.

ICRG measures corruption on a seven-point scale (0-6). The value assigned to each country takes into account financial corruption by business and political corruption by members of the government.<sup>7</sup> I included corruption in my analysis because I believe higher levels of corruption can lead to increased resentment of a government by the citizenry, and a violent rebellion against the regime (ICRG). This rebellion can cause some extremist groups to resort to terrorist activities, including hostage taking.

Ethnic tensions are also measured on a seven-point scale (0-6). This value is assigned based on the degree of racial, nationality, and language divisions present within a country.<sup>8</sup> Ethnic tensions are included in my analysis because such divisions can and often do lead to internal conflict. This internal conflict can lead various factions to resort to hostage taking as a terror tactic.

The value attributable to the law and order of a country is an aggregate of the two components measured separately, each on a four-point scale (0-3). Law is evaluated based on the "*strength and impartiality of the legal system*" and order is

<sup>&</sup>lt;sup>7</sup> ICRG details financial corruption to be "demands for special payments and bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans." Political corruption is "excessive patronage, nepotism, job reservations, 'favor-for-favors', secret party funding, and suspiciously close ties between politics and business."

<sup>&</sup>lt;sup>8</sup> ICRG explains "lower ratings are given to countries where racial and nationality tensions are high because opposing groups are intolerant and unwilling to compromise. Higher ratings are given to countries where tensions are minimal, even though such differences may still exist."

measured based on "*popular observance of the law*."<sup>9</sup> This measure of law and order provides a good base understanding for general respect of law of a country's citizenry. Higher levels of respect are associated with lower crime rates, and consequentially can be assumed to lower the risk of hostage taking.

The risk assessed based on religious tensions is measured on a seven-point scale (0-6). ICRG includes a number of scenarios based on religious divides that may lead to increased political risk in a country.<sup>10</sup> The range of scenarios includes *"inexperienced people imposing inappropriate policies through civil dissent to civil war."* Religious tensions often lead to violence between various factions. In some cases violence against an opposition group can manifest itself in kidnappings.

Military involvement in politics is measured on a seven-point scale (0-6). Due to the fact that the military is not elected, its involvement in the political process is seen as a *"diminution of democratic accountability."*<sup>11</sup> This association with lower levels of democracy can cause unrest in a population, leading to violence and kidnapping tactics.

Internal conflict is measured on a thirteen-point scale based on subcomponents of civil war/coup threat, terrorism/political violence, and civil disorder. Each of these is weighted equally in the final distribution. Internal conflict

 <sup>&</sup>lt;sup>9</sup> For example: "A country can enjoy a high rating – 3 – in terms of its judicial system, but a low rating – 1 – if it suffers from a very high crime rate if the law is routinely ignored without effective sanctions= (for example, widespread illegal strikes)."

<sup>&</sup>lt;sup>10</sup> "Religious tensions may stem from the domination of society and/or governance by a single religious group that seeks to replace civil law by religious law and to exclude other religions from the political and/or social process; the desire of a single religious group to dominate governance; the suppression of religious freedom; the desire of a religious group to express its own identity, separate from the country as a whole."

<sup>&</sup>lt;sup>11</sup> For an understanding of measure, ICRG explains the following: *"lower risk ratings indicate a greater degree of military participation in politics and a higher level of political risk."* 

is "an assessment of political violence in the country and its actual or potential impact on governance."<sup>12</sup> External conflict is measured in the same way based on the subcomponents of war, cross-border conflict, and foreign pressures. Both of theses are directly relevant to rates of hostage taking. Hostage taking is a tactic of violence, and areas with high internal conflict are at higher risk to all types of violence, including kidnapping.

The region of the world a country is located in was taken from the designations in the GTD. The GTD includes thirteen regional groups: North America, Central America & Caribbean, South America, East Asia, Southeast Asia, South Asia, Central Asia, Western Europe, Eastern Europe, Middle East & North Africa, Sub-Saharan Africa, Russia & the Newly Independent States, and Australia & Oceania.<sup>13</sup> I included regional controls because certain areas of the world are known to have higher levels of hostility than others. Areas with higher hostility levels are at greater risk to kidnapping incidents.

Lastly, government stability is measured on a thirteen-point scale (0-12). The value is determined by ICRG based on a government's ability to follow through with promised programs and its permanence in office. These qualities are based on three subcomponents: government unity, legislative strength, and popular support. These are all weighted equally based on a value from 0-4. Higher levels of government stability imply a generally peaceful country. Stable governments are

 <sup>&</sup>lt;sup>12</sup> "The highest rating is given to those countries where there is no armed or civil opposition to the government and the government does not indulge in arbitrary violence, direct or indirect, against its own people. The lowest rating is given to a country embroiled in an on-going civil war."
 <sup>13</sup> The specific countries in each of these regions can be found in the Appendix.

more efficient at suppressing violence and maintaining internal levels of peace, and thereby reducing levels of kidnapping.

