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SECURITY POLICY CHOICES: FOREIGN POLICY BEHAVIOR AS A FUNCTION
OF THREAT, CAPABILITY AND GOVERNMENTAL STRUCTURE

by

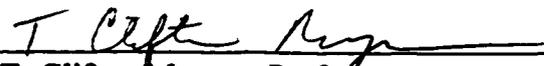
SEAN M. BOLKS

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
DOCTOR OF PHILOSOPHY

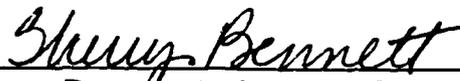
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ABSTRACT

Security Policy Choices: Foreign Policy Behavior as a Function of Threat, Capability and Governmental Structure

by

Sean M. Bolks

This study presents a theoretical model of state security policy choice under varying conditions of external threat and domestic political competition. This model specifies a set of conditions associated with state capability, governmental structure and external threat that determine the levels and patterns of state resource allocation and redistribution. Domestic and international arenas are linked into an inclusive political environment. As politics is a reflection of competition for resources, all policy choices reflect decisions to allocate and distribute resources for a variety of goals. Given this interaction of domestic and international political spheres in the resource tradeoff dynamic, three issue areas are emphasized: national security, the maintenance of political position, and domestic political requirements. Instead of examining policy behavior from a static perspective, the model addresses changing conditions and how these conditions influence resource allocation and policy behavior.

The model produces a number of expectations about state security behavior. In particular, external threat is hypothesized to increase resource allocation for security policies as well as increase cohesion within states. Conversely, as threat diminishes, domestic institutional factors return to prominence. Competition for the domestic allocation of resources increases. The validity of the model's expectations is assessed through the empirical examination of military expenditure levels, the formation of military alliances and foreign policy substitution efforts. Annual data (1816-1985) for all states in the international system is used in evaluation. A number of statistical tests, particularly maximum likelihood and cross-sectional time series techniques, are applied to the theoretical expectations.

The model receives a great deal of empirical support. States do react to external threat and allocate resources for the development of security policy. As threats dissipate, domestic political preferences arise forcing resources to be reprioritized across the issue areas. Five principle findings emerge from the various analyses: (1) security policy is rarely static as decision-making environments are often in a state of flux; (2) threat motivates security policy; (3) internal political structures influence through institutional and resource allocation constraints; (4) the domestic stability of a state affects its security behavior; and (5) time and evolution of the international system influence individual state security.

Acknowledgments

As with any project of this magnitude, the author is faced with a significant amount of soul searching along the way. What became clear early on in the dissertation process was that while the thoughts came from within, support from others was perhaps the greatest motivation for continuing the project. Upon reflection, my greatest satisfaction did not come with the completion of this work, but instead with the relationships that I developed through it. With this in mind, I turn to highlighting those who contributed to this project and my life over the past six years.

I begin by offering thanks to my mentors Richard Stoll and Cliff Morgan. This work is both a reflection and extension of their scholarship. It could not have been completed without their guidance. I expect that my relationship to them is analogous to that between a blacksmith and his metal -- it is an extended process of pounding and shaping. Eventually, through brute force, heat and time, the blacksmith is able to create something of functional value. I hope this study and my future scholarship continue to employ the skills they spent so much effort imparting to me as their student.

My other committee members, Sherry Bennett and Katherine Ensor, also provided invaluable assistance through this project. Sherry furnished an outlet for discussion about the project as well as life in general -- she stressed the importance of life relative to political science. Kathy immensely helped in structuring the methodological portion of the study. Furthermore she provided financial support in my

fourth and fifth years through the Statistical Consulting Lab. More importantly, both Sherry and Kathy became my friends through these years.

A number of others not directly related to this project deserve mention for helping me keep my sanity. First, I need to recognize Jody Neathery for her continued love, support and kindness throughout the last five years. Jody made my life a much better place during the hard times of this project. Without her, I doubt that this would ever have been completed. Dina Al-Sowayel served as an office mate, co-author, but more importantly a friend through the past six years. She listened to innumerable hours of my philosophizing related to this dissertation and about life. Much like Jody, without her, this project would not have been possible.

Carl Rhodes, Pat Moriarty, Robert Hogan and Scott Wohlander served as sounding boards for various chapters. Nelson Neale helped keep me in mental and physical shape. They are friends who listened to my diatribes, were more than willing to drink a beer, play intramurals, or watch football. These outlets were much more fruitful than time in the library.

Finally, I wish to thank my parents, JoAnn and Robert, my sister, Michelle, and my grandparents, Vladie, George, Ann, and Joseph. They each have allowed me to pursue this goal through their sacrifice and selflessness. I know that they have been with me for each step of the journey. This work is more representative of their love and support than my effort. A thank you can never communicate my true feelings for what you have given me, but it is all I can offer. Thank you.

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Chapter 1: Making Security Policy Choices

When there is no change, there is nothing to which society must adapt. It would need merely to maintain the existing flow of people, information and materials. Only when developments at home give rise to new needs and wants with respect to their environments, or when developments abroad give rise to potential threats to their essential structures, are societies faced with adaptive problems . . . no society is endowed with physical resources and psychic energies to meet the needs of integration at home and the requirements of adaptation abroad. The resources must be allocated and the energies redirected, and each allocation and each redirection has both internal and external consequences. (Rosenau, 1981: 41, 46)

Rosenau's statement emphasizes the importance of the domestic and foreign environments to decision-making. It is a fitting introduction to the research presented here because the central proposition posed in this study is that security policy develops in reaction to changing environmental conditions. Decision-makers set policy making agendas to meet, both individual and group, policy desires. However, rarely do leaders have complete decision-making autonomy within their political systems. Other actors and institutions infringe upon their ability to implement personal policy goals. Furthermore, leaders have extremely limited influence over the policy decisions made by external actors, particularly other states. Since the decision-making environment faced by leaders is rarely static, they respond by minimizing political costs and maximizing policy opportunities. Policy reflects these reactions. The decision making setting has a significant impact on state behavior, particularly the development and implementation of security policies.

This study develops a theoretical framework linking the domestic and external environments and their influences on the alliance formation, military expenditure patterns

and dispute participation. Resource allocation is the crucial bridge integrating these environments. Leaders face a finite cache of resources. They must rationally choose how to best distribute them in the domestic and security contexts. Resources frame decision-making by forcing leaders to prioritize policy goals and then budget resources to accomplish these goals. The identification of policy preferences across these domestic and international contexts allows for the identification of resource trade-offs. Using this resource trade-off logic, I identify the conditions motivating the domestic allocation of resources and security allocations and how these conditions influence security policy choice.

Building Security

Foreign policy, according to long held notions in international relations, is primarily motivated by state security. Security is the central service a state provides for its citizens. Consequently, scholars have focused on two related questions: (1) How do states develop security? and (2) How do these efforts affect the security of their counterpart states? As a field, we have gained a great deal of insight into these processes. We have discovered that states maintain security by preventing other states from using force against them (Cusack, 1978:3). States protect themselves by building-up arms, alliance formation and the elimination of opponents. The capability held by a state, either the latent capability associated with the demographic factors of the state or the aggregated capability associated with alliances, is one of the key determinants of success in the

international realm. Many have assumed that states will seek to maximize capability and, in turn, security.

However, our investigations have largely been narrow examinations of individual security policies as opposed to more integrated examinations of multiple policy strategies. Furthermore, we have overlooked the influences of the internal political environments on these policy choices. States are multidimensional actors. They hold a menu of policy options and often choose more than one in their security building efforts. In order to expand our knowledge of how states attain security, we must broaden our theoretical scope. This dissertation addresses some of these weaknesses. In particular, this work focuses on the interaction between the security policy directed towards the international system and the domestic factors that influence its development. I desire to explain policy choices, alliance formation, military expenditure, foreign policy substitution, by examining the influences of threat and domestic political structure.

States seeking security is an intuitive notion. However, security is not costless. Citizens supply the resources for policy through taxation or contribution. Their willingness to pay these costs determines the level of resources allocated for security policy. International tension or threat directed at the state increases the willingness of citizens. As these threats diminish, this enthusiasm is likely to recede and the costs associated with security become too high. In the past, scholarly work has focused on the static nature of external threat as a motivation for security while ignoring the dynamic element of the political environment. This study speaks to this oversight by examining of

security development and maintenance in a dynamic world. How do leaders maintain state security in a changing political environment? This is the third question addressed in this research.

Domestic Politics in International Relations

Foreign policy is about you. It is about your home, your community, your safety, your well-being, your chance to live a decent life and to prepare a better world for your children. Foreign policy is not a game played by “those people in Washington” with other players from far-off distant places. It is as close to you as the members of your family, or the neighbor’s boy, in uniform . . . as close as the taxes you pay to sustain the struggle for freedom, as close as the prices and the markets that you produce¹.--Dean Rusk, 1963

Dean Rusk's statement highlights the interaction between the domestic political environment and international affairs. Foreign policy is intrinsically political in nature (Hagan, 1993). Domestic political forces influence the foreign policy behavior of all states regardless of their political regimes. Although this remark was made over thirty years ago, the impact of domestic influences on foreign policy remains an area of central concern in international affairs. Domestic political structures not only influence how policy is developed within states, but how states react to the policy choices of their counterparts. Recently, the Clinton administration emphasized the role of democratization and democratic institutions on reducing international conflict. This relationship held a strong influence for the development of US foreign policy towards Eastern Europe and the former Soviet Republics. Both policy practitioners and

¹ Dean Rusk, address to the Farmers Union Grain Terminal Association, St. Paul, Minnesota, December 10, 1963 quoted in Rosenau (1967:1).

academics agree that domestic elements are an important causal factor in the development of foreign behavior.

Just as Huntington describes three waves of democracy (1991), international relations research reflects three waves of the study of domestic influences on foreign policy behavior. In the 1960s and early 1970s, Rosenau and his contemporaries laid a theoretical foundation incorporating systematic examination of the role of domestic factors on foreign policy. In the late 1970s and early 1980s, Rummel's work incorporated these theories of foreign policy into his assessments of conflict and war. Finally, in the 1990s, we see the re-emergence of domestic factors associated with the democratic peace, its empirical findings and ensuing debate. The cumulative nature of this work provides the international scholar with a firm starting point from which to extend analysis linking the domestic and external environments.

The institutional framework of each political system outlines the parameters within which leaders can implement policy or react to the environments. Consequently, decision-makers are constrained by the power of other branches of government, political participants, and institutionalized "checks and balances" on their policy choices. As system frameworks and the level of leadership autonomy vary across political systems, different policy behaviors are expected to be observed. Hagan clearly articulates this expectation:

Political influences are at the core of theoretical efforts among researchers interested in the comparative analysis of foreign policy, where there has long been interest in the idea that states with different domestic political

arrangements engage in different patterns of foreign policy behavior.
(1993:1)

The structure of internal political processes directly influences how policy is both developed and implemented. Consequently, decision-makers' reactions are, in part, a function of these networks. As the systems and networks differ, foreign policy behavior is also likely to differ. Internal variables determine how a state mobilizes and distributes its resources and allows for participation (Rosenau, 1967: 52).

Resources and Security

Leaders face a resource dilemma. Given the broad array of preferences facing decision-makers, leaders are forced to prioritize their policy designs between the internal and external environments. How a leader engages in this prioritization process is largely a reflection of the environmental conditions created by the domestic and international arenas. States are expected to provide public services to their citizens, such as safety, health, education and welfare, as well as distribute private goods to the leader's supporters. The particular importance of these goods to the citizenry, however, is not static; individual desires for these goods change over time. Consequently, the distribution of resources through policies at one point in time may not be satisfactory at another point in time.

The dynamic nature of both the internal and external political environments determines resource allocation. Realism has long concluded that security is the primary policy goal for all leaders in all states at all times. However, given the development of the

resource distribution logic, the primacy of national security is under greater scrutiny during conditions of low threat. Baldwin (1995) emphasizes this point in terms of resource trade-offs:

In the world of scarce resources, the goal of military security is always in conflict with other goals, such as economic welfare, environmental production and social welfare. This is another way of saying that the pursuit of security involves opportunity costs as does any other human action. A rational policy maker will allocate resources to security only as long as the marginal return from the dollar spent on an additional increment is greater than the dollar spent on other goods. (Baldwin, 1995:128)

Theoretically, a causal explanation of resource allocation associated with domestic policy preferences challenges realist thought. We assume that all citizens desire to have state security, but the opportunity cost of the pursuit of security varies from individual to individual. In this study, a leader's recognition of these varying preferences is integrated into resource decisions. Individually, leaders may be predisposed to allocating for security purposes as realism would suggest, however, they may also be restrained by domestic political influences.

This study emphasizes the interaction of the domestic and foreign political spheres and how this interaction influences policy development. In particular, resource trade-offs reflect the prioritization of policy. Under some conditions, domestic political initiatives receive more resources while under other conditions, security policy receives the greater allocation. The differentiation of policy into issue areas across these environments allows for the identification of resource trade-offs and the predominant influence of a political sphere. In politics at large, resources provide the central linkage

point for all policy behaviors. Furthermore, the issue areas take into account individual leadership preferences associated with the maintenance of position, important constituent preferences, and public goods. The decision-making environment is thus more fully defined.

Overview of the Study

This study presents a general examination of security policy choice under dynamic environmental conditions. Three conditions are of basic concern: the international environment, particularly the relationship between states and external actors; the domestic political environment; and the level of capability of each state. A general theory of security policy choice is developed through the examination of these environments. This theory seeks to answer the question, Why does a state choose to employ certain security policies over others? I answer this question by constructing a framework that examines resource flows across three issue areas within societies, national security, leadership job security, and domestic priorities. As environmental conditions change, the prioritization of resources for each issue area also changes. Consequently, the redistribution of the resource cache across issue areas affects security policy decisions. I construct a theory of security policy selection given individual leadership motivations and fluctuations in domestic political competition and international threat. Chapter 3 outlines this framework and offers general hypotheses about state behavior.

In the study of international relations, the concept of threat has long served as a motivation for state action. However, the lack of specific definitions of this idea and its ad hoc application cloud our abilities to use threat as a causal factor in policy development. Threat serves as one of the fundamental elements in my theoretical approach by reflecting the relationship between each state and the international system. Consequently, rather than relying on past approaches, I develop an operational conceptualization of threat. Chapter 2 outlines an operational measure of threat and develops a theoretical approach towards examining threat in a more deductive fashion. Observable elements, the power capability and geographic location of opponents, the historical legacy between states, and the level of faced hostility provide the parameters for an ordinal measure of threat. Chapter 2 details the development of this index and examines its robustness through the examination of three case studies and comparison to previous measures of international tension and hostility.

Chapters 4, 5, and 6 apply the general theory to specific policy choices, military expenditure and alliance development, and then in an aggregate policy context through examination of foreign policy substitution. Chapter 4 presents the application of the resource theory towards military expenditure. A number of theoretical relationships outline the influences of the domestic political constraints and external threat on gross expenditure levels. Given the resource trade-off versus reliability nature of military expenditure, this chapter serves as a good test of theoretical framework. An empirical analysis of hypotheses incorporates cross-sectional time series methodologies. Chapter 5

offers a parallel development for alliance formation. Again the relationships between domestic structures, threat, capability and alliance participation are investigated.

Maximum likelihood techniques using a negative binomial regression model, analyze the alliance formation hypotheses. Finally, Chapter 6 presents a continuum of security policy choices integrating alliance formation, military expenditure and dispute participation along a resource dimension. In this chapter, maximum likelihood techniques, ordered probit, analyze foreign policy substitution.

This study seeks to contribute a fuller development of the conditions which influence security policy. Rather than merely recognizing the internal and external environments, an effort is made to synthesize how these environments interact and when one environment predominates the other. We gain a greater understanding of the policy process.

Chapter 2: A Conceptualization of Threat

“The weaker state naturally fears that its identity will be abridged by aligning with a more powerful one; and the strong state, too, will often shun association with the weak for fear of over extending its commitments and resources. Movement toward alignment sets in only when another state intervenes as a threat. The weaker state rallies then to the stronger power as a reaction against the threat from the stronger power.” Liska, 1962: 13

“To some decision-makers, the Soviet Union is a threat to which the United States is compelled to respond. To others the threat passed years ago. Again, to a growing number of scholars it never existed.” Jervis, 1976: 20

“To take the case of the house on fire, it is easy to envisage an international situation in both the internal and external factors -- a dire and unmistakable threat to national survival, plus the fear it engendered among those responsible for state action -- would place statesmen under the influence of almost irresistible compulsion.” Wolfers, 1962: 14

Introduction

International relations has long focused on the concept of threat. The preceding statements by Wolfers, Liska, and Jervis identify threat as a central motivation for state action in the international system. Threat is frequently acknowledged, but it is a concept which is rarely defined or extensively developed in any theoretical framework. The lack of a rigorous definition reflects the general tendency to apply this concept in an ad hoc manner. We assume that a theoretical consensus exists and with that, implicit understandings of threat and its flip side, security. A review of international relations literature suggests otherwise, each term is applied in multiple ways often with multiple meanings. Threat provides a rationale for foreign policy behavior and policy decisions. We assume the primary motivation for the development of security policy is to deter potential aggression or coercion by external forces, but we rarely provide parameters outlining threat. By disentangling this concept and providing clear explanation of what

threat means in state interactions, we can offer better theoretical propositions about state behavior and clearer, more explicit empirical work involving threat. The focus of this chapter is to develop a conceptual framework that enables international relations scholars to distinguish among types and levels of threat.

Threat is not a static concept. It has often been treated as a dichotomous variable reflecting threat or no threat conditions, but threat is qualitative in nature maintaining distinct intensities and levels. It is a product of environmental conditions reflecting characteristics internal to the state as well as those produced as a result of state interactions. Wolfers' concluded that decision-makers place a high value on the possession of the nation, particularly national survival, national independence, and territorial integrity (1962:13). States react in fear of threats against these possessions. In this sense, environmental conditions matter the most when hostile intentions and motivations of an antagonist endanger these possessions. The relationship between the state and its competitor as reflected by geography, capability, and historical legacies all affect a state's comprehension of threat. By recognizing these differences in threat associated with decision-making environments, it will be possible to differentiate the motivations associated with security policy decisions and foreign policy behavior. Much of the variance associated with threat environments has been lost by using extremely broad measures of hostility and belligerence. A more refined measure may in fact clarify the conditions associated with the implementation of different policy measures.

The term threat is used to reflect explicit statement, actions, and the individual perceptions of actors reacting to different situations. The difficulty in examining this abstraction lies in being able to implement a framework that allows the investigator to compare decision-making environments in a standardized manner. Individual perceptions are obviously important, but they are difficult to generalize as well as measure. Thompson and Raplar conclude that “the notion of tension is associated with threat perception because tension implies the expectation of becoming involved in conflict behavior,” (1981:626). Consequently, threat may be best examined through the identification of observable situations, such as conflict and its characteristics, as a proxy measure for threat perceptions.

This chapter develops a threat index. The index is composed by integrating a number of elements drawn from an overview of the security and conflict literatures in international relations. After development of the index, threat frequencies and graphical illustrations are presented to depict the longitudinal trends of threat in the international system. Three country specific case studies explore threat development in specific environments. Finally, a comparison of the threat index to other hostility measures is reviewed.

Existing Approaches towards Security and Threat

International relations literature examines and applies varying conceptualizations of threat. Threat has been integrally tied to deterrence theories/models and arms spirals

theories/models. Deterrence theory concludes that to avoid conflict, states must convince their aggressors of their resolve by displaying the willingness to wage war (Jervis, 1976:59). Threat is an element underlying the show of resolve. In contrast, arms spiral theories propose that states are protected only by their own strength. In order to insure their own security, they must build militarily. The general consequence of such expansion is greater self protection, but also greater menace for others. Threat is a byproduct of these motivations. Jervis suggests: "When states seek the ability to defend themselves, they get too much and too little -- too much because they gain the ability to carry out aggression; too little because others being menaced, will increase their own arms and so reduce the first state's security," (pp. 64). Two distinct applications are developed: (1) threat is used to deter aggression via fear of sanction; and (2) disparities of capabilities produce threat which in turn increases instability. Each threat application has a different connotation, the first being positive and the second being negative. These approaches offer no operational definition of threat. Jervis does conclude that threat is a function of the intentions of the opponent and capability. As a consequence, we are left with a vague understanding of how threat develops and what it means.