#### **Economic Factors**

The next category of control variables I included in my study is economic factors. These include the socio-economic conditions of a country (*SocEcCond*), information flow into the country (*InfoFlows*), foreign direct investments (*FDI*), inequality (*Gini*), urbanization (*Urbanization*), GDP per capita (*GDPperCap*), and total GDP (*log\_GDP*).

My variable for the measure of socio-economic conditions came from the ICRG. ICRG measures this variable on a thirteen-point scale (0-12) with equal weight given to each of the subcomponents of unemployment, consumer confidence, and poverty. I included this variable in my analysis because it is a way to measure standard of living and social satisfaction in society. The lower the standard of living and social satisfaction, the higher the risk is for violence and consequentially hostage-taking (The PRS Group, p. 3).

Next I included the variable, *InfoFlows*, as a way of measuring the globalized nature of a society. This variable came from the Social Globalization measure of the 2014 KOF Index of Globalization. KOF uses data on the number of Internet users, the number of televisions, and trade of newspapers to understand how informed a society is.<sup>14</sup> I included this data because access to these resources demonstrates a level of economic security in the country. Countries with greater access to these

<sup>&</sup>lt;sup>14</sup> "Internet users are people with access to the worldwide internet network, televisions are counted per household, and trade of newspapers is defined as the sum of exports and imports in newspapers and periodicals in percent of GDP" (KOF, 2014). KOF takes its data from the World Bank and the United Nations Commodity Trade Statistics Database.

resources will tend to be more stable economically, leading to lower chances of violence, and lower probability for hostage-taking internally. However it can also have the opposite effect, if these resources are attainable people have opportunity to discover an inequality in their lifestyle versus lifestyles of citizens in other countries. This can cause frustration and rebellion against the government, leading to greater violence and greater probability for hostage-taking.

My data on foreign direct investments (FDI) came from the World Bank. The World Bank measures FDIs as the "*net inflows of investment*" and the data was recorded in United States dollars. I included FDIs as a control variable because involvement by foreign investors in a country can also increase the number of foreigners in a country at any given time. If investors are traveling to high-risk countries to monitor their project their chances of kidnapping are much higher than if all investments were to be made locally.

For the measure of inequality in income distribution I used the World Bank's Gini index. This index *"measures the extent to which the distribution of income or consumption expenditures among individuals or households within an economy deviates from a perfectly equal distribution"* (World Bank, 2014). I included this measure because unequal income distribution can in some cases lead to frustration with the governmental system of country. This frustration can manifest into violence, and lead to greater rates of kidnapping.

My data for the urbanization of a country also came from the World Bank. The World Bank measures urbanization as the percentage of the population living in urban areas. I included this measure because countries with higher rates of

urbanization are in many cases wealthier and more economically stable countries. Countries with greater wealth and economic stability tend to experience less violence, and therefore are at lower risk for hostage-taking incidents within the borders.

The final two economic control variables I included are GDP per capita and total GDP. GDP per capita is the gross domestic product divided by the number of individuals in the population as calculated in the middle of the year. Total GDP is *"the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products"* (World Bank – GDP, 2014). I included GDP per capita because it is possible that citizens of countries with high GDP per capita may be targeted more frequently due to their ability to pay larger ransoms. On the other hand, countries with high total GDP may be less likely to experience hostage taking given their ability to maintain a certain level of security, at least within their borders. However, citizens that come from countries with high total GDP could be equally appealing targets when traveling abroad as those citizens that come from countries with high GDP per capita because their governments may be able to pay large ransoms.

#### **Population Characteristics**

The final group of control variables I included is that which characterizes the population of a country. The variables include the political globalization of a country (*PolGlobalization*), population total (*PopTotal*), and life expectancy (*LifeExp*).

The measure of political globalization came from the 2014 KOF Index of Globalization. KOF uses data on the number of embassies in a country, a country's membership in international organizations, a country's participation in United Nations Security Council Missions, and the number of international treaties a country is a part of to determine how politically globalized a state is.<sup>15</sup> I included this variable because it demonstrates the level of international support a country is receiving and the extent to which that country matters in the international context. Countries with a greater number of relationships with other countries and higher involvement in international measures may be more likely to have a generally stable government and economy. This level of stability minimizes the level of violence and subsequent risk of kidnapping.

The population of each country was taken from data supplied by the World Bank. This was included to control for the natural probability that those countries with higher populations have greater chances of their citizens being kidnapped.