The arms race literature, related to the deterrence and spiral theories, does build in more operationalized approaches. Singer (1958) and later Cusack (1985) focus on the deterrence aspect of threat, but do so from a power or capability perspective. The power of a state or its capability and the distribution of power and capability across the international system determine the threat faced by a state as a consequence its

interactions with other system members.² Threat is not created solely by the possession of power, but the intentions to use it. Singer draws a number of conclusions about threat in the context of the Cold War:

it is contended that threat perceptions arise out of a situation of armed hostility, in which each body of policy-makers assumes that the other entertains aggressive designs; further, each assumes that such designs will be pursued by physical and direct means if estimated gains seem to outweigh estimated losses. Each perceives the other as a threat to national security and is a function of estimated capability and intent. (Singer, 1958: 94)

Threat thus becomes a function of the interaction between power and intent. Both Singer and Cusack employ the multiplicative formula:

$$\text{Threat} = \text{Capability} \times \text{Intent}$$

In this formula, both components are required to produce threat. The absence of either must result in the absence of threat. The existence of threat leads to a counter-response, the accumulation of power to counter threat with the intended purpose of enhancing security (Cusack, 1985: 153).

Other measures of capability have been developed and used as operational methods of identifying security and threat levels. Singer, Bremer, and Stuckey (1972)

² Cusack (1985) and Stoll (1982) emphasize the gap between observations of power and capability, military expenditure and composite variables, and actual measures of military power. We are left facing a divide between what we can theorize as a field, and what we can test empirically. This divide is perhaps greatest in

offer an explicit measure of capability. The authors create an indexed measure of capability as a function of a state's proportion of the total system capabilities. The index is predicated on aggregating six demographic factors measuring population, industrial and military factors. The difference of capability score between two states provides a measure of capability superiority which can be used to identify security or threat in the dyadic relationship. Bueno de Mesquita (1981) adds an additional element of geographic proximity to the score. The capabilities of states are discounted given the distance between them.

Another more simplified measure of threat involves a variant of the index. Here the military expenditure of surrounding states is used to determine the relative advantage of states across dyads (Richardson, 1960; Mintz and Ward, 1987). Again the disparities in expenditure levels reflect threat or security. These studies, however, do not offer explicit theoretical development of what is meant by threat or security.

Walt (1987) seeks to identify and define conditions associated with threat which lead to the development of alliance formation. Here threat is explicitly defined as a function of inequalities in capabilities. Balancing and bandwagoning of capabilities, for Walt the central motivation for alliance development, are reactions to a "balance of threat" management technique. Walt concludes that, "It is more accurate to say that states tend to ally with or against the state that poses the greatest threat," (1987:21). He does focus on more than capability by suggesting that other factors do influence threat perceptions

examinations of power.

including geographic proximity, offensive power, and hostile intentions (each of these will be examined below). His discussion of threat provides a defined theoretical framework in the alliance context. Reiter (1996) evaluates Walt's theory of threat balancing through an operationalization of threat and empirical analysis. He defines two types of threat: (1) a direct threat to the state reflected by a specific demand from one state to another; (2) a systemic threat reflected by a local power posing a general threat to a region. This differentiation is important for determining what policy responses are appropriate. Different kinds of threat thus invoke varying policy strategies.

Morrow's (1987, 1991) examination of security is couched in the development of risk attitudes and expected utility theory. As he suggests, security is rarely defined. Here the concept of security is predicated on the pool of potential preferred resolutions to existing issues: "The current resolution of issues defines the status quo. A nation's security is its ability to maintain the current resolution of issues that it wants to preserve," (1987:426). A parallel concept, autonomy, reflects those issues that the nation desires to change or "the ability to pursue the internal or international policies that it wants," (1987: 426). Morrow concludes that both concepts are reflected at an instant in time. Temporally, they are expected to change as the nation's capabilities rise and fall. This definition of security provides a theoretical point of departure for further examination.

Morgan and Palmer (1997) provide a development of security parallel to that of Morrow's. They assume security to be a state's ability to inhibit change in the status

quo elements which conform to its preferences. The higher the security, the greater its ability to resist attempts by other states to bring about change it opposes. Much like Morrow's autonomy, the authors' development of proaction reflects a state's ability to bring about changes in the status quo. A second assumption focuses on environmental factors which restrict security and proaction. State capabilities, relative to other actors, determine the levels of security and proaction which can be provided--inherent tradeoffs between the goods determine the levels of each. As resources are finite, states with more resources are better able to provide more of the goods. Morgan and Palmer conclude that great powers are better able to provide security than are minor powers. Although not directly speaking about threat, their logic suggests that capability is an important component in limiting threat--major powers have greater ability to ward off threat, as well as applying threat--major powers have increased credibility in applying threats given their capabilities. I will offer further elaboration of this point below.

Iusi-Scarborough and Bueno de Mesquita (1988) empirically examine the pursuit of security in the face of external threat with an expected utility approach. Two definitions of security are provided. "Security is the ability of a nation to *deter* hostile acts or to compel others to accept one's own policy objectives," (1988:86). The definition requires the state's attainment of national security exceeds the ability to defeat threats. Nations can thus formulate policy without fear. Threat³ is defined as a demand

³ Iusi-Scarborough and Bueno de Mesquita use Gochman's (1975) definition of threat as an "explicit verbal statement by a high official on behalf of the member state's government declaring an intent to use force against another member state for other than strictly defensive purposes; or, overt mobilization of armed forces by a member state, during periods of dispute or high tension, clearly directed at another member state

accompanied by a statement of intent to inflict punishment if that demand is not satisfied. The existence of a credible threat presents a nation with information, the content of which is that current security arrangements seem to be inadequate. Exposure to a credible threat should prompt changes in the national, domestic, or foreign policies so as to increase security. These policy changes reflect efforts to form alliances. Security and threat are thus functions of inherent capability levels. States will seek help under conditions of threat. Furthermore, other states will ally given similar interests and collective security concerns to alleviate the threat conditions. Although providing clear definitions of threat and security, Iusi-Scarborough and Bueno de Mesquita limit the definition to the capability component. Consequently, there is little applicability beyond a simple balance of power context.

Some studies which do offer explicit operationalization of threat are Cusack and Ward (1981), Ward (1984), Ward and Mahajan (1984), Cusack (1985), Oren (1995), Reiter (1996) and Bennett (1996). Cusack and Ward examine the military expenditures of the United States, China and the Soviet Union focusing on expenditure levels as a function of the change in the spending of rivals, defense burden, tension with rivals, and war mobilization. Of particular interest is the tension with rivals indicator. Tension reflects the symmetric measurement of dispute between a pair of states. The following formula is employed:

for other than strictly defensive purposes," (89).

$$\begin{aligned} \text{Tension}(t) &= 1.0 + \text{SD}(t) = 0.5 [(\text{Tension}(t-1) - 1.0)] \\ \text{SD}(t) &= 1.0 \text{ if nations were involved in a serious dispute during year } t \end{aligned}$$

This measure accounts for the effect of dispute participation in the current year as well as aggregating the discounted involvement in the previous year. However, the operationalization is limited as a result of the symmetrical nature of the dispute measurement. By assessing only one dyad at a time, the tension measure foregoes all other conflict in which the state is a direct participant.

As cited above, Cusack (1985) builds from Singer's (1958) development of threat as function of capability and intent. Cusack posits that a state will direct no threat against other states if : (1) it possesses no power; (2) it expresses no hostile intent (172). These conditions, however, are rare in the international system. Cusack revises Singer's formula to take into account the interaction between the state and the entire international system by aggregating upward from dyads. His new threat formula becomes:

$$\text{Threat}(\rightarrow j) = \sum_{i=1}^n \frac{\text{HostileIntent}(i \rightarrow j)}{\text{HostileIntent}(i \rightarrow j) + \text{CoopIntent}(i \rightarrow j)} \text{Capability}(i)$$

Capability is a weighted product of the quantities of capital and labor employed in the military sector. The weighting is a function of a balanced force structure -- quantities of labor and capital are equal (158). Intent is a weighted product of both the hostile actions and the cooperative actions occurring between states. These actions are coded from the COPDAB data set. Threat for each state is thus the aggregation of hostile or cooperative intents and capability involved in dyadic relationships. Examination of Cusack's

measures for capability and threat reflect a close relationship between the two. The most capable states are also those facing the highest threat levels. Ward (1984) and Ward and Mahajan (1984) develop a similar measure as an additive function of the cooperative and conflictual behavior between states measured from the COPDAB data set.

Oren (1995) examines the interaction of dispute and hostility behavior as an indicator of threat in arms race research. Oren creates an aggregate belligerence score by summing the intensity of dispute involvement for each year. A yearly score is identified and then applied across time.

Reiter (1996: 86-89) differentiates threat into two types: direct and systemic. Systemic threat is operationalized as a product of great power crisis initiation. Reiter codes this variable as a dichotomous indicator of a great power initiated crisis against another great power or great power ally in the observation year or preceding year. Direct threat reflects a demand made by a major or minor power on minor power for the revision of territorial borders or challenges to the sovereignty of a ruling government in an observation year. Reiter also incorporates state capability ratios and geography in his empirical examination of threat through the incorporation of interactive terms.

Bennett (1996) defines threat as “actions undertaken by enemy states that include (1) any other state with which the state X had a thirty-day reciprocated militarized dispute or war in the last five years, and (2) any rival of X. The existence of rivalry involves two states’ considering each other as threats by definition” (175). Bennett’s focus is oriented towards the development and continuation of enduring rivalries.

As this brief overview indicates, the literature rarely offers an explicit theoretical understanding of threat or security. The works presented here are those which do offer elements of definition and theory. They provide some clues as to what factors can produce threat. On a consistent basis, threat is linked with disparities in capabilities, intentions and demands, geography and issues. By integrating these factors into an explicit index, a more coherent theoretical approach can be developed.

Creation of a Threat Index

Our theoretical foundations employing threat and security are ambiguous. These are concepts which are almost universally applied in international relations, but are without an overarching or cohesive theoretical framework. In this regard, our approaches towards the study and development of security policies may be better served by developing some clearly defined parameters for conceptual use. Explicit definition allows for the development of precise causal linkages. Consequently, our expectations can be more clearly identified and tested.

I begin this conceptualization of threat by making some basic assumptions. First, policy motivations are not consistent across time nor across states. Both Morrow and Morgan and Palmer differentiate security policy choices into two distinct goods, those which are developed for security or preservation and those which are developed for autonomy or proaction. Each policy choice can produce each of the goods. Intuition suggests that state actions attempting offensive or revisionist policies will be met with

some kind of reaction as other states will prefer to maintain the status quo. States have preferences over conditions of the world. As efforts are made to alter these conditions, other states formulate reactions and employ them via policy decisions. In this regard, initiators of actions, or more specifically dispute initiators, will have reactions directed back at them. I assume, referring to Wilkenfield and Brecher (1989), that an action-reaction dynamic exists. The amount of conflict directed at a state is proportional to the amount it directs towards other states. As the authors suggest, conflict and violence beget conflict and violence. Initiating states will face a reciprocated violence of some type. Hence I assume that initiators will face threat just as targets face threat. There are obvious strategic advantages for initiating, but this does not minimize the costs of an opponent's reactionary policy choices. Consequently, all states involved in dispute will face some measure of threat.

The literature reviewed identifies four factors causally associated with threat: the capabilities of the state and its opponents, the opponent's geographic location, important and unresolved security issues associated with the existing rivalries and hostile intentions. Using these factors, I develop an index to better define foreign policy decision-making environments. This index identifies the threat levels experienced by states and indicates how this threat potentially affects the formulation of security policies. The typology will rely on the existing operationalizations of a number of variables associated with the Militarized Interstate Dispute data set and interpretations of this data set used to create an enduring rivalries list, particularly Bennett (1996, 1997) and Goertz and Diehl (1993,

1995), a general categorization of state power status (Singer and Small, 1982), and regional geographic categorizations found in all Correlates of War studies. The objective behind the development of a threat typology is to identify conditions associated with the selection of particular security policy choices.

When threatened, most states are likely to employ some type of policy measure which will attempt to increase security (although some may choose to do nothing). The costs associated with security policies vary. Often, those policies which reduce threat to the greatest degree have the highest resource or political costs -- the choice of policy will be addressed in the next chapter. Much of the existing literature employing threat concepts does so in a blanket fashion, overlooking the variability and qualitative differences in threat levels. The differentiation of threat better defines environmental conditions under which policy is formulated. The type of threat and the type of threatener will have an obvious impact on policy choice. By focusing on the dispute behavior of a state, the characteristics of its opponents, and its historical legacy, we gain a better picture of potential influences on current policy choices. In this regard, the threat index fills an operational void often overlooked in conflict studies.

The index is created by summing dispute participation across time. To begin, a rolling five year block of time is used to determine a base level of hostility for all states. This baseline focuses on the highest hostility level faced by a state within each dispute it participated. Hostility levels are identified in the participant data of the Militarized Interstate dispute data set. For a thorough investigation and development of this data

refer to Jones, Bremer and Singer (1997). A five point ordinal scale codes the significance of each dispute action. The lowest level, 1, reflects the occurrence of an action without a precise coding of the action -- these actions were coded as -9 originally. I make a decision to include these actions as the lowest value of hostility. The inclusion provides more data and is unlikely to bias any analysis given the lowest demarcation (any bias will be against the development of threat rather than for threat development). The highest level, 5, reflects a war directed at the state.

Hostility Level	Value
Action Taken, but not coded	1
Threat to Use Force	2
Display of Force	3
Use of Force	4
War	5

The hostility scores are aggregated within each year and then across the previous five years and the current year⁴. A block of time is used to reflect the memory associated with the disputes. I chose to employ a rolling period as I assume that leaders and citizens are highly cognizant of the recent past. Consequently, threat perceptions will be related to actions which are recognized by individuals, but will fade over time⁵. Furthermore the intensity of such actions will intensify the memories associated with threat. A second

⁴ The baseline hostility score is similar to Oren's belligerence (1995). He creates an aggregate belligerence score for each state for each year by adding the highest degree of violence used by a state in each dispute. He, however, uses a four point scale instead of a five point scale. Furthermore his focus is the policy of the state whereas the focus here is the policy of the opponent.

⁵ I also develop a discounting variant of the rolling five year period. Here, the particular effect of the hostility level is discounted a percentage given the capability of the opposing states, 25% for minor powers and 15% for major powers. This variant performs in a parallel fashion to the simpler version presented. Consequently, I choose to employ the simpler model.

rationale influencing this decision is the time needed to implement changes in policy.

Although not directly relevant to the development of threat, policy reaction requires time.

The rolling period takes this point into account. The five year period is a rather arbitrary cut point, but one which will take into account the likelihood of recognition reflect the effect of recent history. For each rolling period, the aggregated dispute hostility score will be computed for each state year. In this regard, the initial level of threat will be measured as the aggregated hostility levels for a state going back five years (H_{t-5}) to the present year (H_t):

$$\text{Baseline Hostility} = H_{t-5} + H_{t-4} + H_{t-3} + H_{t-2} + H_{t-1} + H_t$$

The baseline hostility score will increase as the degree of violence employed by the opponent increase; threat increases as the opponent undertakes more extreme policy choices. The baseline hostility attempts to place each state in a threat context which is a function of time, intensity of opponent action and dispute participation. As the latter two increase, hostility must also increase. The baseline hostility is not bounded, but theoretically can increase to infinity.

The aggregated hostility scores are combined with characteristics of opponent states to create a refined threat index. Three qualities are emphasized, the capability of the opponent, the regional proximity of the opponent to the state, and if the state is involved in an enduring rivalry or extended dispute. From a theoretical perspective, the capability of the opponent has a great deal to do with the credibility of any threat one state may make against another. Threat is a reflection of the opponent state's ability to

carry out the threat and that state's resources to impose costs (Russett and Starr, 1992:134-135). Oren (1995) offers a refinement of this position suggesting "the amount of hostile behavior coming from state X may be interpreted differently depending on how capable X is," (309). Furthermore he contends that the inference of intentions from behavioral acts depends on the strength of the actor: "For weaker actor, carrying out a hostile act requires greater exertion (or exacts a higher cost) than the same act would require from a stronger actor with the potential destruction which can be inflicted," (310). In Oren's study, external threat is primarily projected in terms of capabilities. Stronger states, or those with high levels of capability, have the ability to inflict more damage as well as the ability to extend their influence. The inherent capability of the opponent serves as a central characteristic of threat development, but it does not offer a broad enough theoretical foundation to stand alone.

The second element in the threat index examines the regional proximity of the threatening state. A defined body of work has emerged assessing the role of geographic distance on war and dispute behavior (see works by Starr, 1978; Starr and Most, 1976, 1978; Bremer, 1992, 1993; Diehl, 1985,1991; Maoz and Russett, 1992; Vasquez, 1993). Diehl (1991) provides a good overview of this literature. Contiguity and proximity appear to be central factors associated with the development of conflict. Consequently, a number of premises found in these works are pertinent to threat perception. Starr (1978) and Most and Starr (1976, 1978) focus on the opportunities associated with proximity. States have a greater probability for interaction given the closeness of their geographic

relationships. Furthermore, these authors suggest that proximate nations will be perceived as more threatening than those further away because distant states are less visible than proximate ones. Building from this theoretical approach, Diehl (1985) argues that states' willingness to fight is enhanced by proximity. An intuitive connection can thus be made about continuity and distance. Threat will be greater in hostile relations with closer states than with more distant states.

I continue this logic with the assumption that nations facing opponents in the same region face higher hostility and threat than nations facing opponents not in the same region. The theoretical development of "relevant dyads", dyads involving contiguous states or major power status (Weede, 1976), has focused on the impact of proximity and contiguity on the spread and increase of conflict in the international environment. Proximity appears to be a recurring influence on the development of dispute. All else being equal, those states which may offer the most threat are those states in close proximity. In this regard, a state's vigilance will be oriented towards those which can inflict quick strikes. I develop a dichotomous variable reflecting the geographical relationship between a state and its opponent. In each dispute, each participant is designated a geographic region according to its nation number. The dispute participants are categorized by side to determine if the opponents fall into the same region. I also use a determination about major powers which has been previously applied by Bueno de Mesquita (1981) and Organski and Kugler (1980) that major powers are always relevant. Lemke (1995) suggests "Ability to overcome the 'tyranny of distance' and move

resources into other countries, allows the leaders of a state to go to war with others. The greater this ability, due to material resources or political capacity, the larger a state's relevant neighborhood," (pp. 24). As major powers have greater levels of capabilities, I also assume that they have a greater ability to project their power over geographic space. This power does diminish as space increases (Boulding's loss of strength gradient, 1962, and Bueno de Mesquita's, 1981, geographic distance logarithm), but due to their higher initial capability levels, I assume that they have the ability to be members of each geographic region. In this regard, all major power opponents are categorized as being regional opponents. Geographic proximity thus adds to the identification of threat levels.

A third element found in the threat index incorporates the empirical observations regarding enduring rivalries. Enduring rivalries reflect a continuing conflictual relationship between a pair of states over a protracted period of time. Bennett (1996) defines rivalries as:

a dyad in which two states disagree over the resolution of some issue(s) between them for an extended period of time, leading them to commit substantial resources (military, economic, or diplomatic) toward opposing each other, and in which relatively frequent diplomatic or military challenges to the disputed status quo are made by one or both of the states. (160)

A central element associated with the rivalry concept is the recurring pattern of hostile action. Vasquez (1996) focuses on the psychological hostility in his definition of rivalry. Here hostility overwhelms the importance of individual issues involved in the development of dispute, creating an environment in which the principle actors are only

concerned with the competitor, rather than resolving crisis issues. Intuitively, this point suggests that the existence of a rivalry increases the vigilance of those involved in it. Rival states face higher levels of threat due to the ongoing hostility factor and hostility spirals associated with the continued disputes. Using an empirical categorization to identify if a state is in a rivalry, a dichotomous rivalry variable is created reflecting 1 for the presence of rivalry and 0 for no presence⁶. I assume that states always face more threat when involved in a rivalry than when not involved in one. Due to the psychological factors associated with lingering hostility of recurring conflict, this is a reasonable conjecture.

The four components can now be integrated into a threat measure. Using the base-line hostility scores -- $\text{Baseline Hostility} = H_{t-5} + H_{t-4} + H_{t-3} + H_{t-2} + H_{t-1} + H_t$, three points of demarcation are used to separate states. The first cut point includes those states having a baseline threat of greater than and equal to 1 and less than or equal to 4 in the aggregated score. Within this group are states that have been involved in dispute(s), potentially facing a use of force, but have not faced a war. These states have experienced hostility, but to a very limited level. A second cut point includes those states having a baseline greater than and equal to 5 and less than or equal to 18. A final cut point includes all those states with hostility scores greater than or equal to 19. I arrive at the cut point of 18 by examining the mean hostility scores across the time period. The population of cases, 11312, held a mean baseline hostility value of 7.7 with a standard deviation of

⁶ A number of operational definitions for enduring and interstate rivalries have been developed. Most prominent are those by Wayman and Jones (1991), Goertz and Diehl (1992, 1993, 1995) and Bennett (1996, forthcoming). In this study, I employed the rivalry listed provided by Bennett (1996) as the basis for rivalry existence. I also examined a list provided by Goertz and Diehl as a supplement. Both are highly correlated.

about 11. Consequently, I selected 18 as a function of being about one standard deviation above mean level. It should be noted that there are outlying cases with extremely high baseline hostility scores, such as Germany in World War II with a value of 229. In this regard, the outliers obviously have an effect on the variance and the mean. The one standard deviation decision appears to be justifiable with recognition of the skewed nature of the data. From a substantive perspective, a rolling cut point of 18 would equate to multiple disputes with high hostility levels. For example, a state would have to face a minimum of 4 disputes, 3 of which were wars and one greater than or equal to a display of force in the five year period to pass the baseline of 18. This scenario is observable, but rare. The cut point is somewhat arbitrary, but poses an identifiable threshold for high levels of hostility. Frequencies will be examined below.

The three groups order threat by three dispute characteristics: the proximity and capability of opponent states, and the presence of rivalry for the state. The threat index is an ordinal variable with 26 values. The ways in which threat can be obtained are presented in Table 2.1. The value of threat is judged to increase as each element is incorporated into the index. As the baseline hostility increases so does the threat level. Furthermore, the type of threatener, major or minor power, and the location of threatener are used to differentiate the faced hostility. The existence of an enduring rivalry also increases the threat perceptions. The interaction between these characteristics is used to identify qualitative differences in levels of threat. Threat thus becomes more than dispute

involvement. An ordered hierarchy is created to incorporate each of the opponent state's characteristics:

nonregional < regional < major < enduring rival < regional rival < major rival

For example, states facing opposition from a major power with a baseline hostility of 3 receive a threat value of 6 whereas states with a baseline threat of 12 facing a major power and enduring rival in the current year receive a threat value of 17. The index seeks to capture the historical dispute environment via the incorporation of the rolling baseline hostility score and enduring rival variable as well as capture current dispute characteristics associated with the opponent.

A key question arises: what is the advantage of the threat variable over one that simply taps dispute involvement? First, most past empirical operationalizations of threat have merely reflected the existence of a dispute without differentiating the level of action or hostility. The development of a threat index takes this into account. The threat variable can also tell us much more about the longitudinal participation of a state in dispute and level of actions the state has faced. The threat indicator can also define the policy environment a few years afterward. In this sense, threat places our observed policy decisions in a more complete context. Consequently, we can make more sophisticated inferences about security policy decisions such as increases in military expenditure or the formation of alliances. Furthermore, given the level of threat and the actions taken, we can make inferences about the underlying intentions of policy decisions. For example, given Morgan and Palmer's two motivations for foreign policy, security and

Table 2.1.
An Index of Threat

Threat Level	Baseline Hostility	Major Power Opponent	Regional Opponent	Enduring Rivalry
0	0			
1	0			X
2	1-4*			
3	1-4*			X
4	1-4			
5	1-4		X	
6	1-4	X	X	
7	1-4			X
8	1-4		X	X
9	1-4	X	X	X
10	5-18*			
11	5-18*			X
12	5-18			
13	5-18		X	
14	5-18	X	X	
15	5-18			X
16	5-18		X	X
17	5-18	X	X	X
18	>18*			
19	>18*			X
20	>18			
21	>18		X	
22	>18	X	X	
23	>18			X
24	>18		X	X
25	>18	X	X	X

*: Indicates the baseline hostility without any dispute involvement in the current year

proaction, the formation of an alliance under conditions of low threat would lead one to conclude that a leader is seeking to add proaction. The threat indicator thus depicts a fuller decision-making environment.

Examination of the variable begins with a simple frequency analysis. Table 2.2 displays the raw frequencies and percentages of each threat level for major and minor powers. A number of inferences can be drawn from the table. For major powers, threat frequencies appear to be highly distributed towards the more extreme threat levels. Threat levels with values of 11, occurring 18 percent of the cases, and 25, also occurring 18 percent of the cases, are the categories with the most observations. Recall that a threat value of 11 reflected threat conditions involving a baseline hostility between 5 and 18, the existence of at least one enduring rivalry, but no dispute involvement in the current year. A threat value of 25 reflected conditions involving a baseline hostility greater than 18, the existence of at least one enduring rivalry, a regional opponent, a major power opponent, and dispute involvement in the current year. One can conclude that major powers are very active in the international system with a high level of dispute involvement. This finding is consistent with Cusack's results (1985), threat appears to be a trait correlated with high levels of capability. As a diagnostic test to identify the relationship between threat and capability, a series of Pearson correlation tests is undertaken. Correlations between threat, dispute involvement, hostility levels, the Capability concentration (CINC), and a system ranking of the CINC score for each year reflect a moderate positive relationship between capability and threat, between .23 and .43, and a moderate negative

Table 2.2.
A Frequency Development of Threat Levels for Major and Minor Powers

Threat Level	Major Powers		Minor Powers	
	Frequency	Percent	Frequency	Percent
0	39	3.8	4189	40.7
1	33	3.2	229	2.2
2	15	1.5	1237	12.0
3	65	6.4	283	2.8
4	1	0.1	54	0.5
5	1	0.1	158	1.5
6	3	0.3	129	1.3
7	10	1.0	16	0.2
8	14	1.4	48	0.5
9	9	0.9	21	0.2
10	40	3.9	1368	13.3
11	178	17.4	411	4.0
12	15	1.5	126	1.2
13	10	1.0	425	4.1
14	12	1.2	287	2.8
15	54	5.3	59	0.6
16	24	2.3	241	2.3
17	83	8.1	119	1.2
18	19	1.9	121	1.2
19	41	4.0	114	1.1
20	24	2.3	30	0.3
21	7	0.7	94	0.9
22	25	2.4	75	0.7
23	55	5.4	42	0.4
24	65	6.4	236	2.3
25	181	17.7	177	1.7

relationship between capability rank and threat, between -.18 and -.46 (negative relationship is a function of the descending order of ranking, the most powerful state in the system is ranked 1). The strongest correlations are presented in Appendix 1. These results reflect that threat and capability are linked, but that threat is not completely driven by capability. Other issues are involved.

The minor power frequencies reflect different trends. For these states, the predominant threat level is 0, the lack of threat, composing 41.4 percent of the cases. Only two other threat levels have frequencies greater than 10 percent, threat equaling levels of 2 and 10. Threat level 2 reflects an environment with a baseline hostility of 0, but the existence of an enduring rival. As rivalries extend over protracted periods of time, this circumstance is not out of the ordinary. Threat level 10 reflects an environment of a baseline hostility between 5 and 18, but no dispute involvement in the current year. This suggests that when minor powers face growing hostility levels, they are likely to back away from involvement in further hostility. Minor powers appear to be much more pacific in their interactions with other states.

Graphical illustrations showing the temporal trends for the threat, baseline hostility and dispute involvement provide a mechanism for easily identifying changes in each of the variables. Charts 2.1 through 2.8 reflect the aggregated and mean values of the three variables for major and minor powers. I chose to incorporate the aggregate values in order to illustrate the longitudinal trends associated with dispute involvement and threat development. Given the rising number of states in the international system over time, the

mean values control for the number of states in each year. Charts 2.1 and 2.2 display the major power aggregated values. Certain characteristics of the graphs should be emphasized. First, the dispute variable does not appear to have a great deal of variation but is fairly consistent in its levels across time. Examination of the general frequencies of major power dispute involvement, however, does increase over time. For the 19th century the yearly mean number of disputes was 2.25 while the 20th century held a mean value of 4.36. This point indicates a higher propensity for major power dispute involvement. Second, as reflected in Chart 2.2, threat and hostility hold relatively parallel values from 1820 till the initiation of World War I. The effect of the war increased both variables, but the baseline hostility appears to almost double. A similar spike is seen for World War II and then for the post war period with the initiation of the Korean War. The threat variable maintains a consistent level of approximately 100 from 1950 onward while the hostility baseline spikes and declines. Recall that the maximum threat value is twenty five while the hostility measure reflects the rolling aggregated intensity of the opponent's policy choices. Consequently, spikes reflect the application of volatile policy choices within the short term and current year. The threat measure incorporates the baseline hostility, but does truncate it to certain levels. As the hostility baseline is an interval variable, it maintains the potential to rise to infinity. I make an assumption that after some threshold, a state can not "process" any more hostility. In this regard, once a saturation level is reached all additional hostility will be treated as the maximum peak. The consistent threat patterns in the 1950s and beyond reflect a high level of threat. The