Data on the life expectancy of populations was also recorded from the World Bank. The rationale for this inclusion was the same as that for population of a country. Life expectancy is in many cases a good determinant of the economic status of a country. Countries with higher life expectancies tend to be states with high levels of GDP per capita. As discussed earlier, GDP per capita may increase the

<sup>&</sup>lt;sup>15</sup> Value assigned to a country's participating in UN Security Council missions is based on "personnel contributed to U.N. Security Council Missions per capita." Treaties that were "signed between two or more states and ratified by the highest legislative body of each country" are included in the treaty count. "Not ratified treaties, or subsequent actions, and annexes are not included. Treaties signed and ratified must be deposited in the Office of the Secretary General of the United Nations to be included" (KOF, 2014).

probability that citizens of states with high levels of GDP per capita are targeted for kidnappings.

# **Chapter 5: Data Analysis**

In my statistical analysis, a total of 15,442 observations are included. My method for observation is a logit regression controlling for the year of the attack, and clustering the results by the terrorist group that committed the attack.

It was important to control for the years because some years experienced significantly more attacks than others. The lowest number of attacks was sixteen in 1972, while the greatest number was 657 in 2013. In general, the trend was a steady increase from 1970 until the mid 1990s. Following the Cold War the number of attacks decreased, but dramatically increased again starting in the mid 2000s, following the attacks of September 11, 2001. This information is shown below in Figure 1.<sup>16</sup>

There were a total of 496 groups in the test. Clustering the results of the analysis by terrorist group committing the attacks organizes the data in such a way that it is not simply a random sample from which the results are being drawn, but rather the results demonstrate conscious choices by multiple terrorist groups committing the attacks. Without the clusters, the results are framed as if it is a single entity makes the decision to carry out all terrorist attacks. With clusters, the data shows that multiple independent groups choose to use kidnappings as a method of terror.

<sup>&</sup>lt;sup>16</sup> The number of hostage attacks shown in this graph is based on the information in GTD. In 1993 the graph shows there were zero attacks because GTD lost the data for that year, and so has no information on any terrorist activity in 1993.

Figure 1: Number of Hostage Attacks per Year (1970-2013)



#### **Primary Results**

Table 1 (shown below) demonstrates that the relationship between hostage attacks and both democratic presidential and parliamentary regimes is positive and significant. The results for democratic parliamentary regimes (*DemParl*) are highly significant (p >.01) and indicate that citizens of a country that is both democratic and parliamentary are roughly fifteen times (1500 percent) more likely than citizens of a country that is not both democratic and a parliamentary system to be targeted by a hostage attack given that they are the target of a terrorist act to begin with. The results for democratic presidential systems (*DemPres*) are significant and demonstrate that citizens of a country that is both democratic and presidential are about seventy percent more likely than citizens of a state that is not both democratic and presidential to be the targets of a kidnapping.

These results confirm my hypothesis that democratic parliamentary regimes experience higher risk of hostage attacks than democratic presidential systems. While it is true that both systems experience increased risk levels of kidnappings relative to all other types of systems, the difference between the two is extremely high. This demonstrates that there is something about the two types of democratic governmental systems that makes citizens of the parliamentary style government a much more desirable target for terrorist groups.

# Table 1: LOGIT, Democratic Presidential and Democratic ParliamentarySystems17

	Odds	Robust Std.	
HOSTAGE	Ratio	Err.	P> z
DemParl	16.11731	4.699646	0.000
DemPres	1.706777	0.4382896	0.037
Dem_NonDem	1	(omitted)	
PARL	0.9744759	0.5017372	0.960
PRES	10.58375	4.288013	0.000
Corruption	1.297603	0.2161551	0.118
EthnicTens	1.067154	0.2161551	0.506
LawOrder	0.8000782	0.1240758	0.150
RelinPol	1.143131	0.075994	0.044
MilinPol	0.877152	0.0725415	0.113
SocEcCond	0.9367158	0.120721	0.612
GovtStab	0.8130975	0.0345091	0.000
InfoFlows	1.002522	0.0102876	0.806
PolGlobalization	0.9721489	0.0137211	0.045
FDI	1	2.87E-12	0.271
Gini	1.000513	0.0122348	0.967
Urbanization	1.009279	0.0066634	0.162
GDPperCap	0.9997558	0.0000787	0.002

<sup>&</sup>lt;sup>17</sup> It was pointed out that Israel's policy to rescue hostages whenever possible (Meyr, 2002) may be skewing the results of the Democratic Parliamentary systems. In order to check I ran the test again, excluding all incidents in which the targets were Israeli citizens, and the results did not change. This is most likely due to the fact that while Israel does in most cases manage to rescue the hostage, in the time period observed Israeli citizens have only been hostages nineteen times.