Chart 2.1.
Major Power Aggregate Trend for Disputes

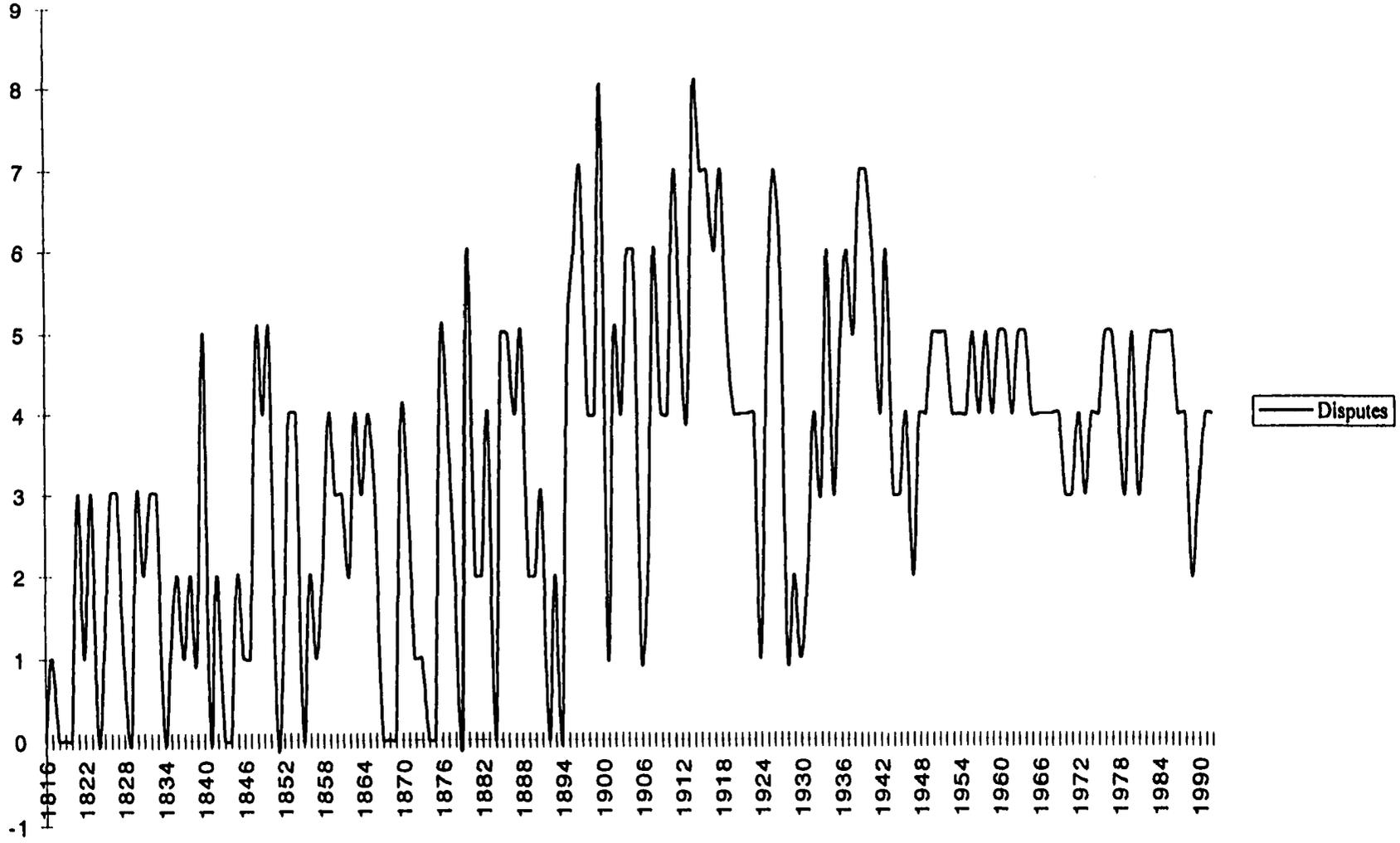


Chart 2.2.
Major Power Aggregate Trends for Threat and Hostility

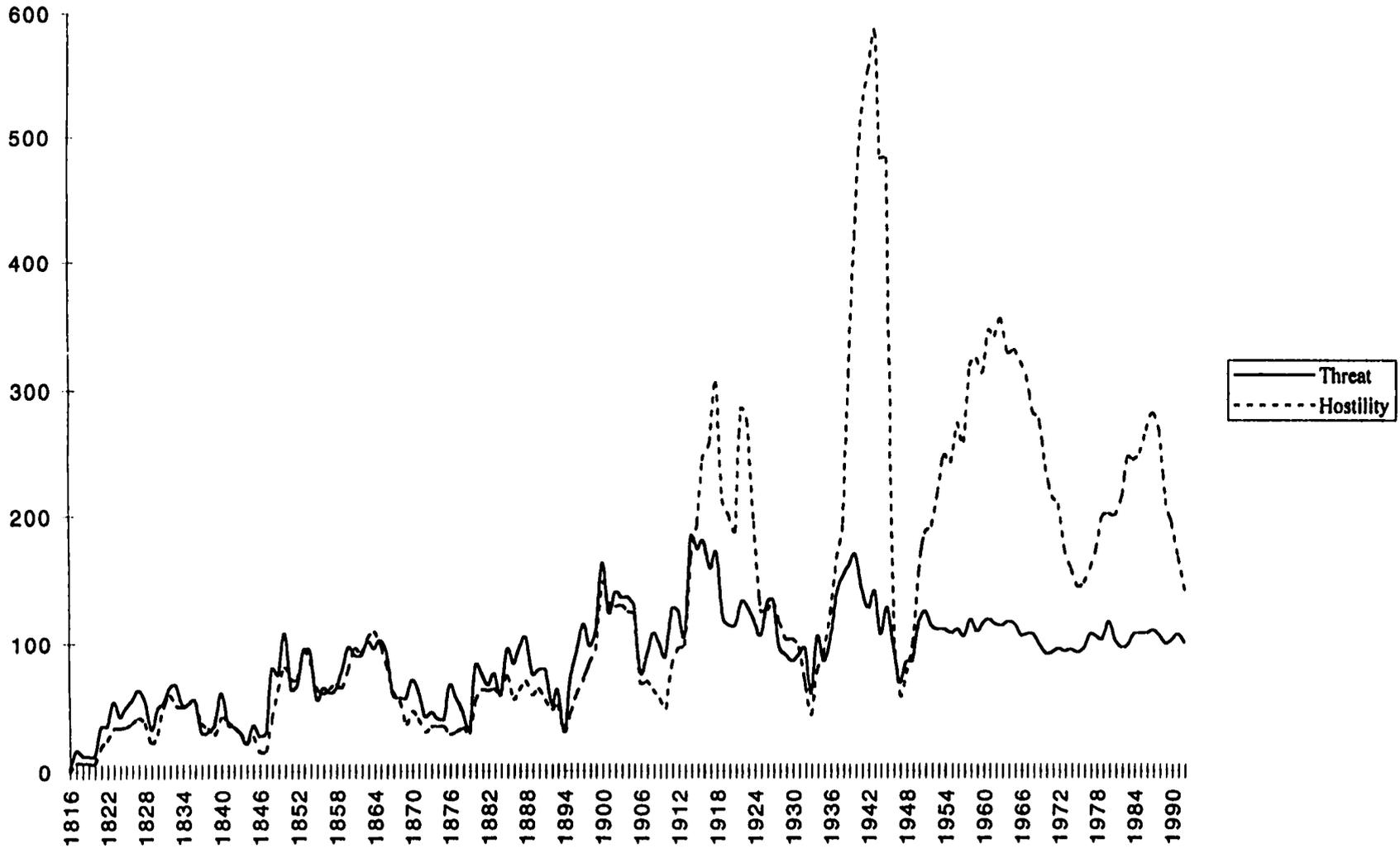


Chart 2.3.
Major Power Mean Level for Dispute

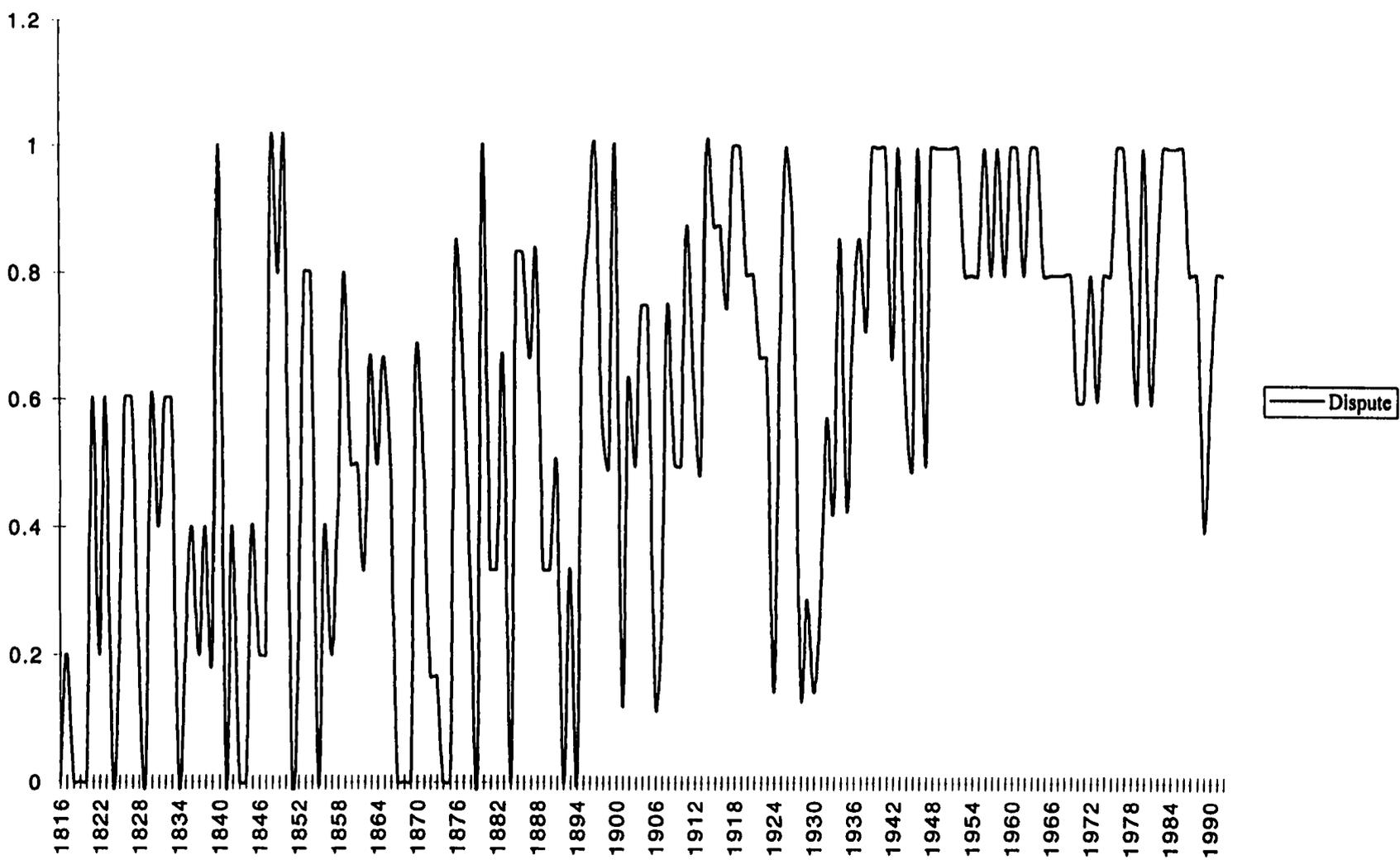
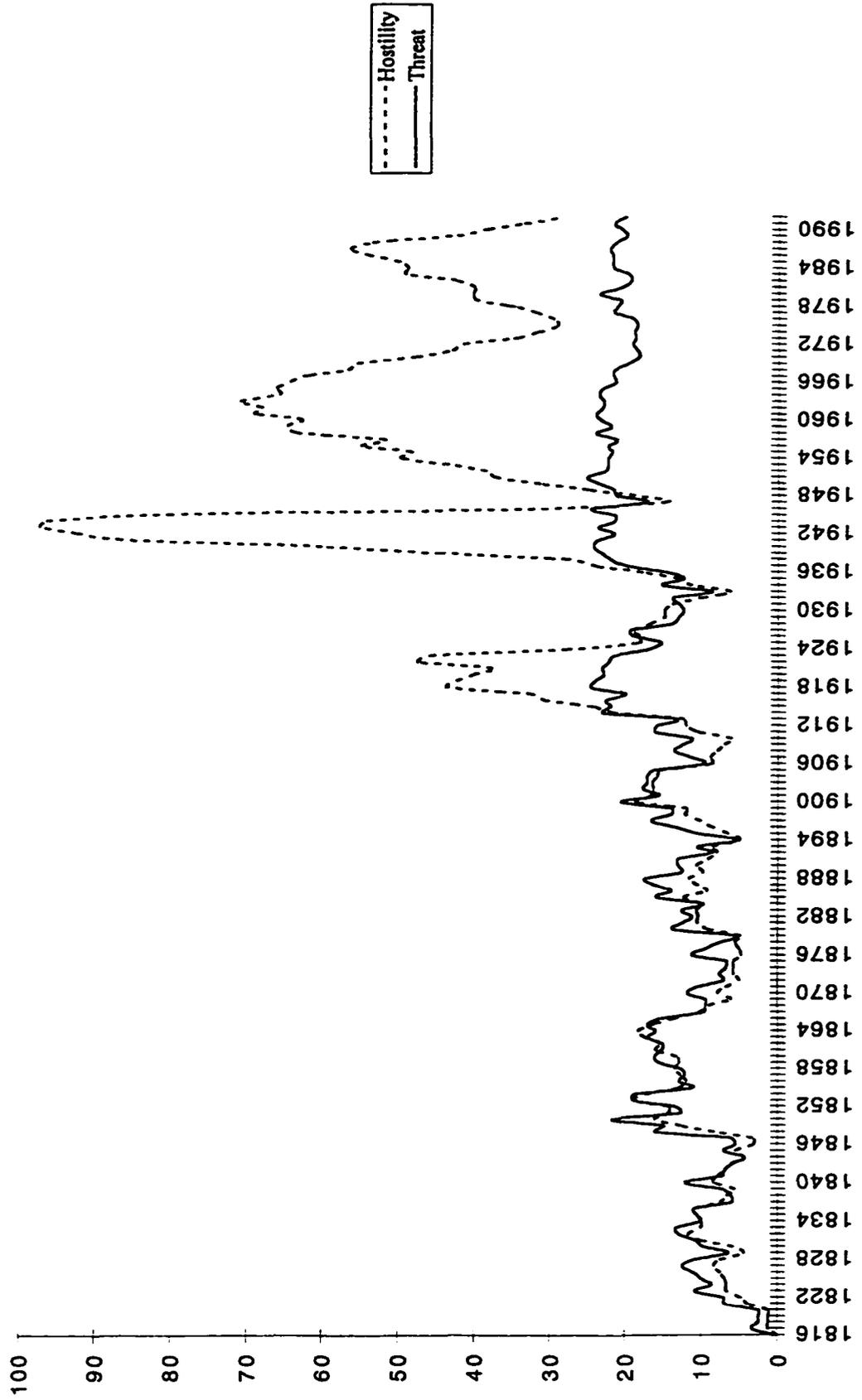


Chart 2.4.
Major Power Mean Levels for Threat and Hostility



hostility spikes reflect more volatile policy choices and higher numbers of dispute involvement. Although, there were few major conflicts in this period, (Korea and Vietnam) the development and entrenchment of the Cold War appears to have a significant effect on the level of threat. Consequently, outside of the two world war spikes, threat is consistently higher during this time period. Towards the end of the period and the ending of the Cold War, threat and hostility begin to slightly decline.

Charts 2.3 and 2.4 reflect parallel patterns for the major power mean levels of all variables. There is virtually no change in the tendencies of any of variables when controlling for the number of major powers in the system. This point suggests that major powers tend to behave in similar manners. Threat maintains a general level of 10 until the initiation of World War I. From World War I until 1992, with the exception of the interwar period and brief dip after World War II, the threat level hovers about 20. There appears to be a beginning downturn in the late 1980s and early 1990s. These trends suggests that the threat level for major powers has been significantly higher with the development of conflicting ideological blocks associated with the Cold War, but may now be reduced with a rising period of détente. Hostility levels display a general flat trend for the nineteenth century and four longitudinal spikes in the twentieth century. These spikes are associated with the world wars, the Cold War (1950-1970), and the re-emergence of the Cold War in the late 1970s and 1980s.

Charts 2.5 through 2.8 display similar representations for minor powers. In Chart 2.5 and 2.6, the aggregate values for the three variables reflect an upward trend over time

Chart 2.5.
Minor Power Aggregate Trend for Disputes

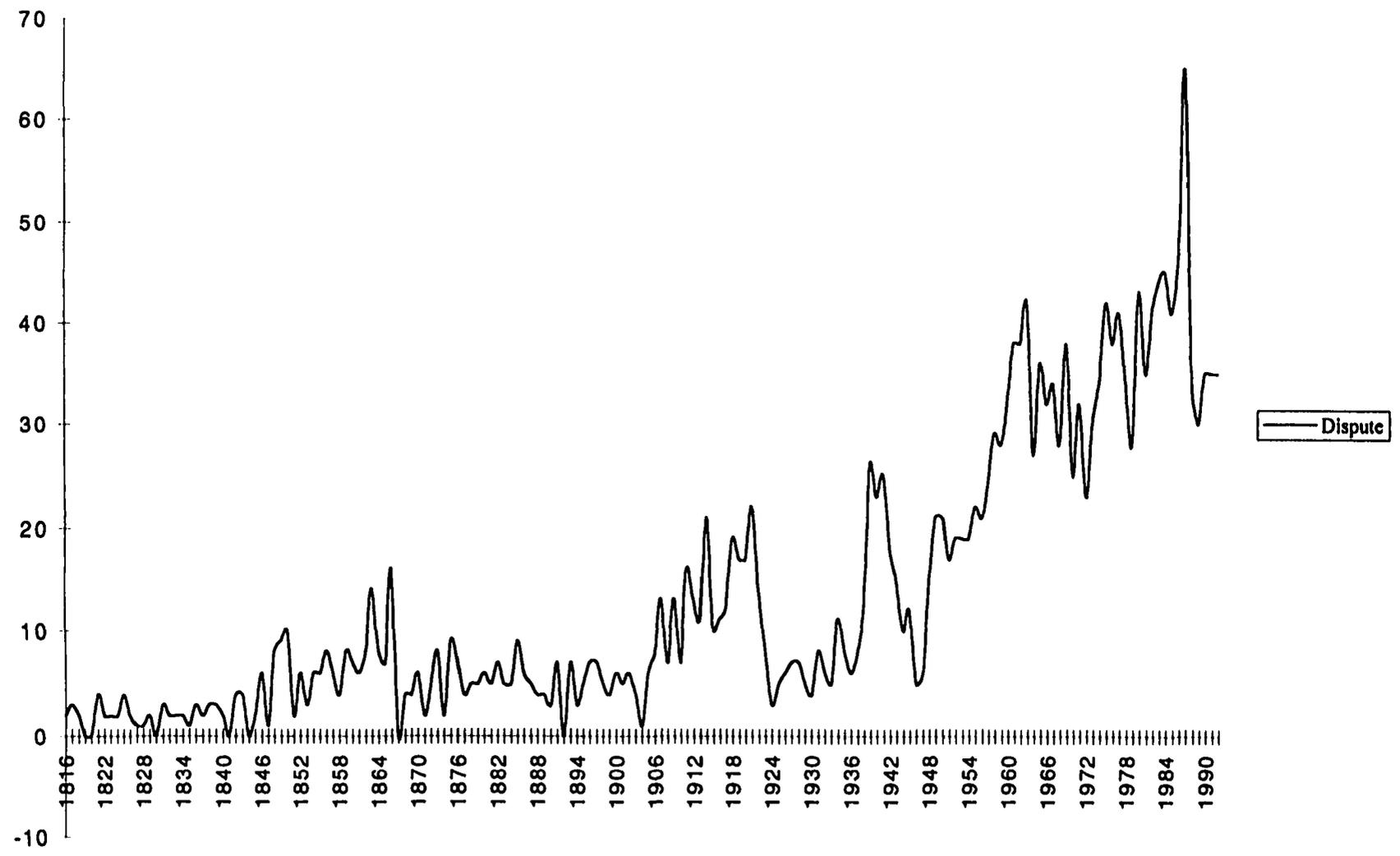


Chart 2.6.
Minor Power Aggregate Trends for Threat and Hostility

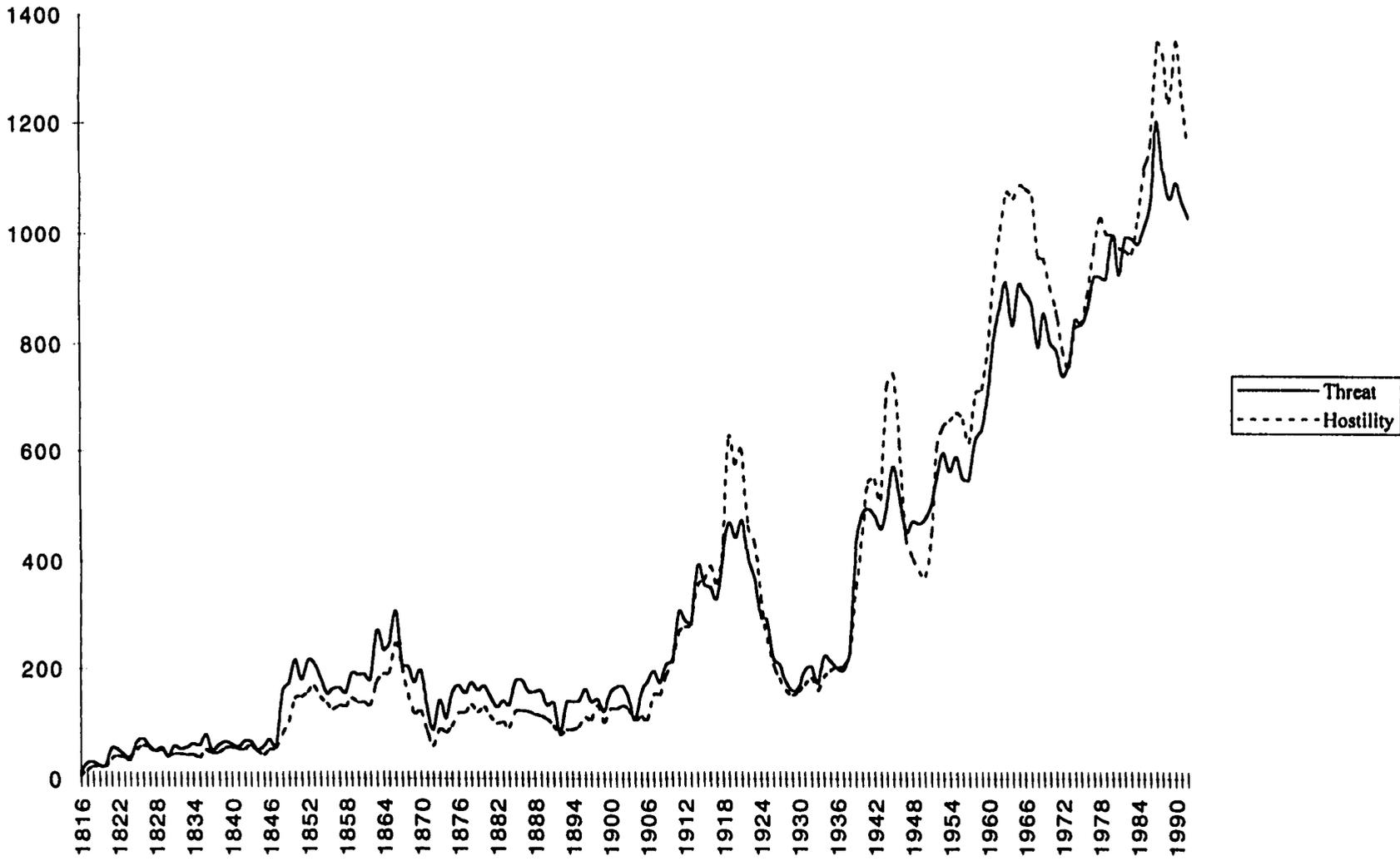


Chart 2.7.
Minor Power Mean Level for Dispute

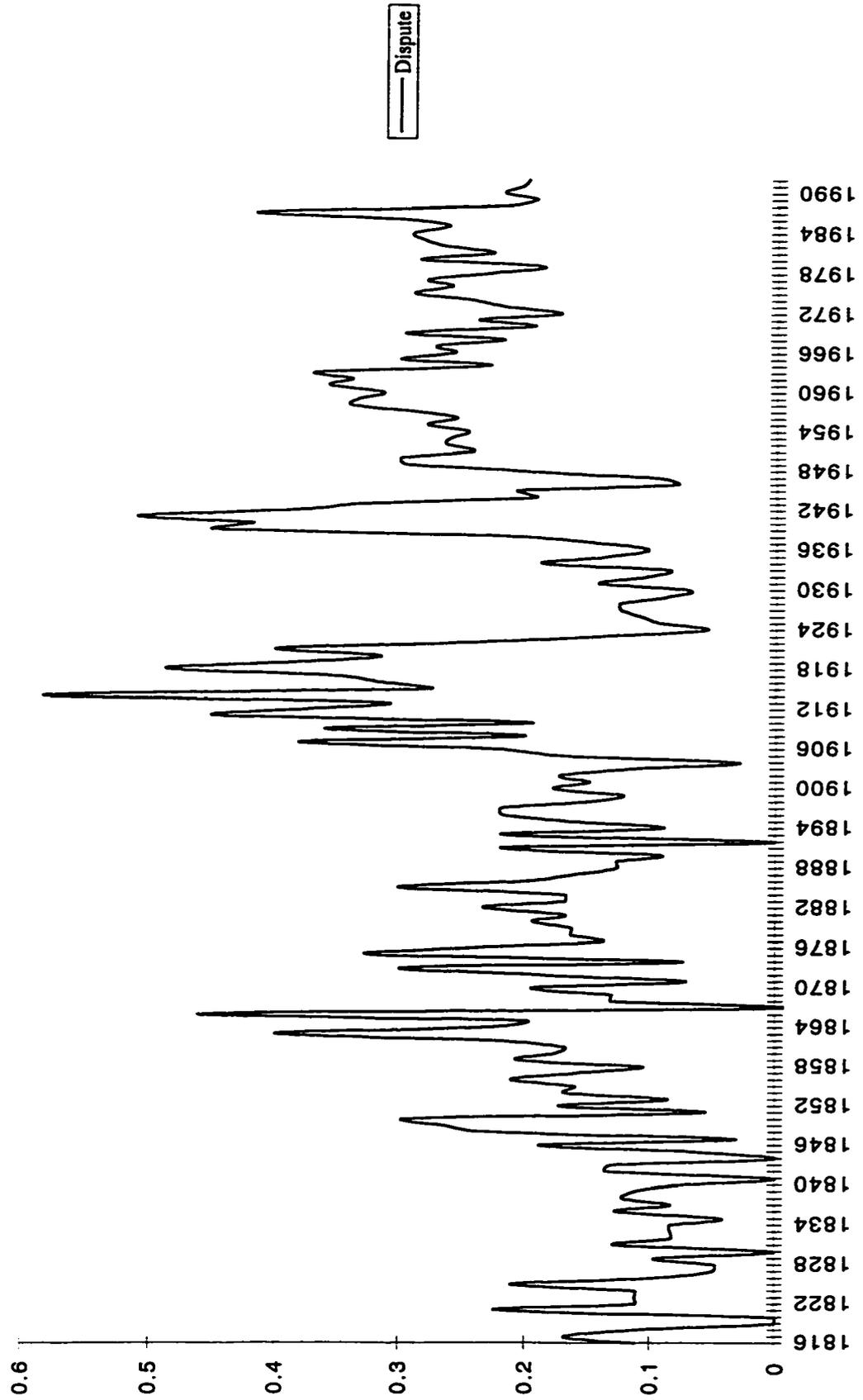
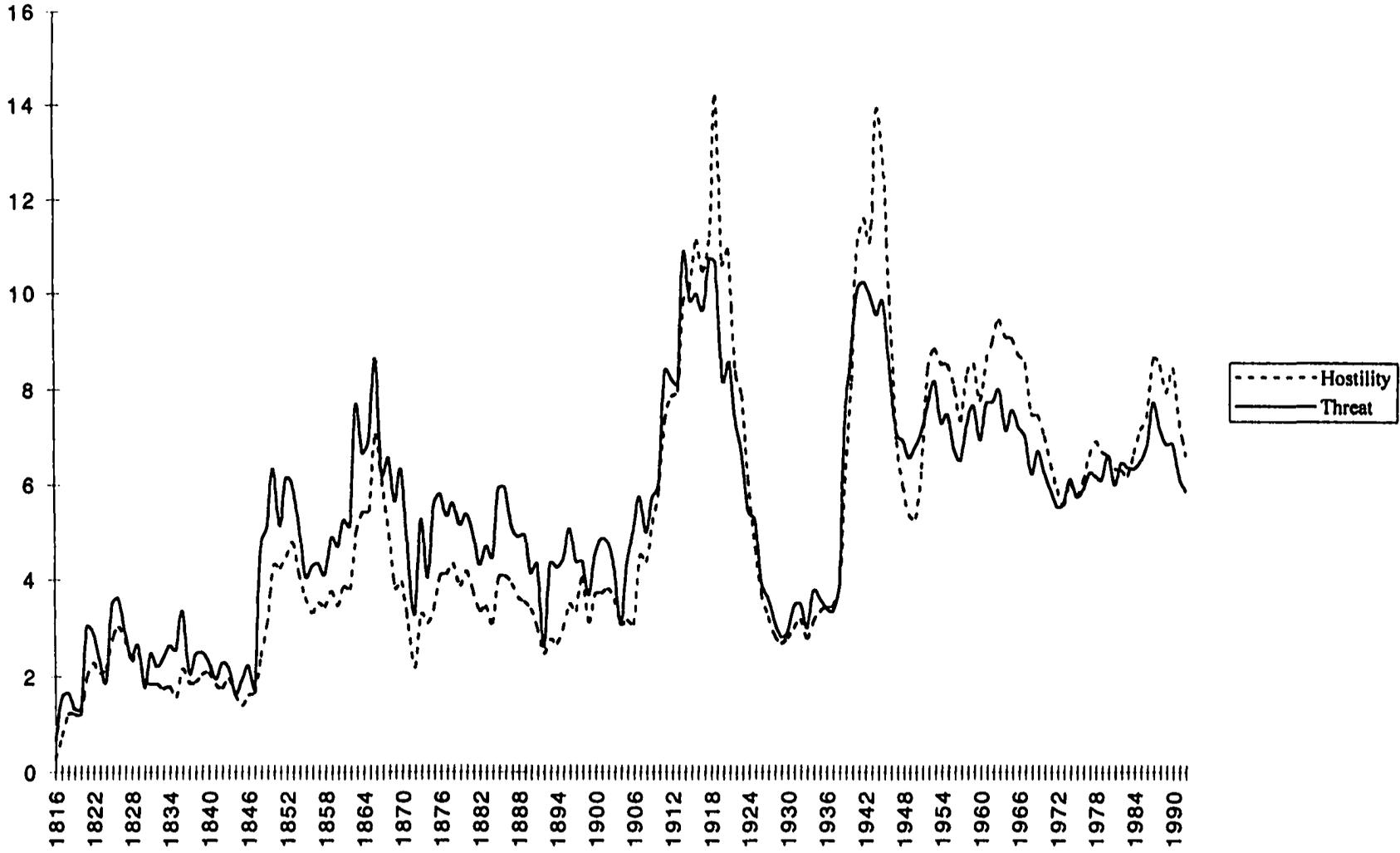


Chart 2.8.
Minor Power Mean Levels for Threat and Hostility



with a positive increasing slope as an effect of the increasing number of states in the system. This behavior differs from the observed pattern of the major powers in Charts 2.1 and 2.2. The threat and hostility scores maintain similar values throughout the complete period. This characteristic differs from the major powers as well. The two world wars and a period between 1965 and 1975 show spikes in the baseline hostility and threat variables. Hostility does jump above threat in these periods, but then returns to comparable levels. The yearly mean dispute levels also increase over time. Minor powers averaged 4.86 disputes per year in the 18th century jumping to 21.11 disputes per year for the 19th century. When controlling for the number of minor powers in the system, as seen in Charts 2.7 and 2.8, these trends flatten. The rapid expansion of the number of states in the international system associated with the collapse of colonialism explains this trend. When this effect is controlled, the three variables reflect consistent increasing patterns, but the rate of increase is the product of positive slope instead of an increasing slope. Again the spikes associated with the world wars are easily identifiable. The threat levels in the post war period do appear to be greater than those in the prewar period. A rough estimation reflects prewar levels of threat to be approximately 4 and post war levels to be approximately 7.

Compared to the threat levels represented for major powers, minor powers face less threat and hostility. The mean threat level for minor powers is 5.99 for the entire period and 15.28 for major powers for the period. The baseline hostility score is 23.11

for major powers and 6.16 for minor powers. In this regard, minor powers appear to be less likely to become involved in conflictual engagements.

A number of conclusions can be drawn about threat development from these charts. The use of dispute involvement as a measure of threat offers some indication of system fluctuations, but is generally consistent over time -- not a great deal of variation exists from year to year. A bulk of the increase in dispute participation between the two centuries examined here can be explained by the two world wars. Consequently, much of the variability we seek to identify may be lost solely due to the general stability of the measure. The hostility baseline and threat variables depict a much fuller picture of competitive interaction in the international system. Hostility provides an element of policy intensity. It allows us to move beyond a count or dichotomous measure of dispute into a differentiation of disputes type. Threat incorporates this intensity, but also integrates the particular nuances of the "threatening" state that the hostility baseline ignores. The threat index gives a fuller understanding of the policy environment within the state by providing information about the type of opponent and ongoing hostile relationships. In this regard, threat provides a better understanding of which actions may affect policy development.

Case Studies

The aggregate charts suggest that major powers are much more active in the international system and consequently face higher levels of threat than their minor

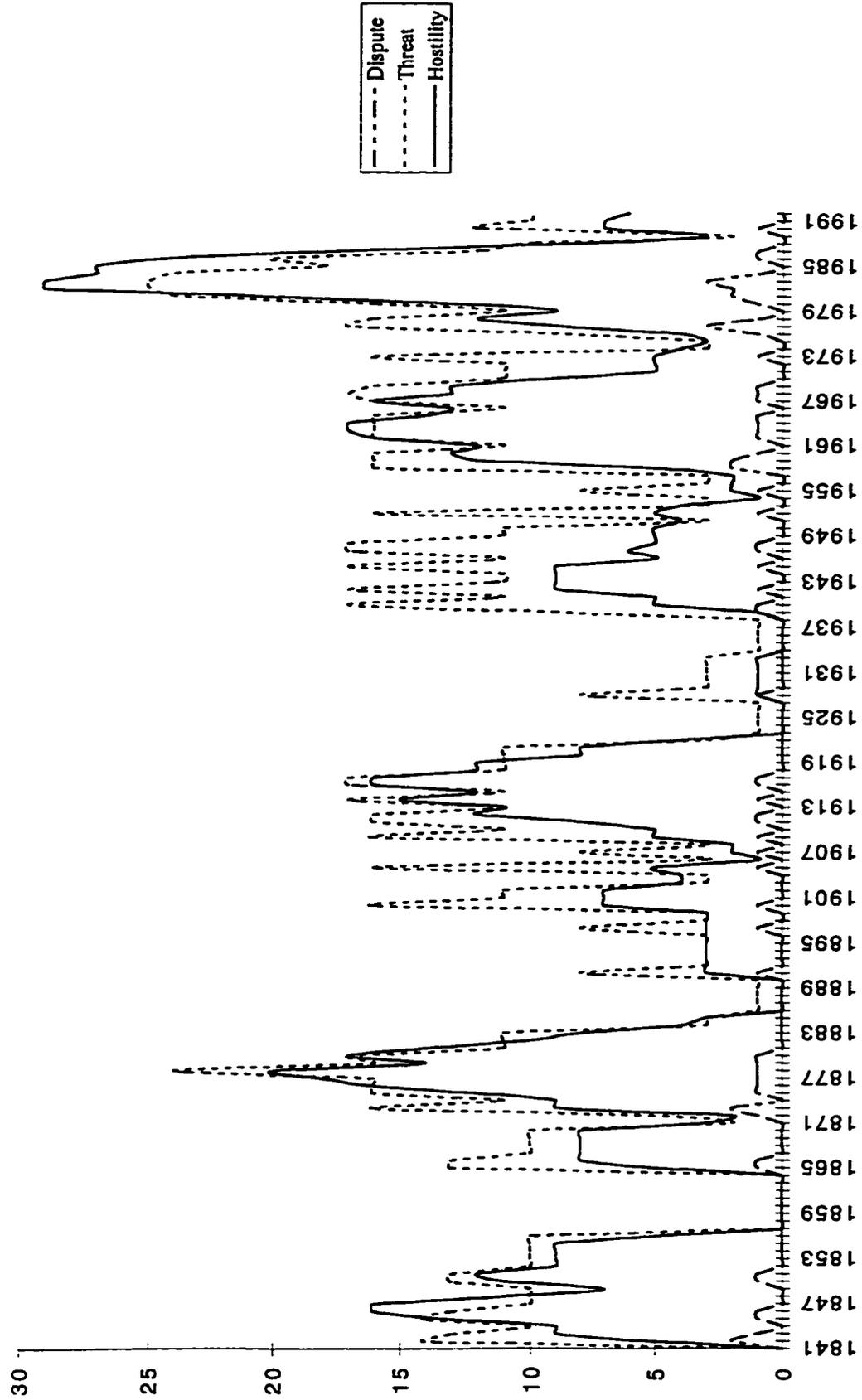
counterparts. Furthermore, we see that dispute frequencies have increased over time, but are actually vary stable given their lack of variance. The threat and hostility measures provide better measures of tension within the international system. However, the aggregated charts gloss over the individual environmental dimensions associated with threat. Consequently, I will turn to a brief investigation of three case studies to examine the environmental dimension at the individual state level. The case studies make two important contributions: (1) they offer a more robust presentation of the threat index and (2) they will offer a reliability check on the performance of the index. The cases, the United States, Iran, and Argentina, are selected to represent different types of states. The selection of the United States is predicated on the US's role as a major power and central actor in the international system. Iran is selected as a minor power which has been involved in dispute in its region. Finally, Argentina is selected as another minor power with a major regional influence. The conflict and threat environments of these states are examined via analysis of threat index graphical representation, the development of any rivalry explanations, any involvement in disputes identified in the International Crisis Behavior data set, and a general overview of foreign policy approach via historical examinations and studies. The ICB project characterizes disputes occurring in the international system between 1929 and 1979. Obviously the study does not hold the same longitudinal period as does the Militarized Interstate Dispute data, but will be used here as a supplemental source for comparative examination.

An overview of the Argentinean threat graph, Chart 2.9, reflects longitudinal trends of threat spikes and valleys. Argentina appears to have rapid changes in its foreign policy environment reflected in dramatic oscillations between threat levels. There are no real periods of consistent threat, but instead rapid jumps and falls. An underlying cause of this variance can be attributed to an enduring rivalry with Chile. Bennett (1996,1997)⁷ has developed an intensive description of a series of 34 rivalries. This source is quite useful in assessing the longitudinal development of threat and I rely on it heavily in these case examinations. The Chilean-Argentinean rivalry, running from 1873 to 1984, resulted in 27 disputes occurring between these states. The central issue involved in this rivalry focused on border territory between the states escalating into a series of disputes between 1873 and 1879. This escalation is clearly identifiable in chart 9 as the threat level jumps from 2 in 1873 to 24 in 1881. A quiet period develops in the rivalry, between 1909 and 1952, reemerging with continued hostility in the 1950, 1960s, and 1970s. The spikes beginning in 1957 through 1974 reflect the continuation of the conflict. An agreement developed by the Pope, presented in 1980, was signed in 1984 concluding the rivalry.

Historical examination of Argentina reflects a cyclical relationship between conflict and political stability. During the 1840s, Argentina faced a series of foreign interventions from France and Britain as well as regional disputes with Uruguay, Paraguay and Brazil. A blockade by France and Uruguay in 1839, joined by Britain in 1845, was designed to damage the economy and undermine the dictator Rosas. A military

⁷ Discussion of the enduring rivalries relies heavily on Bennett's development rivalry summaries and descriptions associated with his 1996 and 1997 rivalry termination articles.

Chart 2.9.
Argentine Threat, Hostility and Dispute Involvement, 1841-1992



leader, Urquiza, was able to defeat Rosas in battle and gain control of the government with help from Brazil and Uruguay in 1852. From 1865-1870, Argentina was involved in a war with Paraguay over a buffer zone incorporating part of Uruguay. Just after the war, as detailed above, the rivalry with Chile began over the Beagle Channel and continued till the mid 1880s. This rivalry went dormant until the 1950s then escalating again with increasing violence in the 1960s and 1970s. A dispute in 1979 marked the crossing of Argentine troops into Chile and heavy, but limited fighting.

A final significant series of disputes for Argentina is reflected long standing disagreement over possession of the Malvinas/Falkland Islands with Great Britain dating to 1820. Although negotiating throughout the 1960s, the dispute was not formally resolved. In 1976, a shooting incident between an Argentine destroyer and British vessel led to the recall of ambassadors. New negotiations began in 1977, but proceeded slowly. In April 1982, an Argentine force occupied the islands. British forces surrounded and eventually reoccupied the islands using force. The dispute was characterized as the South Atlantic War with over 1100 casualties. After the conclusion of the war, Argentine threat significantly drops.

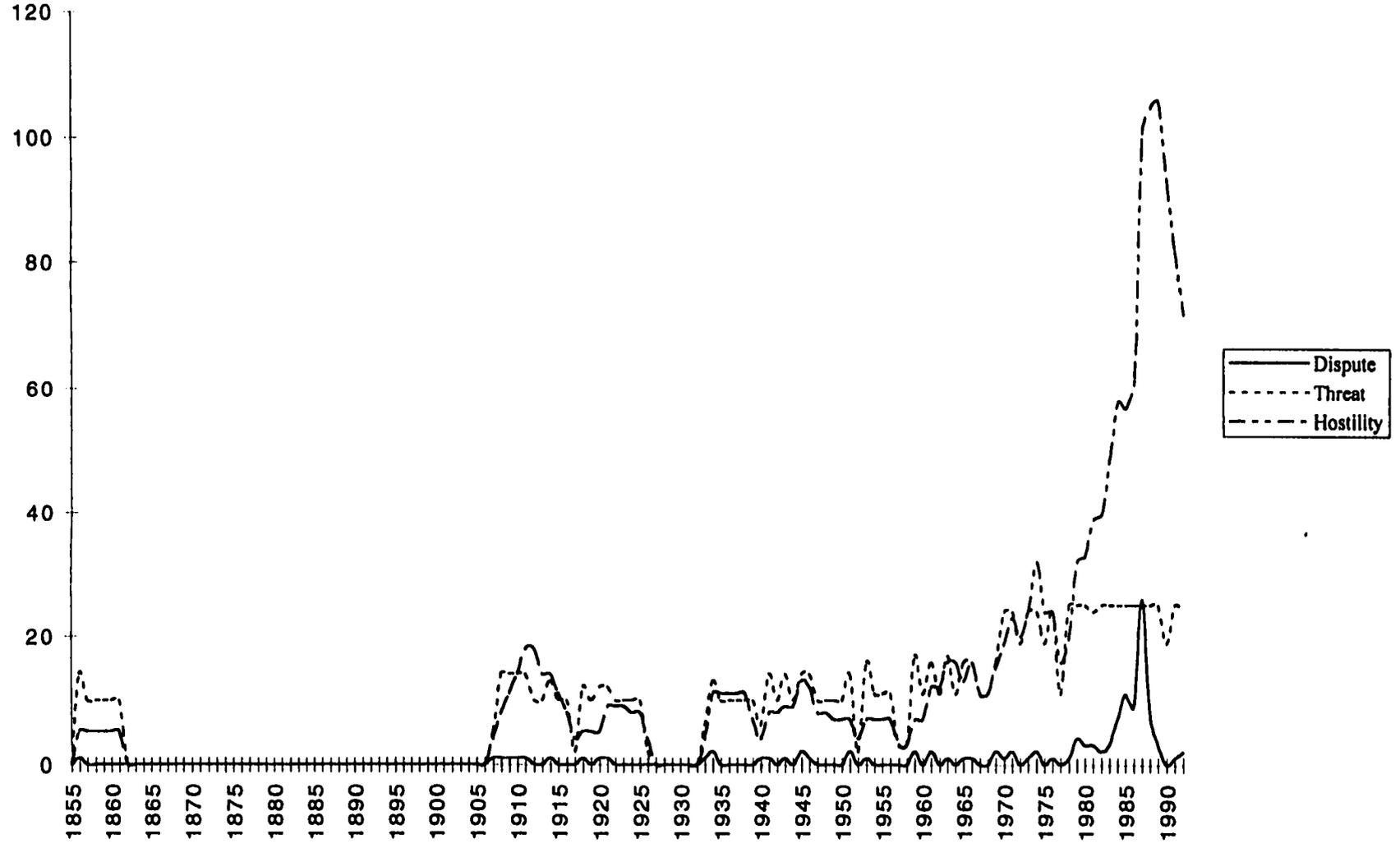
Chart 2.9 appears to reflect these historical circumstances to a high degree of replication. The blockade, Paraguayan War, and Beagle disputes are each clearly reflected in the first three series of spikes. The rise of a second series of Beagle disputes and the ongoing Malvinas situation are reflected in the spikes to the right side of the graph. The

most intense threat is correlated with the end of the Chilean rivalry and the South Atlantic War reaching the maximum level of 25 in 1982.

An interesting aspect of the chart is represented by the relationship between the dispute involvement and the level of threat. A simple selection of two points can reveal a great deal about the Argentine environment at two points in time. A first point will be 1897. The graph relays that one dispute occurs, with a hostility of baseline of 3, and a threat level of 7. This information suggests that Argentina is faced with a show of force by Chile. A second point, 1973, reflects the occurrence of one dispute, but here the hostility is 5 and the threat is 16. Previous studies, using dispute involvement as a measure of threat, would have characterized both years as being essentially the same. The threat level provides more information about the interaction between Argentina and other states as well as including the potential effects of historical events on current policy selection. The threat index enables us to distinguish between disputes, their intensities, and the participants.

An overview of the Iranian threat graph, Chart 2.10, reflects two general levels of threat, one of fluctuating between 5 and 16 for the period running from 1942 to 1954 and a second fluctuating between 20 and 25 for the period running from 1957 to 1985. Historically, Iran is entangled in one rivalry, Iraq from 1953 to 1992 involving 20 disputes. The rivalry, much like the Argentinean-Chilean rivalry, focuses on the border territory associated with the Shatt al-Arab waterway. A series of intensive military disputes emerged in the late 1950s and continued throughout the 1960s and 1970s clearly

Chart 2.10.
Iranian Threat, Hostility, and Dispute Involvement, 1855-1992



reflected in the rising and consistent threat levels over this period. The overthrow of the Shah in 1979 and continued tension produced the war running from 1980-1988. The threat index maintains a high level during this period.

Using the ICB data and source material focusing on Iranian foreign policy, the Iranian historical context can be more fully developed. Iran maintains a relatively dispute free approach until 1941. Given its close affiliation with Germany and refusal to permit allied use of territory or oil concessions, a series of three crises was initiated during the period between August 1941 and June 1946. The most serious of these occurring in 1941 with the forced occupation of the state by the Soviet Union, Great Britain, and the United States and pressured abdication Reza Sha to his son Muhammad Reza. The occupation did involve the use of force and violence. Although treaties were eventually signed guaranteeing Iranian sovereignty, the crisis did involve threat to the existence of the nation. Two other disputes, involving Soviet overtures for Iranian oil in 1944 and the attempted occupation of Iran via Azerbaijan in 1945, involved no violence nor the use of force. The latter dispute did escalated to both US and UN involvement forcing the Soviets to withdraw troops by mid 1946.

The fall of the Mossadegh regime, associated with CIA intervention in 1953, marked a substantial change in the state's political orientation. The general effect of the change in government represents the entrenchment of US influence over Iranian policy. Consequently, a large part of Iranian aid from the US came with conditional satisfaction

of US policy desires. The threat index does show an increase in 1953 moving from 10 to 15.

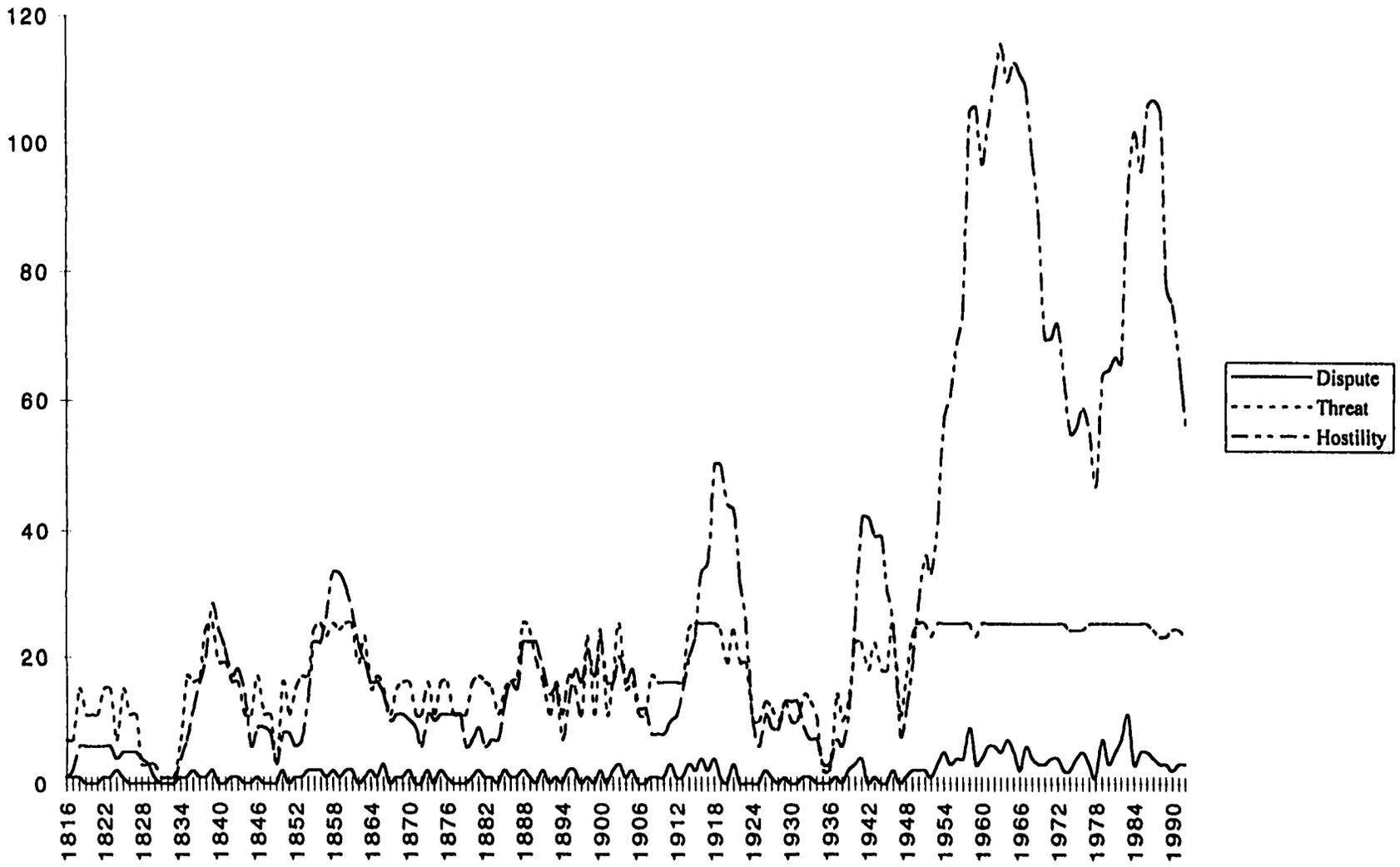
The Shatt-al-Arab waterway served as a continuing source of dispute between Iran and Iraq from the late 1950s until the early 1990s. The basis of contention focused on a strip of territory along a river on which Iraq could collect transit dues from passing ships. In 1959, the Shah questioned the international agreement between the countries designating the arrangement suggesting that it was “intolerable” (Brecher, Wilkenfield and Moser, 1989:245). The ensuing conflict between the states escalated in both the number of disputes and their intensity.