log_GDP	1.435944	0.228064	0.023
PopTotal	1	5.27E-10	0.834
LifeExp	0.9089718	0.0189023	0.000
IntConf	1.369095	0.129389	0.001
ExtConf	0.8647155	0.0723104	0.082
region	0.8613067	0.0514651	0.012

In addition to there being a significant relationship between hostage attacks and democratic presidential and parliamentary systems, there are a number of other variables that also demonstrate a strong relationship with hostage taking. Presidential systems *(PRES)* exhibit a highly significant (p >.01) relationship with hostage attacks. The results show that presidential systems are about nine times (900 percent) more likely than non-presidential systems to experience hostage attacks. This relationship most likely exists because the presidential categorization by DPI includes not only systems with elected presidents, but also those with dictatorships or monarchies. For example, Bahrain, which is technically a constitutional monarchy, Jordan, which is also a constitutional monarchy, and Saudi Arabia, which is a monarchy are all categorized as presidential systems in DPI.

The level of religious tensions *(RelinPol)* also exhibits a significant relationship to the likelihood of citizens of a given nationality taken hostage. The results show that religious tensions increase the likelihood of a hostage attack by about fourteen percent. This relationship is most likely due to the fact that greater levels of religious tensions increase the probability for violence and therefore the probability for hostage attacks. Religious tensions also tend to be the cause of violence most frequently in incidents of domestic terrorism. Given that conflicts of a religious nature tend to be fought within the boundaries of a particular state, any factions' ability to capture hostages of the opposing faction is made greater due to their naturally close proximity.

The level of government stability *(GovtStab)* is a highly significant predictor of the likelihood of being targeted for a hostage attack. As the level of government stability increases, the probability of being the target of a kidnapping decreases by roughly nineteen percent. Government stability is measured based on the level of government unity, legislative strength, and popular support. Government unity generally implies that the goals of those in office are the same, this allows not only for more productive day-to-day functions of a government, but also permits a swifter response to violence against the country's citizens. This ability to quickly respond and minimize the extent and time period of violence lowers the likelihood of hostage attacks. The legislative strength and popular support facilitates the ability of the government to make such quick decisions.

Political globalization (*PolGlobalization*), as measured by the KOF Index of Globalization, also demonstrates a significant relationship with the likelihood of a country's citizens to be targeted by a hostage attack. The results show that as political globalization increases, the likelihood of being targeted by a terrorist attack and for that attack to be a hostage attack decreases by about three percent. This relationship may seem counter-intuitive to those who argue that globalization increases countries' presence abroad and therefore heightens animosities between states. In the case of hostage taking it may seem more natural to assume that as presence abroad increases, the number of citizens being taken hostage also increases. It could be that that is in fact the case, and the reason that effect is not

being reflected in these results is because KOF doesn't include presence abroad in their measure of political globalization. However, it also could be that those countries that do have heightened levels of participation internationally are also wealthier countries, and countries that devote many resources to security of their citizens domestically and abroad. For example, the United States and United Kingdom, which are arguably the most targeted countries for incidents of international terrorism, have some of the lowest numbers for citizens taken hostage from 1970-2013. Colombia has the highest number of hostages taken by far at 1075, while other countries like Vietnam and Romania have not had a single citizen taken hostage. The U.S. and UK fall in the middle of the spectrum, with the number of U.S. citizens taken hostage at twenty-seven, and the UK having six.

GDP per capita and the log of GDP also exhibit significant relationships with hostage attacks, but in opposite directions. As GDP per capita increases, the likelihood of being targeted for a hostage attack decreases by about one percent. As total country GDP increases however, the risk for hostage attack increases by roughly forty-three percent. The effect of GDP per capita on the likelihood of being targeted for a hostage attacks is small, and can most likely be attributed to the fact that generally a country's wealth is identified on a national scale, rather than wealth based on the shared GDP of each citizen. Countries with high GDP per capita also tend to be smaller than other countries geographically, and in terms of population size. Total GDP however is a much more widely known and commonly used attribute for identifying the wealth of countries, and that identification often affects the perception of citizens' wealth. If that is the case, individuals that come from

wealthy countries may be targeted more frequently for hostage attacks in hopes that the individual's government will be able to pay a high ransom. Also given that in hostage situations the demand for ransom is given to the government, it makes sense that terrorist groups would take into account more heavily overall GDP than GDP per capita.

Life expectancy is highly significant (p>.01), demonstrating that as life expectancy increases the risk for being taken hostage decreases by about ten percent. This is most likely due to the correlation between life expectancy and GDP per capita. As discussed earlier, GDP per capita lowers the likelihood of being taken hostage.

Internal conflict also exhibits a highly significant relationship to the likelihood of being taken hostage. The results show that as levels of internal conflict increase, the likelihood of hostage attacks increases by about thirty-seven percent. The explanation for this is similar to that of the correlation between religious tensions and increased risk for kidnapping. The measure of internal conflict used by the ICRG explicitly includes terrorism and political violence as one of its indicators. Hostage taking is a form of terrorism, and therefore the risk of kidnapping increases as levels of terrorism and political violence rise within a country's borders.

The last variable that exhibits a significant relationship is region. Changes in region can increase risk of kidnapping by about eighty-six percent. This variance in geographic location and risk of hostage-attack is most intuitively explained by the fact that certain regions of the world have experienced higher and lengthier levels of conflict than others. Given GTD's regional categorizations, South America and the

Middle East & North Africa regions have experienced significantly higher rates of violence and for longer periods of time than countries in the Central America & Caribbean and Western Europe regions. Of course Europe experienced its fair share of violence throughout history, but in the 1970-2013 time frame violence has shifted to other regions of the world.

#### **Additional Results**

In addition to analyzing democratic presidential and parliamentary systems in the same test, I also observed the effects of these two systems independently. Table 2 and Table 3, shown below, confirm the comparison between democratic presidential and parliamentary systems that was evident in the results presented in Table 1. The results for democratic parliamentary systems are significant and demonstrate that democratic parliamentary governments are roughly 143 percent more likely to be the targets of hostage attacks than non-democratic and nonparliamentary systems. The results for democratic presidential systems are also significant but in contrast to the results when democratic parliamentary systems were also accounted for, these results demonstrate that citizens of democratic presidential systems are about ninety percent less likely to be the targets of hostage attacks than citizens of countries that are neither democratic nor presidential.

	Odds	Robust Std.	
HOSTAGE	Ratio	Err.	P> z
DemParl	2.431443	0.8341168	0.010
Dem_NonDem	1.883499	0.5796038	0.040
PARL	0.4369823	0.1856878	0.051
Corruption	1.234348	0.2180994	0.233
EthnicTens	1.044025	0.0848457	0.596

**Table 2: LOGIT, Democratic Parliamentary Systems** 

LawOrder	0.845397	0.1210153	0.241
RelinPol	1.220674	0.0727456	0.001
MilinPol	0.8264342	0.0671375	0.019
SocEcCond	0.9422947	0.1174639	0.634
GovtStab	0.8160648	0.0383669	0.000
InfoFlows	1.005864	0.0109011	0.590
PolGlobalization	0.9702645	0.0120258	0.015
FDI	1	2.57E-12	0.648
Gini	0.9848363	0.0127009	0.236
Urbanization	1.021695	0.0064188	0.001
GDPperCap	0.9998238	0.0000492	0.000
log_GDP	1.199844	0.2085906	0.295
PopTotal	1	4.71E-10	0.125
LifeExp	0.9064615	0.0201005	0.000
IntConf	1.352377	0.1211829	0.001
ExtConf	0.885213	0.0815828	0.186
region	0.9192045	0.0520632	0.137

# Table 3: LOGIT, Democratic Presidential Systems

	Odds		
HOSTAGE	Ratio	Robust Std. Err.	P> z
DemPres	0.106898	0.0377461	0.000
Dem_NonDem	16.00899	6.336581	0.000
PRES	10.75727	1.957305	0.000
Corruption	1.29819	0.212963	0.112
EthnicTens	1.069312	0.0707502	0.311
LawOrder	0.8002897	0.1274822	0.162
RelinPol	1.141249	0.0881356	0.087
MilinPol	0.8766198	0.0714248	0.106
SocEcCond	0.9367005	0.1210063	0.613
GovtStab	0.8124341	0.0393997	0.000
InfoFlows	1.002404	0.0098755	0.807
PolGlobalization	0.9722028	0.0129936	0.035
FDI	1	2.98E-12	0.286
Gini	1.000904	0.0139919	0.948
Urbanization	1.009064	0.0069305	0.189
GDPperCap	0.9997555	0.0000756	0.001
log_GDP	1.442009	0.2999629	0.078
PopTotal	1	4.98E-10	0.840
LifeExp	0.9088074	0.0196829	0.000

IntConf	1.36888	0.1268146	0.001
ExtConf	0.8645603	0.0747146	0.092
region	0.8603533	0.0664536	0.051

In both sets of results, Table 2 and Table 3, we see that democracy exhibits a relationship with the likelihood of being targeted by a hostage attack. In the table showing democratic parliamentary systems the results are significant and show that democracies are about eighty-eight percent more likely to be targeted by hostage attacks than non-democracies, once they are identified as targets for terrorist attacks in general. In the table showing democratic presidential systems the results are highly significant showing that democracies are about fifteen times (1500 percent) more likely to experience hostage attacks than non-democracies. Democracies have been shown by many studies to be targeted more frequently by terrorist attacks than non-democracies.<sup>18</sup> While there has not been any study concluding that democracies are also more frequently targeted specifically by hostage attacks, this correlation can be expected given that in this case hostage attacks are being observed as a subset of terrorist attacks.