The period between 1960 and 1971 reflects increasing hostility between Iran and Iraq over the Shatt al-Arab, but also due to Iraq’s movement towards Egypt in its policy orientations and the dissatisfaction of Kurdish communities in Iraq. Iraqi officials accused Iran and Turkey of instigating and supporting Kurdish rebellion. Iranian-Iraqi relations deteriorated throughout the decade with increasing numbers of border incidents. In 1969, Iraq requested that Iranian ships lower their flag when entering the waterway and also restricted Iranian nationals on board vessels suggesting that if the demands were not met, then no vessels bound for Iran would be allowed to continue. Iran’s response was to escort freighters with naval vessels and jet fighters. A peak occurs in 1971 with the severing of political relations. A peace treaty is signed in 1975 minimizing threat until 1979 with the development of the Islamic revolution. The taking of the American hostages and then the initiation of the war with Iraq mark a return to high threat levels.

The index appears to do a good job in reflecting threat trends. The peaks and valleys represented by the indicator do appear to match the historical circumstances. A clear example of this is the valley associated with the 1975 treaty followed by the jump with the hostage situation and war involvement. The indicator itself may not provide the most accurate assessments of some events. In particular, the occupation during World War II and the CIA inspired coup in 1953 reflect increasing activity, but the threat level may be under represented. Both cases, however, are difficult to characterize given the coding nature of the MID data. Given the performance of the index relative to measures of dispute participation, the threat variable does depict a much fuller picture of the Iranian historical environment. Although not perfect, the threat index gives us more information and an overall better measure of hostility.

The United States' threat, hostility and dispute levels are represented in Chart 2.11. The graph represents relatively high levels of threat throughout the entire period. In part, threat is unusually high due to the number of rivals maintained by the US. I offer a brief discussion of the rivalries in chronological order identifying the dispute behavior and central issues. Again these descriptions are drawn from Bennett's collection of rivalry case studies. A first rivalry develops with Great Britain from 1816 to 1903 involving twelve disputes. The central issues motivating the rivalry were British efforts to restrict US westward and northward expansion, particularly with respect to Oregon and Washington, British support of the Confederate states during the civil war, and influence in South and Central America. The rivalry starting date is identified as 1816 due

Chart 2.11.
United States' Threat, Hostility, Dispute Involvement, 1816-1992



to the British-US war of 1812. A rivalry with Mexico occurs between 1836 and 1923 involving 24 disputes and one war, 1846-1848. The predominant issues reflect border controls, control over incursions and authority to deal with them, and the nationalization of foreign companies in Mexico. A rivalry with Spain occurs between 1850 and 1898 involving 13 disputes and one war, 1898. The focus of this rivalry centers around Spanish influence in the western hemisphere, particularly Cuba and Latin America. A rivalry with the Soviet Union occurs between 1946 and 1988 involving 53 disputes. The rivalry is predicated on Soviet threats to Europe and US threats to Eastern Europe. However, influence and ideological conflict spread disputes throughout the world. The polarization of the world into autonomous blocs can be construed as potentially escalating the number of disputes, but also restricting war behavior as no disputes escalated to war. A final US rivalry, China between 1949 and 1972, includes 24 disputes and one war, 1950-1953. The central issues of dispute reflect Chinese influence and threat towards Taiwan, Korea and South Vietnam.

Taking the rivalries into account and other war behavior, one can easily justify the relatively constant threat level of greater than 20 for the 1816 to 1992. The two World War periods hold extreme hostility and threat spikes. Given the conflict level, these are to be expected. The post war period reflects a maximum threat level from 1949 onward with some exceptions. The development and continuation of rivalries with two major/superpowers, China and the Soviet Union, and the participation in two wars, Korea and Vietnam, again offer plausible explanations for high threat levels. Certain dips in the

threat index, such as 1924-1941, are explained by isolationist foreign policy choices and domestic instability. We begin to a decrease in the late 1980s with a reduction to threat levels of 24 and 23. This reduction can be associated with the end of the Cold War. A movement back to 24 occurs in conjunction with the Gulf War and then a return back to 23. Given the American case, the index does appear to capture the nuances of threat and hostility.

The index does raise some concerns about threat faced by the United States given its high level of capability. The United States clearly is a great/superpower for the greater part of the century. Given its capabilities, the state is a central actor in the world system and has been active in its efforts to expand influence. There have been few challengers to American foreign policy desires. One could conclude from American capability levels, that the threat index should reflect lower levels of threat in the post War period.

However, American policy choices, and in particular, the development of ideological rivalry, have increased the potential threat the United States may impart to other states. In such a competitive environment, policy choices lead to reactionary activities and dispute. As Brecher and Wilkenfield (1989) conclude, states will receive a proportional amount of conflict directed at them that they direct towards other states.

The United States is a superpower, but its international role does inherently produce threat associated with interstate competition. In particular, the American case reflects the high level of hostility found in the international system associated with the Cold War. The high threat levels reflected in the index are also articulated in public and

elite opinion gathered from 1950 to the 1980s. Russett (1990) and Russett and Lackey (1987) conclude from polling results that American perceptions of nuclear war were fueled by high levels of international threat associated with the Soviet and Chinese rivalries. Most Americans pushed for increased military buildup in response to external threat. Capability permits states to undertake more international activities. High capability can insure increased security, but it can also lead to increased threat. Cusack's findings (1985) suggest that the most capable states, The United States, China and the Soviet Union, were also the states facing the highest threat levels. The American case presented here further reinforces these conclusions.

A Comparison to Previous Measures

Very few studies have actually employed any empirical type of threat measurement. Two, Cusack and Ward (1982) and Oren (1995), were reviewed above. Both provide operationalized measures which seek to represent hostility between states. Oren's belligerence score reflects the severity of a state's policy choice as attributed by the MID categorization for hostility. He then aggregates these scores across disputes to achieve a yearly belligerence score for each state.

Cusack and Ward develop a formula to measure tension between states. This tension indicator is described above. However, as suggested, it is a measure to describe the symmetric tension between a pair of states. As I seek to identify the total or complete threat a state faces, their formula is not adequate for comparison. In order to

produce a degree of comparability, I create an analogue of their formula by using the total dispute participation for a state in each year as compared to the dispute participation between a dyad. The altered model is represented by the following:

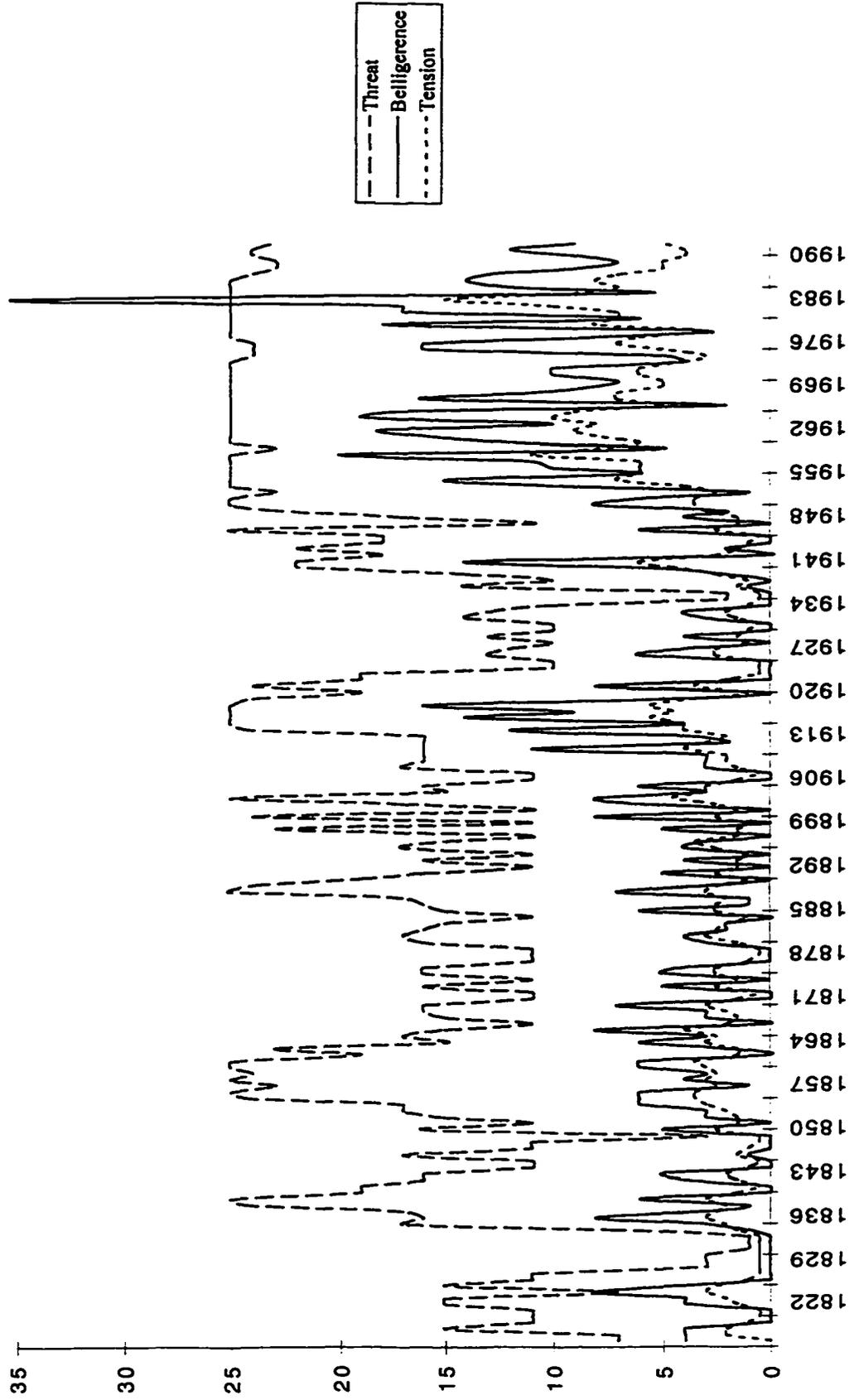
$$\text{Tension}(t) = 1.0 + \text{SD}(t) = 0.5 [(\text{Tension}(t-1) - 1.0)]$$

$$\text{SD}(t) = \text{number of disputes during year } t$$

I believe that the altered model does retain the integrity of the original.

Using these operationalizations, all three indicators are applied to the United States. I chose the United States due to its inclusion in the case studies and its high degree of dispute participation. Chart 2.12 reflects the graphical representation of each. One can observe that each of the measures share similar peaks and valleys. This point suggests a general continuity in their application—all three do rely on the same dispute data. Both the tension and belligerence measures are interval variables which can rise to infinity while the threat index is capped at 25. It should be emphasized that the belligerence measure reflects the policy choices undertaken by the United States and not the policies directed towards it. Furthermore, the belligerence score is much more abrupt in its fluctuations given that it focuses only on the current year rather than integrating previous events as the threat and tension scores do. The tension measure maintains the lowest level of the three indicators. It is a measure which generally reflects a rolling dispute involvement with a discounting effect. Consequently the trends are somewhat smoother than the belligerence scores, but given the reliance on dispute participation, its variance is restricted.

Chart 2.12.
Comparison of Threat, Belligerence, and Tension Measures for the United States, 1816-1992



Direct comparison of the measures for a limited period provides some interesting insights into their development of threat. A sample of the time period, 1851 to 1881, reflects some distinct differences. The belligerence score maintains 8 spikes and drop-offs during this period. The spikes generally reach a peak of five then drop to 0 for every couple years. The tension score also spikes and drops during the period generally reaching a peak of 2. The threat score spikes to 25 and maintains that level for a period from 1854 to 1864. This time reflects the Civil War period and British involvement with the Confederate states. Threat drops to 17 in 1866 and then fluctuates between 15 and 10 the rest of the period. The comparison suggests that the belligerence and tension scores identify the initiation of the hostility, but allow it to fall off quickly. Furthermore, neither takes into account the opponent's identity, but treats all opponents equally. Given earlier discussion, leaders and citizens are likely to remember hostile actions and the perpetrators of those actions for a period of time. These memories will have an effect on current and future policy choices. Consequently, the implementation of historical tendencies and opponent characteristics adds to the operationalization of threat and what is defined as threat.

Conclusion

This chapter addressed a gap in the literature regarding the meaning of threat. The conception for threat developed here facilitated the formation of an operational measure for threat. Four factors, the geography of the opponent, the capability of the opponent,

the existence of rivalry and baseline hostility, are integrated into a 26 point indexed measure. The underlying motivation for this task was to emphasize the complexity and non-uniform nature of the threat concept. Previous examination has employed extremely broad measures of threat overlooking many of the nuances which affect security policy decisions. By identifying the causal relationships which influence policy decisions--the conditions that increase threat--we make more precise model specifications and offer better explanations for policy decisions.

The measure developed above makes a number of contributions to our analysis of foreign policy. The strength of the measure is its ability to provide a context for the development of policy. Instead of an extremely general measure, such as a dichotomous examination of war, threat provides both a historical and qualitative picture of the policy-making environment. We gain a more robust picture of the extended or planned security policy choices undertaken by leaders. Conversely, the indicator's central weakness is its inability to distinguish changes in the short term as its unit of analysis is the state-year. The threat concept will help us develop a predictive framework for policy decisions. In this sense, we can begin to identify which types of policies will be employed under varying threat conditions. As a continuum of security policies exists with variable costs, a general security policy model can be conceptualized. This task will be undertaken in the following chapters.

Chapter 3: A Theory of Security Policy Choice

The focus of this chapter is to develop a theoretical framework which will be used to derive hypotheses concerning security policy choice. Here it is necessary to assume that security is a fundamental and desired good and that threats to the state, populace and/or regime exist. Given the existence of threat, security seeking motivations become clearer. Leaders seek to protect the state in order to insure the maintenance of its existence both for the general good and the preservation of individual position. How these security decisions are made, however, reflect domestic conditions associated with available resources, governmental and institutional structures and leaders themselves. This chapter will primarily focus on three interdependent questions: (1) how governmental structure affects policy selection; (2) how resource flows affect policy selection; and (3) how individual motivations affect policy selections. Governmental structures, resources, and leadership are fundamentally intertwined in the policy arena in all states: the national government is the center of interaction between the population and its rulers, the pool of available resources provides fundamental restrictions on policy opportunities, and leaders maintain individual preferences and goals as well as national goals. The intermingling of these three elements thus defines the policy environment. In order to simplify theoretical development, I will focus on each independently and then integrate them into a more cohesive theoretical design. This chapter serves as the theoretical linchpin for the complete study.

Introduction

Leaders are continually forced to make difficult decisions associated with resource allocation and distribution. These are no win situations. Few citizens are pleased by paying taxes. Furthermore, by satisfying the particular preferences of one group with these extracted resources, leaders raise the ire of others -- by taking resources from some and redistributing to others, invariably some are left dissatisfied. This situation is common in the domestic context, but it may be most intense in the foreign policy environment where most political participants do not identify the benefits accrued to them by their sacrifices. One can easily assume that most political participants and citizens desire the benefits of national security, but like most public goods, they may not be as willing to pay high costs if they can not ascertain the distinct rewards garnered to them as individuals. In this sense, the good is desired, but the cost associated with that good maybe perceived to be extraordinarily high during conditions when little threat to the state exists, and low when conditions of threat are high. Security can be analogized to be much like insurance, it is of high cost when there is little misfortune, and of low cost when misfortune strikes unless one gains distinct benefits from increasingly higher levels of security, such as those in the military-industrial establishment.

Leaders thus face the difficult policy road of supplying security by extracting resources from the society, while at the same time, meeting other individual and group preferences. A leader's ability to accomplish these tasks, as a function of a resource accumulation and tradeoff dynamic, has a significant influence not only on the political

stability of leaders themselves, but the political stability of nations as a whole. This logic is perhaps most easily presented in the historical case associated with collapse of the Soviet Empire.

Examination of the Soviet Union in 1985 reveals Gorbachev faced with a hostile international situation -- high tension with the United States, an ongoing war in Afghanistan, and the responsibility of upholding a wide ranging economic and security network for the Eastern Bloc all while his state is in the midst of economic stagnation and decline. Given these resource debilitating security issues, Gorbachev initiated a program which attempted to reduce the external threat being faced by the Soviet Union. His policy platform was predicated on a simple logic: reduced threat would permit a reduction in the level of resources used for security and a reallocation of these resources into areas which would increase economic productivity and help strengthen a shaky domestic environment. Rather than attempting to increase security through military development, the policy employed by each of his predecessors, Gorbachev used diplomatic tools to defuse tension with the United States and create a new period of détente. In turn, resources long applied to a forty year arms race could be funneled into economically oriented sectors. He continued this new security approach by ending the war in Afghanistan and permitting increasing independence of Eastern bloc nations. Both these actions alleviated resource burdens which had long shackled the Soviet Union. Increasing economic and political liberalization produced new political participants and a changing political environment.

Gorbachev's policies, however, also created political opposition. Traditional political actors, the military, the Communist party, and entrenched bureaucrats saw his actions as undermining their political power, but more importantly, minimizing their control over resources within the system. These groups had long been central determinants of Soviet foreign policy, perhaps the central issue of importance among Soviet elite, and viewed Gorbachev's policy approach to be sacrificing hard fought international gains, undermining long run security, and limiting individual interests. These groups had prospered during the hostile East-West relations by maintaining control over material goods as a function of security premises. The reduction of threat allowed for the reallocation of these resources away from the foreign policy establishment and towards newly emerging domestic groups, particularly a liberal intelligentsia and political reformers. Inevitably, the erosion of traditional conservative support for Gorbachev due to this redistribution and his inability to continue to satisfy these new political forces produced conditions leading to the Coup attempt of August 1991.