Table 2 provides additional information about parliamentary systems that was not evident in the primary results. In this case, the relationship between parliamentary systems and the likelihood of hostage taking is significant and shows that parliamentarian governments are about fifty-seven percent less likely to be targeted by hostage attacks than non-parliamentarian systems, once they are identified as targets for terrorism. Table 3 confirms the findings presented in the

<sup>&</sup>lt;sup>18</sup> Chenoweth, Eubank & Weinberg, and Gause have all come to this conclusion.

primary results showing that at highly significant levels presidential systems are about nine times (900 percent) more likely to be the targets of hostage attacks than non-presidential systems.

Tables 2 and 3 both show that government stability, political globalization, GDP per capita, life expectancy, internal conflict, and region have significant relationships to the probability of citizens being targeted for hostage attacks. Tables 2 and 3 show that as government stability increases the likelihood of being targeted by hostage attacks diminishes by about nineteen percent. Both results also show that as political globalization increases the probability of being targeted for a hostage attack decreases by approximately three percent. GDP per capita is also shown to decrease the likelihood of being targeted for kidnappings by roughly one percent. In both sets of results life expectancy is highly significant and is shown to diminish the probability of hostage attack by about ten percent. Internal conflict is shown to increase the likelihood of hostage attacks by between thirty-five and thirty-six percent.

There are some variables that exhibit significant relationships to the probability of hostage taking in only one of the two results. Religious tensions, military involvement in politics, and urbanization are shown to have a relationship with the likelihood of hostage taking in the results that account for democratic parliamentary systems. Religious tensions are highly significant demonstrating that as religious tensions increase probability for kidnappings increase by about twentytwo percent. Military involvement in politics is also highly significant and shows that as the level of military involvement in politics increases the chances of hostage

taking decrease by about eighteen percent. This could be because military presence in politics is often accompanied by oppression of opposition forces, and therefore lower levels of violence. Urbanization is also highly significant and increases the likelihood of kidnappings by roughly two percent. This relationship could be tied to an increase in hostage taking for the same reason total GDP increases the probability of hostage attacks. Higher levels of urbanization are usually reflective of higher national GDP, which makes a government more able to pay a higher ransom for hostages. Table 3, the results that account for democratic presidential systems, echoes the relationship between region and hostage taking found in the primary results. Changes in region are significant and decrease the likelihood of hostage attacks by roughly fourteen percent.

All three tables of results presented serve to validate my hypothesis that democratic parliamentary systems face greater risk of hostage attacks than democratic presidential systems given that both types of systems are targets for terrorism. In all three tests, while both democratic presidential and parliamentary systems face greater risk than all other systems, the difference between the two exceeds one thousand percent. This tremendous variance shows that terrorist groups perceive a difference between the two systems and determine that they are more likely to receive concessions or ransoms from democratic parliamentary systems than democratic presidential systems. These results also demonstrate that democratic systems are at greater risk for hostage attacks by terrorist attacks, which serves as a robustness check for studies that concluded democracies face greater risk for terrorist attacks in general. Additionally, there are a number of

variables that demonstrate significant relationships with the likelihood of being targeted for hostage attacks. The secondary tests serve to reinforce the results of my primary observations and give credit to the conclusions found to be consistent among all three models.

## **Chapter 6: Conclusion**

#### Findings

In this thesis I provide evidence that citizens of democratic parliamentary systems are at significantly greater risk of kidnapping than citizens of democratic presidential systems, and citizens of non-parliamentary and non-democratic systems. Democratic parliamentary systems are about fifteen hundred percent more likely than non-democratic and non-parliamentary systems to experience hostage attacks given that both are targeted by terrorism. The results of this thesis give new insight to the literature arguing that democracies experience greater numbers of terrorist attacks than other systems. The results of this thesis strengthen that argument by showing that when a specific type of terrorist attack is observed democracies are still at greater risk than non-democracies.

The results also demonstrate that there are important and influential differences between types of democratic governing systems that make some more susceptible to risks than others. The strength of the results also suggest that the differences in systems are evident to terrorist groups, and that terrorist groups are acting under certain assumptions about the way democratic governance functions. The huge discrepancy between the likelihood of democratic presidential systems' and democratic parliamentary systems' likelihood to be targeted by hostage attacks could also demonstrate that terrorist groups use certain methods of terror for different regime types. Terrorist groups may have discovered that they can

accomplish more by targeting democratic parliamentary systems by hostage attacks and democratic presidential systems using different forms of terror.

The results of this research also give insight into features of democracies that increase the risk of hostage attacks. The greater the levels of religious tension, urbanization, total GDP and internal conflict the higher the risk is for hostage attacks. Presidential systems face about a 900 percent greater risk of hostage attacks than other systems. On the other hand, higher levels of government stability, political globalization, GDP per capita, and life expectancy decrease the risk for hostage attacks. Variance in region can also decrease the risk of hostage attacks. On the whole, parliamentary systems face roughly fifty-seven percent lower risk of hostage attacks than non-parliamentary systems.

#### Implications

While there has been extensive study of the relationship between democracy and terrorism, there have been very few efforts to study specific types of terrorism and their prevalence in democracies. Understanding different types of attacks and their frequency in democracies can help governments develop strategies to combat terrorism more specific to the types of attacks they are being faced with.

The results presented here suggest that there should be a policy implemented to minimize the risk felt particularly by democratic parliamentary systems, but also for all governments. The only effective policy will be one that minimizes the potential benefit terrorist groups gain from kidnapping. This means that the governments of the citizens that are kidnapped have to set a standard of no negotiations for any terms. The theoretical effectiveness of this strategy has already

been accepted, but there has not yet been an effective way in which to ensure its implementation.

Given my argument that citizens, more so than executives, are the demographic that prefers negotiations, increasing audience costs for the executive by negotiating under a firm no-negotiation policy may prove to be ineffective. Even given an official governmental stance to not negotiate, there may still be a significant enough portion of citizens that will advocate for negotiations. This pressure may, as it has been in the past, be enough to force executives to negotiate. As mentioned earlier, citizens' willingness to negotiate is due to the emotional reaction of society to terrorist attacks, and perhaps more importantly, due to the negotiations conducted by other countries in exchange for the return of hostages.

If this international presence of negotiations impacts citizens' construct of the acceptable nature of negotiations, then the only way to increase costs enough for an executive to not negotiate is by creating an internationally binding agreement. This may prove effective for a couple reasons. First, it may dissuade citizens from putting pressure on their executive to negotiate. If there is enough belief in the power of the international system citizens will recognize such an agreement as binding, and while there still may be some dissenters, the size of the support will diminish and therefore executives will not fear the loss of their office. Second, the audience costs placed on an executive may be higher in an international atmosphere if that executive chooses to pursue negotiations. In an international setting the credibility of a government that has negotiated under a no-negotiation will severely

decrease, and may inhibit that governments ability to combat terrorism in general in the future.

It is important to acknowledge that either one of these methods is unlikely to triumph as completely effective. In present day, countries with explicit no negotiation policies choose, in some cases, to pursue negotiations anyway, but in secret, as a way of avoiding those audience costs (Lee, 2013). Parliamentary systems specifically may want to examine the relationships between the executive and the legislature as it pertains to matters of terrorism. If executives of democratic parliamentary systems are seen as being particularly vulnerable to public opinion specifically in hostage scenarios, terrorist groups will choose to continue perpetrating that type of violence. It may be reasonable for parliamentary systems to assign the responsibility of deciding whether or not to negotiate to another official, potentially even one that is unelected. This would reduce the conflation between the interests of the hostage and the interest of the executive to maintain office.

In general, a notable feature of modern terrorist groups is that they learn from each other and from historical patterns. This is a feature of what many consider to be "modern terrorism" and allows terrorist groups to adopt new tactics in response to the successes and failures of other groups (Miller, 2001). Governments also need to be prepared to respond and adapt as quickly as terrorist groups, if they hope to successfully combat all types attacks.

Future Research

Avenues for future research including tailoring this research to observe even more specific qualities of democratic presidential and parliamentary systems and exploring other types of terrorist attacks in greater detail. Researchers may benefit from further segregating democratic parliamentary systems into majoritarian and proportional assemblies. It could be the case that proportional assembly systems are at greater risk of hostage taking. In proportional assembly democratic parliamentary systems the executive can more easily suffer a no-confidence vote. If terrorist groups are conscious of this risk for the executive they may choose to target those systems more frequently with hostage attacks.

It may also be beneficial to examine other types of terrorist attacks to help determine whether terrorist groups select targets based on the type of attack they are seeking to execute. Some potential subsets of attacks to study are assassinations, hijackings, and unarmed assaults.