This case reflects both the difficulties associated with resource allocation and distribution in the security context and the maintenance of political support for leaders. Furthermore, it highlights that competition for resources is a central factor in states that are both democratic and non-democratic. Leaders are forced into the difficult position of providing state security while at the same time satisfying important constituents in order to maintain position regardless of institutional framework. The security policy making arena forces decision-makers to make tradeoffs, nation security/national good verses

support of important political actors. For Gorbachev, this trade off led to his political downfall and the eventual dissolution of the Soviet Union as a political body. The interesting aspect of the case is that Gorbachev was indeed successful in reducing international threat and increasing Soviet security. However, this success did not translate into domestic political capital. The structure of the Soviet polity and the necessity of maintaining support from a diverse political coalition became increasingly difficult as Gorbachev shifted resources away from traditionally strong actors. Resources provided the glue to keep such a coalition together. As the interests of the coalition splintered, Gorbachev's political foundation dissolved leaving instability.

This case highlights a number of important issues which will be developed in this chapter. First, resources are a key to policy formation and development in two perspectives: (1) available resources dictate the scope of policies in the political arena as resources are finite; and (2) resources serve as a mechanism to gain and trade political support -- they are a political currency used to buy support. This idea is commonly identified in both log rolling and pork barrel efforts in the American context, but can be translated elsewhere. For the Soviets, resource constraints forced decision-makers to choose between defense development or domestic economic development. This trade off affected domestic political stability. Second, institutional design has a strong influence on decision-makers' abilities to extract and accumulate resources and to formulate policy. The breadth of political participation and decision-making power found in the political system determines how resources are extracted and where they may be designated. In the

Soviet case, the institutional framework was centralized with decision-making power lying in the Politburo. Policy here appears to have been formulated by establishing coalitions of central actors from the military, the Communist party, and bureaucracies. Gorbachev was able to forge varying coalitions to enact his foreign policy designs, but the stability of these coalitions eroded as Gorbachev became increasingly reformist from 1985-1989 and then increasingly conservative from 1989-1991. By August of 1991, Gorbachev had few important backers and little political stability. Third, a leader's stability in office is predicated on their ability to maintain support. As emphasized above, complex policy tradeoffs affect a leader's ability to maintain support. These tradeoffs are perhaps most difficult in the security context when leaders are forced to choose between the national good and their own welfare. Gorbachev's tenure clearly reflects this proposition. This chapter offers a general theory of politics founded on resource allocation and distribution decisions. The theory emphasizes how security decisions are made across all political systems relative to flow of resources between different political interests.

The next section of this chapter will examine literatures associated with state formation and building, resource and tax extraction, political capacity, institutional frameworks and foreign policy/public policy behavior, and leadership behavior. Each of these literatures provides insight into the decision-making processes in a general perspective. Integrating different elements from them provides an established jumping off

point to examine the interaction between resource application and security policy behavior.

Literature Review

All states seek to maximize security while minimizing security costs (Waltz, 1979). Institutional frameworks within political systems influence how political decisions are formulated and implemented. In particular, institutions affect how decision-making power is centralized and how resources are allocated for policy decisions. Both of these processes are crucial in the development of security policy. I hypothesize that as these institutions and structures vary so will security policy within the policy selection rubric. The role of domestic political environments and structures is a key in developing theory addressing foreign policy. The realist paradigm has long assumed that external security is the most important goal associated with state decisions. The external environment thus dominates the development of foreign policy. However, domestic factors can and do influence policy selection. Barnett and Levy (1991) suggest:

Because state survival is rarely at stake while regime stability or survival frequently is, because state decision-makers generally attend to immediate threats first, and because their risk orientations involving high values but low probabilities vary considerably, we hesitate to assume a priori that external security goals are always given priority in the foreign calculations of states. (373)

The type of state governmental system and its institutional framework thus become central variables in the choice of security policy.

Over the past decade, a cottage industry examining the interaction between domestic political systems and war behavior has emerged in international relations. The empirical findings of the democratic peace have propelled the development of theory focusing on the effect of governmental structure on foreign policy behavior. Consequently, one can clearly identify a re-emergence of the study of comparative foreign policy and policy variation across regime and state types.

A recent literature review by Hagan (1994) identifies a diverse number of theoretical approaches examining the internal-external policy nexus in the war environment: regime structure approaches—particularly the democratic norms and democratic constraint models (see for example, Chan, 1984; Weede, 1984; Domke, 1988; Maoz and Abdolali, 1989; Bremer, 1992; Maoz and Russett, 1992, 1993; Dixon, 1993, 1994 etc.) elite survival and diversionary strategies (Levy, 1988, 1989; Miller, 1994; Bueno de Mesquita and Siverson, 1995, 1997a, 1997b), coalition maintenance (Snyder, 1991), extraction political strategies (Lamborn, 1991), and power politics strategies and revolutions (Walt, 1992; Starr, 1990; Hagan, 1989, 1994). All identify the effects of domestic political processes on foreign policy choices related to conflict. It is beneficial to describe the domestic political environment and its relationship to our conceptualizations of the nation-state.

Finer (1975) offers an explicit definition of the state: “an organization which controls the population occupying a defined territory is a state *in so far as* (1) it is differentiated from other organizations operating in the same territory; (2) it is

autonomous; (3) it is centralized; and (4) its divisions are formally coordinated with one another,” (70). Furthermore, he suggests that paramount organ of the state is the government which provides applicable goods and services to its citizens. As suggested above, the institutional structure of the government, participation in the political system and the locus of decision-making policy power are fundamental determinants of policy outcomes. How the state develops and institutions evolve thus become important inputs into policy determination.

War is a policy long associated with state building by providing leaders opportunities to expand the state and alter institutional frameworks. Institutions can limit or constrain foreign policy behavior by leaders. I turn to literature examining the development of the state as a function of security concerns and the subsequent institutional evolution of the state as modernization occurs. Intrinsic to our ideas of state is the process of state building. The evolution of the state reflects development of its institutions via political and economic growth. Rasler and Thompson (1985), Tilly (1975), Finer (1975), Ardent (1975) and Braum (1975) develop a notion of war making and state building. Leaders act in an extraction-coercion-beliefs cycle. Here leaders extract resources via taxes or other methods and then use these resources to develop security networks and bureaucracies to coerce the populace. At the same time, leaders employ social stratification and beliefs to incorporate parts of the population to build coalitions. Threat plays a central role increasing the acceptance of the populace. Much like Jack Levy’s examination of diversionary theory, leaders identify a source of threat

which can be used to justify increased extraction of resources. Here war and conflict provide states opportunities to not only expand territorially and resources wise, but also for governmental and institutional development. Rasler and Thompson suggest:

A primary, if not the primary imperative of state building has been the suppression of internal rivals and the defeat of external enemies . . . To pay for these seemingly ever-rising military costs, rulers have felt compelled to extract more and more resources from their populations. To collect and manage the increasing scale of these extractions, rulers have been forced or encouraged to create and expand their state's bureaucratic-administration apparatus as well. (315)

In particular, the notion of state building becomes increasingly important as war time creates and expands sources of revenue, social problems, domestic political coalitions, and bureaucratic organizations. Institutions and governmental structures evolve over time. As this process occurs, the goals of the state change as do the methods of achieving these goals. However, the idea of security does remain a constant.

Organski and Kugler (1980), Organski, Kugler, Johnson and Cohen (1984), Kugler and Domke (1986) assess the process of state building both in the context of war and periods of peace. Here the state is predicated on the functioning of four bureaucracies: a military force, the national police, civil bureaucracy and political parties. In order for state building to occur, these bureaucracies are necessary to acquire resources via taxation and other methods. A cycle develops within the state expansion--bureaucracies grow, large bureaucracies require more resources, resource need require further extraction. The

political costs associated with extraction become more evident as populaces generally do not enjoy being taxed.

For these authors, the ability of a state to extract resources to meet goals and provide services is reflected in the concept of political capacity. Political capacity is defined as the ability of the national government to effectively carry out tasks imposed on it by elite, important societal groups and pressures of the environment. The most capable governments extract and allocate a larger portion of available resources for these purposes -- resources reflect societal resources or the pool of human and capital resources generated by the population and governmental resources or the share of societal resources extracted by the national government. The national government becomes the focal point between the population and diverse groups competing over the allocation of resources.

State building and governmental structures thus become increasingly important in policy selection and the levels of governmental extraction. Given two of the questions developed at the beginning of this chapter, how governmental structure affects policy selection and how resources flows affect policy selection, the impact of institutional design of the government becomes a key explanatory factor. Regime type and its concomitant characteristics offer a great deal of insight into political capacity and extraction. Given the underlying institutions and norms found in states, both domestic and foreign policy selection can be expected to vary given distinct political environments. Domke (1988) stresses two particular governmental characteristics in his examination of war participation: (1) formal institutional constraints serving as checks and balances on

power; and (2) the activity of groups and organizations seeking to advance the interests of a segment of society. These two factors reflect the dispersion of decision-making power within political systems and the effect of political participation on policy development. Others have extended this institutional/structural approach. Morgan and Campbell (1991), Morgan and Schwebach (1992), and Bueno de Mesquita and Lalman (1992) stress the method of executive selection, the nature of political competition, and the degree of decision-making power as being internal constraints on decision-making.

Hagan (1993) builds a theory of foreign policy choice predicated on the effect of political opposition within the state. Much like Domke's examination of participation, Hagan focuses on the influence of opposition within the domestic politics bargaining dynamic as a mechanism for policy development. Political competition aids in the legitimizing process of the state, but also complicates the policy development process. Leaders are forced to bargain and to build political coalitions to enhance their ability to implement policy and also to insure that they can maintain political position. The type of opposition, a reflection of political divisions within the leadership/regime fragmentation or opposition outside of the leadership, affect policy in various ways. Hagan synthesizes Domke's two central points by suggesting that dimensions of political conflict merge the institutional structures of the state, exemplified by party systems, and the divergent preferences associated with participation of various political interests. The political power of the significant players inherently affects the size of the coalitions and

the potential constraints placed on leaders -- this point will be more fully examined

below. Hagan suggests that :

The strength of opposition refers to the organizational capabilities relative to those of the regime, with the assumption that foreign policy makers are more attentive to opposition groups who appear strong enough to threaten the regime's long-term hold power. It is basically a function of the relevant resources it commands in the political system. (79)

The nature of political interaction within the states is framed by the institutional nature associated with resource allocation and participation. Again this point will be more fully examined in the context of resource aggregation below. But as Hagan suggests, the inherent interaction processes of these factors go along way to determining policy development related to institutional constraint:

Democratic norms and open political processes predispose leaders to emphasize various forms of accommodation as a means of coping with opposition at all levels. In contrast, authoritarian leaders are in a better position to manipulate opposition and policies via political legitimization. All this is not to say that leaders in closed systems are immune from opposition, but only that they are probably better able to insulate it from domestic politics and have greater options for dealing with domestic opponents. (90)

Institutionalization reflects the entrenched norms of the political system or the widely accepted "rules of the game". In turn, these rules help stream line behavior. For open polities, such as democracies, these rules add legitimacy, but inherently complicate or constrain decision-making. For closed polities, the rules increase the ease in implementing

policy choices, but may decrease long term legitimacy. Consequently, coercion may play a bigger role in the latter.

While Hagan examines opposition within the system as a function of governmental system, Snyder (1991) examines the coalition development process within the domestic context and its effect on foreign policy, particularly with reference to state expansion. In building from Olson, he points to the compactness of group interests in determining how policy is developed. The more parochial or cartelized a decision-making group's political power, the greater its ability to influence policy. In political systems without power monopolies, such as democracies, constraints are greater as the individual political groups hold more evenly distributed power and diverse interests across political and economic sectors. The structure of the political system and the size or number of key participants rise as essential characteristics in foreign policy development.

Bueno de Mesquita and Siverson (1995, 1997a, 1997b) develop a domestic institutional model for conflict participation focusing on these factors. This model integrates two institutional characteristics, the size of the selectorate (those who participate in government selection) and the size of the winning coalition. Foreign policy decisions are predicated on a leader's desire to maintain office and his/her ability to garner support via the distribution of public and private goods associated with policy. The ability to distribute benefits becomes a function of the available pool of resources and an endogenous allocation decision -- as the size of the selectorate and winning coalitions increase, the payoffs or goods accorded to the individual members decrease. Motivations

for conflict participation are intertwined with the leadership's desires to gain more resources which are in turn used to gain support from constituents. The distribution of the private goods is particularly important for the maintenance of position.

In this study, I propose that a general theory of foreign policy or security policy selection develops as a function of resource flows through domestic institutions. The ability to control and divert resources within the domestic political environment serves as the foundation for policy selection. Leaders with monopolies over resource allocation and diversion are likely to face less domestic constraint and consequently have a greater ability to pursue policy designs. This freedom is reflected in both domestic and foreign policy behavior. Six studies, Arnold Wolfers (1962), Margaret and Harold Sprout (1968), Theodore Lowi (1964, 1967), William Zimmerman (1973), Alan Lamborn (1991) and Margaret Levy (1988), examine the effect of resource flows and extraction on policy development. I highlight these studies in particular because they address the interaction between resource flows and foreign policy. In particular, the authors try to parse out the effect of domestic politics on foreign policy development by moving beyond unitary actor assumptions about foreign policy behavior and open the "black box" long associated with this issue area. Their importance lies in their contributions in framing how domestic politics interacts with external threats to lead to policy.

Wolfers (1962) develops a foreign policy framework predicated on the nature of issues at stake. He defines a continuum of decision-making environments with one pole reflecting a pole of power and the other a pole of indifference. The pole of power focuses

on the preservation of the state. Threats to the states will result in power maximization behavior. The pole of indecision focuses on conditions in which little threat exists. Policy is therefore generally formulated by institutional design. The ends of the continuum reflect policy as if it were formulated by an unitary actor. The space between the poles, however, reflects decision-making conditions which involve individual preferences and group interests. The majority of foreign policy development thus takes into account domestic political orientations.

Sprout and Sprout (1968) examine the dilemma of rising demands and insufficient resources. In their examination of Britain's foreign policy, the author's focus on how resources are allocated according to discernible patterns and priorities. Three propositions about resource behavior are emphasized. First, the commitment of goods and services provided by the state will fluctuate over time. Second, decision-makers allocate resources to meet the needs of the political system and some proportion of its membership. Rasler and Thompson (1992) suggest that these commitments vary from system to system, but are found in all systems. Third, the demands placed on the system are likely to escalate overtime. Given the Sprouts' model, Rasler and Thompson conclude: "Precisely how this process is played out will vary from system to system, depending in part on the types of political economies involved, the degree of consensus of collective goods and the quality of the prevailing public order," (1992:41-42). The Sprouts propose that the form of government affects how this resource dilemma is played

out in politics. It is therefore necessary to include this input into the analysis of foreign policy behavior.

Lowi (1964, 1967) examines the structure of the American political context by differentiating the policy formation process into three subsystems: distribution, regulation, and redistribution. Using this typology, he focuses on the influence these subsystems have on foreign policy choices, including conflict and trade decisions. The dominant effect of these policy subsystems comes from the allocation of resources to distinct groups as a function of public policy. In particular, the extent to which political goods can be disaggregated becomes a key determinant as to what type of issue policy is implemented. For distribution, political goods can be easily allocated to individuals or firms. For regulation, political goods are allocated to groups or coalitions with like minded preferences. Winners and losers are easily identified with this system as the reallocation of resources is coercive. For redistribution, political goods are oriented towards classes and movements with disaggregation becoming difficult. Redistribution is often associated with class warfare.

In the context of these subsystems, Lowi makes four central assumptions about political behavior:

1. A modern state generates conflict that cannot be taken care of solely by elite management, but may necessarily involve bargaining and logrolling.
2. Three fundamental political relations -hierarchy or management, bargaining and logrolling - form the basis for three subsystems within the American political system.

3. These three types of political relations are indexes to the pattern of power in any political institution or unit of government.

4. We can know about the political system through the policy outputs of units without the need of “inside dope”. (Lowi 1964: 299)

Lowi stresses the role of bargaining and logrolling in the development of policy. In this regard, resources play a crucial in the determining policy outcomes.

Zimmerman (1973) builds an issue based foreign policy paradigm integrating both Lowi’s subsystems and Wolfers’ continuum. The paradigm specifies the nature of the political process by identifying the major actors and the intensity of conflict over interests. Two central questions define the foreign policy processes: (a) Is a decision perceived to be symmetrical on politically relevant domestic actors? and (b) Are the political goods at issue exclusively tangible? (1973:1208). Zimmerman concludes: “By ascertaining answers to these questions, one should be able to predict the nature of the policy process and to stipulate the social science literature most likely to facilitate the generation of insights relevant to the predications of outcomes,” (1973:1208).

Zimmerman’s great contribution is his application of the paradigm to a number of different states, most of which are not democracies. In this regard, he identifies the effects of totalitarian, pluralist, authoritarian regimes on policy development. Each institutional framework has distinct policy characteristics, but all also share common attributes.

Lamborn identifies three key sets of theories necessary to develop a model of foreign policy decision-making. First, the identification of relevant sources of resources, resources associated with power, clarifies policy choices. Second, the identification of domestic constraints on resource mobilization affects policy choices. Third, the identification of domestic coalition formation affects the extraction and allocation stages of resource gathering. Furthermore the redistribution of resources affects coalition development. Inherent conflicts of interest exist even when policy choices may improve the positions of all members relative to external groups. Two domestic conditions become apparent as extraction increases: (1) the more visible and adverse the net effects of government tax and spending policies, the more intense and widespread opposition becomes; and (2) the more effective opposition groups, the more pressure on domestic coalitions. Lamborn suggests that foreign policy selection shares the same social choice problems found in all political activities.

Levy examines how rulers aggregate and monopolize resources. Rulers maximize revenue to the state, but do so subject to the constraints of their relative bargaining power vis-à-vis agents and constituents, their transaction costs, and their discount rates. These constraints determine the choice of revenue system. Rulers cannot simply advance any policy that appeals to them. Levy suggests that rulers:

..... choose from among the feasible set of options. By definition rulers are actors within a domestic and an international context, and they must interact with constituents, agents, and the representatives of other polities. To achieve their ends, they must coerce and bargain, develop their resources, and, often, alter their constraints. (10-11)

Policy made by rulers are reflected in the ruler's ability to gain resources and/or power within competitive political environments.

Each of these studies helps to clarify the roles of political structure and resource allocation in the foreign policy process. The theoretical framework developed below proposes that security policy choice is a function of centralized decision-making power and resource flows. The selection of a policy choice reflects the interaction of numerous individual, social and political conditions. Leaders make decisions relative to aggregated social preferences and their individual preferences. In the policy environment, power reflects the ability to institute actions which satisfy preferences. Consequently, policy choices are a function of powerful actors within a given political system. Foreign policy exhibits the same conditions as domestic policy. A leader's policy reflects an aggregation of preferences of powerful actors in the state and his or her own preferences as the implementor.

Theoretical Development

The development and implementation of foreign policy retains many of the same characteristics associated with policy making in the domestic context. Hagan concludes "Foreign policy making is intrinsically political in nature," (Hagan, 1993:3). Lowi (1964) takes a more extreme position concluding that foreign policy is not fundamentally different than domestic politics nor is it insulated from domestic political forces. I define politics in both environments as being a reflection of competition for resources and

decision-making power. Power, or bargaining power, allows individuals to enact policy which in turn enables them to achieve their preferred outcomes regardless of issue area. The central difference between these policy realms, however, is the inclusion of the external actors not involved in the domestic context. In the domestic context, generally, political actors are comprised of individuals, groups or coalitions. In the international context, political actors are larger collectivities such as states or international organizations. In these instances, the collectivities are often assumed to reflect a unified group or unitary rational actor. Consequently, the actions of leaders reflect those of the state in the external environment. Furthermore, foreign policy behavior affects the entire state and is reflected in the development of public goods, particularly security, and other private goods. As many recent articles have suggested, foreign policy behavior, and in particular security policy, is the bridge between the domestic and external environments (see, for example, Putnum, 1988, Simon and Starr, 1994, 1996, Starr, 1994, Morgan and Palmer, 1995, 1996, 1997, forthcoming, Barnett, 1990, Barnett and Levy, 1991, etc.).

For a matter of simplification, all policy choices are placed in three broad issue areas -- Lowi (1967) uses this schema in relation to public policy and it is reasonable to use it here. The three issue areas reflect the national security of the state (most commonly referred to as the national interest), the ability of the leader or her/his party to maintain political position, and the interests of important political actors, groups, and participants. Leaders will allocate resources to each of these issue groups, but will prioritize the resources according to both the domestic and international environments.