Analyzing the preferred tactics of domestic and internationally operating groups may also shed light on the variance in tactics used by groups depending on where their base of operation is. Terrorist groups may choose to prioritize resources to types of attacks most accessible and effective for them based on the geographic range of their operations. If there is a significant difference in tactics, governments may develop tactics to combat terrorism specifically based on their threat as international or domestically operating groups.

Finally, it may be worthwhile to examine the pattern of negotiations these types of systems have pursued in the past. Whether or not negotiations even took place is not something that was explored in this research, but can be very important

in determining what specific characteristics of policies of these systems increase or decrease their risk of hostage attacks. While many accept that definitively not pursuing negotiations will deter future attacks, this rationale needs to be backed up by historical evidence. If there were increased levels of hostage taking of citizens of a specific nationality after negotiations were successfully brokered by a terrorist group and the hostage's country of citizenship, then the theory will garner more strength, and perhaps serve to encourage countries to adopt a firm no negotiation policy. However it may also be the case that there have not been many successful negotiations in the past, yet the strategy of hostage taking persists.

These future endeavors will all serve to create a more holistic picture of the strategies of terrorist groups, and how governments can begin to successfully combat them. Patterns that emerge within specific types of terrorism, or within groups of countries with similar governmental systems will also help successful policy development, and aid the fight against terrorism.

# Appendix

Polity Score: Democracy We	ights
Competitiveness of Executive Recruitment	(XRCOMP)
Election	+2
Transitional	+1
Openness of Executive Recruitment (only if	XRCOMP is
Election or Transitional)	
Dual/Election	+1
Election	+1
Constraint on Chief Executive	
Executive parity or subordination	+4
Intermediate category	+3
Substantial limitations	+2
Intermediate category	+1
Competitiveness of Political Participation	
Competitive	+3
Transitional	+2
Factional	+1

Polity: Autocracy Weigh	ts
Competitiveness of Executive Recruitment	(XRCOMP)
Selection	+2
Openness of Executive Recruitment: only if	XRCOMP is coded
Selection	
Closed	+1
Dual/designation	+1
Constraints on Chief Executive	
Unlimited authority	+3
Intermediate category	+2
Slight to moderate limitations	+1
Regulation of participation	
Restricted	+2
Sectarian	+1
Competitiveness of Participation	
Repressed	+2
Suppressed	+1

	GTD: Countries by Designated Region
North America:	Canada, Mexico, St. Pierre and Miquelon, United States
Central America & Caribbean	Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire (Netherlands Antilles), Cayman Islands, Costa Rica, Cuba, Curacao (Netherlands Antilles), Dominica, Dominican Republic, El Salvador, Grenada, Guadeloupe, Guatemala, Haiti, Honduras, Jamaica, Martinique, Montserrat, Nicaragua, Panama, Puerto Rico, Saba (Netherlands Antilles), Sint Eustatius (Netherlands Antilles), Sint Maarten (Netherlands Antilles), St. Barthelemy, St. Kitts and Nevis, St. Lucia, St. Martin, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos, Virgin Islands (British), Virgin Islands (U.S.)
South America	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela
East Asia	China, Hong Kong, Japan, Macau, Mongolia, North Korea, South Korea, Taiwan, Tibet
Southeast Asia	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, South Vietnam, Thailand, Timor-Leste, Vietnam
South Asia	Afghanistan, Bangladesh, Bhutan, India, Maldives, Mauritius, Nepal, Pakistan, Seychelles, Sri Lanka
Central Asia	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Western Europe	Andorra, Austria, Belgium, Corsica, Denmark, Finland, France, Germany, Gibraltar, Great Britain, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Man, Isle of, Monaco, Netherlands, Northern Ireland, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, Vatican City, West Germany (FRG)
Eastern Europe	Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Czechoslovakia, East Germany (GDR), Hungary, Kosovo, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Serbia-Montenegro, Slovak Republic, Slovenia, Yugoslavia
Middle East & North Africa	Algeria, Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, North Yemen, Oman, Qatar, Saudi Arabia, South Yemen, Syria, Tunisia, Turkey, United Arab Emirates, West Bank and Gaza Strip, Western Sahara, Yemen

Cub Caboren Africa	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Brazzaville), Congo (Kinshasa), Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea- Bissau, Ivory Coast, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rhodesia, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwo,
Russia & the Newly	Armenia, Azerbaijan, Belarus, Estonia, Georgia, Latvia,
Independent States (NIS)	Lithuania, Russia, Soviet Union, Ukraine
	Australia, Cook Islands, Fiji, French Polynesia, Kiribati, Marshall Islands, Micronesia, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Samoa (Western Samoa), Solomon Islands, Tonga, Tuvalu, Vanuatu, Wallis and
Australia & Oceania	Futuna

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