As conditions change, decision-makers will change their allocation patterns in conjunction with the political environment. Security policy is emphasized in this study. It is the most unique of the issue areas due to its ability to have impact across a breadth of political actors. Security affects all citizens at all times.

Given this interaction between domestic and international environments, security policy is unique in its ability to have impact across a breadth of political actors. Security affects all citizens at all times. Foreign policy decisions undertaken to increase security thus provide a public good which is non excludable.

In the domestic arena, decision-makers are faced with the difficult tasks of providing security, while at the same time attempting to fulfill individual preferences. Resources are the mechanism used to meet all preferences and goods. As leaders are faced with a finite pool of assets, they must make policy tradeoffs. Their particular policy choices, as exemplified by Lowi's typology--distributive, regulatory or redistributive policies--reflect the disaggregation of political goods. Barnett identifies this problem in the security context:

One way of linking the systemic and domestic in the state's security policy is to recognize that security policy is itself two-faced: it is concerned with the construction of strategies vis-à-vis foreign threats and with the construction of strategies for mobilizing societal resources as well. (Barnett, 1990:530)

Given the disaggregation, political winners and losers become increasingly apparent as a result of resource mobilization. All citizens contribute to the societal pool of resources.

The subsequent allocation of resources for policy choices and the disaggregation of political goods coming from resources defines those who benefit from policy. In the distributive environment, most, if not all, participants benefit from the development of political goods. Security is a reflection of this type of good. However, in the regulatory and redistributive spheres, only limited groups receive the benefits of policy choice. Here elite, interest groups or political relevant units have their preferences realized. Barnett's statement touches upon one of the central issues confronting all leaders in the search for policy development, how to mobilize resources to implement policy while at the same time minimizing political opposition.

Resource mobilization becomes increasingly complex when leaders are faced with highly competitive environments. Hagan (1993) suggests that decisions-makers are often faced with two conflicting political tasks: the development of policy via coalition policy-making and retaining political position. A leader's ability to do both is a direct reflection of the organizational framework of the governmental structure. The institutional boundaries imposed by governmental structure dictate the ease of resource extraction or diversion within the social context. Furthermore, institutional frameworks designate political competition and opposition and affect the formation of coalitions. Invariably, each of these elements influences a leader's ability to maintain political position. A leader's ability to extract resources and distribute them via policy design is a consequence of institutional design.

Security policy choice thus appears to be a product of a number of factors: decision-making power, the flow of resources, external influences, and governmental structure. In this theoretical section I develop a model of security policy selection predicated on the interaction between these four factors. In particular, I examine how resources serve as a constraining element in the development of security policy. Though “resources” is left vaguely defined, I concentrate on two central issues, monetary resources and political support. I focus on two research questions: When should security policies change? and What type of security policies should be implemented when change occurs? Given the framework of the theory I propose a number of hypotheses about security policy which then will be empirically examined in the later portions of the study.

Prioritizing the Issue Areas

The state is the primary provider of a number of essential services for its inhabitants: maintenance of the military, provision of social services in the education and health fields, operation of bureaucracies dedicated to the regulation of behavior of individuals and organizations within national boundaries, transfer of funds to house holds and firms, investment in capital projects, financing of debt accumulation, etc. (Cusack, 1987: 326). In order to fulfill these duties, the state must extract resources via taxation or other forms of resource aggregation. As Cusack suggests, the state controls an extensive proportion of society’s resources as well as the power to allocate them. Kugler and his

co-authors (1980, 1984, 1986) focus on this point in their concept of political capacity.

Here the political capacity of a state is reflected in the ability of the state to meet the needs of important political actors. The most capable governments extract a larger proportion of the state's resources for these ends. The power of the state is reflected in its ability to limit opposition or external constraints on its resource extraction and diversion decisions. The legitimacy of the state lies in its interaction with the polity and how the polity may affect policy decisions through opposition. The institutionalization of participatory mechanisms increases popular perceptions of political equity.

Competition and the development of political opposition are direct reflections of the legitimacy produced by the openness of the governmental system and institutional structure.

Given the finite nature of resources, states are forced to make decisions about policy, or more specifically devise budgets and rank how resources are allocated. The provision of specific services affects the domestic social environment. Those individuals whose preferences are met will support allocation decisions. Conversely, those individuals whose preferences are not being met will oppose allocation decisions.

Perhaps the most vital service provided by the state is security (Wolfers, 1962, Waltz, 1979). Simply, security maybe defined as the ability to deter hostile acts or compel others to accept one's own policy objectives (Iusi-Scarborough and Bueno de Mesquita, 1988:86). Security policies are those that strengthen the state's ability to limit external coercion and influence. They are costly activities which have grown

disproportionately expensive over time relative to other goods and services (Cusack, 1987). Security is a distributed good available to the complete population. It can rarely be withheld from citizens. At the same time, however, all citizens are obligated or are coerced to compensate the government for its provision. The provision of security is necessary, yet reduces the available resource pool which can be allocated for other provisions especially given its costly nature. I assume that all members of society desire to have security. However, individual and group preferences towards security -- or how much security is adequate--will vary across a continuum of preference orderings and utility functions. A key to policy formation is identifying the level of security which will satisfy a significant number of these orderings.

Some important distinctions about security preferences should be made at this juncture. Being a public good, security is not excludable, but does require payment, in the form of resources, from all individuals. The difficulty in identifying an acceptable level of security for the decision-maker is a function of getting individuals to reveal their preferences of varying intensities for a good all consume in equal quantity (Samuelson, 1954; Mueller, 1979). I assume that political participants desire to limit external coercion in their lives and are willing to expend resources for this purpose. The level of payments will reflect the rewards each individual obtains from security, but all individuals are required to pay a base level in the form of tax. Individuals receiving greater benefits from increased security are likely to expend more resources for this end, while those receiving fewer benefits will pay the base level tax for the good. Individuals who feel that too

many resources are being expended on security can expend resources to try and limit increases in security.

However, security conditions are not constant. Security is affected by exogenous actors. As general conditions change, I assume that individuals will be willing to adjust their application of resources to accommodate their preferences. In this sense, the flow of resources for security will vary given the international environment. Equilibrium periods are expected to arise when a constant flow of resources is applied for security -- the security environment is stable. In between these equilibrium periods, resource allocation for security will rise and fall. These peaks and valleys are a function of the threat being faced by the state.

Given the needs of the populace beyond security, leaders will allocate resources for domestic political goods. The state is obliged to provide its citizens with a broad spectrum of services including civil administration; judicial systems; means of transportation, communication and education; the maintenance of law and order; the supply and regulation of coin and currency (Braun, 1975:245). These goods reflect both private individual/interest group policy preferences and public goods. Leaders are thus faced with the distribution of resources across a variety of domestic areas while at the same time attempting to maintain political support and state security. These issue areas are inherently related, yet maintain individual dimensions. During periods of low levels of threat, domestic goals will receive higher levels of attention by the population. In turn,

political participants will place pressure on their leaders to achieve domestic individual and public goods. The policy focus will therefore turn towards domestic initiatives.

The state is the provider of goods, but is rarely viewed as being a faceless entity in the domestic arena. The leader of any political system assumes responsibility for policy decisions to the domestic audiences and other states. The leader becomes the personification of the state. Domestic audiences hold the leader responsible if their individual preferences are not satisfied or their needs are not being met. Where there is dissatisfaction, there will be increasing opposition. At the same time, leaders can gain support by developing policies that fulfill needs and the provision of preferences, services, etc. As individuals are held responsible for their decisions, both good and bad, leaders try to rationally calculate the policies providing the most support and minimize opposition. Responsibility provides direct and indirect constraints on the policy choices leaders try to impose. Levy (1988) suggests that the interaction between leaders and constituents is the basis for constraint, leaders can rarely impose any policy decision they desire. Consequently policy choices reflect some coercion, bargaining, and exchange between leaders and other actors.

Rational policy calculation undertaken by decision-makers reflects individual motivations associated with holding leadership positions. I assume individuals desire to become leaders because they gain positive outcomes associated with the office. Consequently, they attempt to maintain position and promote their own interests (this assumption is described in detail in Downs, 1957; East, 1978; Salmore and Salmore, 1978;

Levy, 1988; Bueno de Mesquita and Siverson, 1995; and numerous other articles).

However, as suggested above, leaders rarely own a monopoly on political power.

Consequently, coercion can be applied, but leaders must also bargain with other actors to gain support or use log rolling or pork barrel techniques. As resources are the currency used to gain support, leaders bargain for resources by making trades via policy. Levy (1988) proposes a theoretical framework in which rulers try to centralize power -- predatory rule associated with making revenue production decisions and tax payments. Here leaders try to gain bargaining power and minimize transaction costs. In certain situations, they will make concessions to actors who can provide them resources or support. These concessions are reflected in the selection and implementation of certain types of policy.

A cycle thus appears to be identifiable. Leaders attempt to gain power. Power is a reflection of resources or control over resources. Leaders will go to those with resources and bargain to gain resources. In turn, they distribute resources to gain power. As Levy suggests, leaders reflect both the principal and the agent in their efforts to get resources and maintain position. Resources can be both collected and traded.

A further assumption can be made about policy decisions. Leaders will implement policies which will allow them to stay in power. Given the trades of support and resources between leaders and powerful political actors, policy decisions will be used as a mechanism to satisfy constituent preferences. Policy reflects an exchange of resources between a leader and those individuals or groups which provide enough support for the

leader to maintain position. In this regard, leaders are forced to pay attention to the particular preferences held by actors in the system. The difficulty in maintaining position will be satisfying constituent preferences when multiple conflicting preferences exist. Leaders have to make strategic choices in the development of their policy positions, particularly in situations involving conflicting preferences of important constituents. Again Lowi's typology of distributive and regulatory policies is illustrative in presenting political winners and losers resulting from policy choices. The application of resources and the type of political goods resulting from it are important support gaining actions.

A hierarchy for the three issue areas can now be presented. I begin by emphasizing leadership goals. This study explicitly examines the formation of security policy. I make a central assumption that leadership goals are always constant with security being the preeminent interest. Leaders will be forced to shift attention towards other priorities because the environmental conditions dictate emphasis towards them. However, leaders will always return to emphasize security. This is explored below. Three issue groupings have been developed for decision-makers. The interactions of these groupings with the environmental conditions help to determine when a policy choice will be undertaken and what type of choice will be undertaken. These groupings are the following:

1. National stability reflected in national security--N
2. Political stability reflected in maintaining the current leadership (or the party of the current leadership)--position of the leader-P
3. Domestic political goals reflected in private and public goods associated with the maintenance of the state-D

The security of the state is the pre-eminent interest. As Zimmerman suggests :
“Preservation of the state is a goal highly esteemed by almost all decision-makers,” (1967: 1204). In his seminal essay, Arnold Wolfers makes two central assumptions about leaders’ security oriented motivations. First, he posits that decision-makers are expected to place an exceedingly high value on the so-called possession of the nation -- above all, on national survival, national independence, and territorial integrity -- and to react in fear against threats to these possessions. Wolfers suggests that these traits are generally shared among all citizens in a type of conformity (1962:12). Second, he assumes that the international system creates constant danger to national core possessions (1962:13). Without the state, the leader will not be able to maintain position and individual citizens will not be able to pursue their preferences. Decision-makers will act for the benefit of the state (this is unlikely to be from altruism, but instead personal interest). Security will demand resources. Under finite conditions, leaders will be forced to extract them from individuals or divert them from existing policy programs. In cases of increasing threat, extraction and diversions should be more easily undertaken with minimal or lessening opposition. This point will be further described below.

Leaders recognize that individual participants and groups are concerned about security, but also recognize that it may not be the most important good for the populace under all conditions. Citizens may not be willing to provide resources for security when they feel that more preferred goods are being overlooked. Given the dynamic nature of threat, citizens are less likely to be concerned about security under conditions of low

threat. Consequently, their preferences will focus towards other public and private goods in the domestic context. In these situations, leaders will follow the institutional development of policy. By institutional development of policy I suggest that leaders will use bargaining and logrolling to develop policy and provide goods as a result of the competition for resources rather than apply them directly to security as their own preferences may suggest. Wolfers concludes that governments act according to institutional frameworks during periods of low threat:

When not more than minor values are threatened by international discord, governments find it expedient to act according to established rules, since their interest in seeing others do likewise exceeds their interest in winning an occasional and minor advantage. Under these circumstances, they may forfeit an immediate national gain for the sake of sustaining the rule of law with its long-run benefits. (Wolfers, 1962:16)

I am emphasizing that while leaders are predisposed to security issues, they are also rational actors concerned about personal position. When the threat is low, leaders will be more willing to make tradeoffs, security for other goods, because political participants become increasingly focused on the domestic arena. Political competition for resources will thus be greatest when attention is directed towards the internal political agenda. Leaders will be willing to allocate resources away from security and apply them to other policy areas. These tradeoffs reflect leaders' desires to hold onto to political position. Political stability, or simply the maintenance of political position will be the second important

interest. Actors will seek to maintain position. This will be a driving force in leadership decision-making. Policy making will be a reflection of this central desire.

As few leaders own a monopoly of decision-making power, they will need to develop a base of support. Leader will maintain support by satisfying the preferences of important political actors. The number of important actors and the level of competition between their preferences will influence policy selection. Leaders will seek to increase political stability by increasing individual stability -- powerful individual actors will be more important to satisfy than weak political actors. Their support will in turn provide increased political stability for the leadership. Power is again reflected in the control and allocation of resources. Allocation, trade and distribution of resources is a reflection of bargaining power and position. Policy choices are made to satisfy those actors in the system who can provide political stability. The policy continuum will thus be oriented around a leader's ability to satisfy important constituents to increase political stability

Third, given the need to address policy options beyond security and need to maintain political support, leaders will allocate resources for domestic political initiatives. Decision-makers understand the need to allocate and distribute resources for basic services that the state must supply for its populations. In this context, resources will be allocated for goods that allow the state to continue to function, the administration costs of the state, and provide goods to the population that satisfy a base level of expectations. Domestic political goals reflect the quality of life issues associated with public services.

Given the dynamic nature of the international and domestic political environments, leaders will react to changing political conditions. Consequently, the levels of resources allocated to each of the issues areas can vary as a function of these changes. Leaders allocate resources across these three issue areas, security, position, and domestic goals. I assume that each of the issue areas receives resources at all times. Given the finite levels of the available resources, the allocation of resources for each issue areas is defined by the environmental conditions rising in the domestic and international political arenas. The trade-off dynamic between the different issue areas is defined by the political landscape facing each leader at each point in time. In domestic politics, as political competition for resources increases, leaders will focus on the maintenance of political position and consequently will be more attentive to constituent interest. In many respects, this scenario parallels Wolfers' pole of indifference that suggests as political competition lessens, leaders can refocus on security issues. In the international environment, as threat increases, leaders will refocus on security issues. Simultaneously, domestic competition should decrease. Leaders should thus have greater policy latitude. As threat diminishes, domestic political competition will begin to rise. I assume that the key to resource allocation across these preferences is the dynamic nature of politics in the international and domestic arenas. Changes in either arena will affect policy. In this sense, it is impossible to separate them into distinct political spheres. Both invariably influence resource allocation which is the central component of politics at large.

Motivations for Security Policy Changes

The prioritization of resources for the issue areas reflects the conditions associated with policy change. McGinnis suggests that changes in foreign policy decisions will be related to changes in the “states of the world”:

Thus optimal outcomes are jointly determined by an actor’s preferences, constraints, and beliefs about the consequences of its action. If a given rational actor changes its behavior, then something must have changed in order to make that actor prefer the newly selected alternative to the previously optimal action, and the only logical alternatives are changes in its preferences, constraints or beliefs. (McGinnis, 1994: 71)

Decision-makers will alter policy behavior, but not given a change in their preferences.

Changes result from an altered decision-making environment. Consequently, I focus on three environmental motivations for a change in policy. Changes in constraints regarding resource availability and in the beliefs about actor preferences and threat will be the central motivations in the change of security related policy. These motivations are emphasized:

(1) A change in the security of the state. As external threat increases, a change in the foreign policy behavior of a state becomes more probable. This motivation for policy change is a reflection of the N issue area. Security policy is focused on providing stability for the population of the state and insuring security. This is a dominant preference for all participants when threat is high. Threat will have a clear impact on policy preferences by restricting the complete set of social outcomes. High levels of threat may influence

individuals causing them to focus on similar policy choices. Consequently political competition for resources may appear to lessen and unanimity of preferences rise.

Wolfers' analogy of the house on fire is representative of this environment. In this analogy, Wolfers proposes a house on fire with a number of individuals inside. A realistic expectation is for the individuals to run for the exits in order to save their lives. As threat increases, most political actors prefer to increase security in order to reduce threat.

Rationally, most actors need the state to obtain their own preferences--the construction of the state provides individuals with an environment where they can seek to satisfy their preferences. Without the state, they have nothing. Under conditions of threat, political actors are likely to agree on increasing the allocation or diversion of resources to insure national stability. This may not be each individuals' most preferred outcome, yet given the median voter theorem, it is a consistent expectation.

(2) A preference of an important constituent. Given a leader's desire to maintain position, the interests of political actors can influence a change in policy. This motivation is a reflection of the I preference grouping.

(3) A transition in resource cost of a policy option. A policy becomes cheaper in terms of the resources it requires. This can be a function of a technological change--the cheapness of a policy is a reflection of low costs or reduced opposition. Morrow (1993) places a restriction on this type of motivation--if a policy is cheap, it is likely that

leadership would have already implemented it. Logically any subsequent change in policy is likely to reflect an increased cost in either resources, opposition or both. The conditions surrounding this type of relationship have not been widely examined (For further development see Morgan and Palmer, 1996, 1997; Levy, 1984; Anderton, 1989)

Given these motivations for policy change and the issue area prioritization, I can now offer a development of resource allocation theory in the security context. The picture developed above stresses two central factors, the dynamic nature of both international and domestic politics, and the importance of resources in policy formation. A third dimension, the latent capability of the state, also influences policy development. The size and demographic factors associated with nations determine the availability of resources. Larger states should have more available resources than their smaller counterparts. Consequently, major powers will have greater freedom in the development of policy.

From a decision-making perspective, the conditions facing a leader will have a large influence on their policy choices. Consequently, external and internal political conditions will influence a leader's preference hierarchy. I here conclude that leaders will never place the interest of individual or group above their own interest. Leaders, being leaders, have agenda setting power and the powers to develop coalitions within the political system. Consequently, they should be able to formulate a winning coalition which will be fairly close to their preference point. Furthermore, by focusing on the exclusive preferences of a group, the leader may become expendable or replaced by the group This is not to

suggest that leaders are never voted out, overthrown or implement unfavorable policy options, but does focus on the inherent powers associated with leadership. This assumption is a mechanism reflecting the rational motivations for maintaining position.

The resource framework is predicated on the interaction between three dimensions: (1) the relationship between the state and external actors reflected by threat (t); (2) the domestic political structure and competition for resources in that structure (c); and (3) the size and capability of the state (ps). Within these dimensions, decision-makers formulate policy to maximize their goals across the three issue areas: (1) national security (n); (2) the maintenance of political position (p); and (3) domestic political requirements (d). Given the finite level of available resources (represented by the upper bound of 1), the level of allocation for each issue area is defined by the environmental conditions arising in the three dimensions. A leader i's utility function (U_i) across the issue areas is thus reflected by the her/his allocation of resources towards each issue at a specific instance in time:

$$\begin{aligned}
 U_i &= f(c, t, ps) \\
 S &= \{n, p, d\} \\
 n &\in \{0, 1\} \\
 p &\in \{0, 1\} \\
 d &\in \{0, 1\} \\
 n + p + d &= 1
 \end{aligned}$$

This function is represented by a three dimensional space found in Figure 3.1.

The X dimension of this environment reflects a continuum of international threat moving

from low threat to high threat. The Y dimension of the environment reflects a continuum of political competition for resources again moving from low to high competition.

Political competition here is a product of the imposed institutional framework of the governmental system. This structure varies across political systems and can vary within political system. The Z dimension reflects the capability of the state. As state capability is not easily altered, I will not devote a great deal of attention to it until later chapters.

This is not to minimize the influence of state capability, but to suggest that it is less dynamic than the other two dimensions.

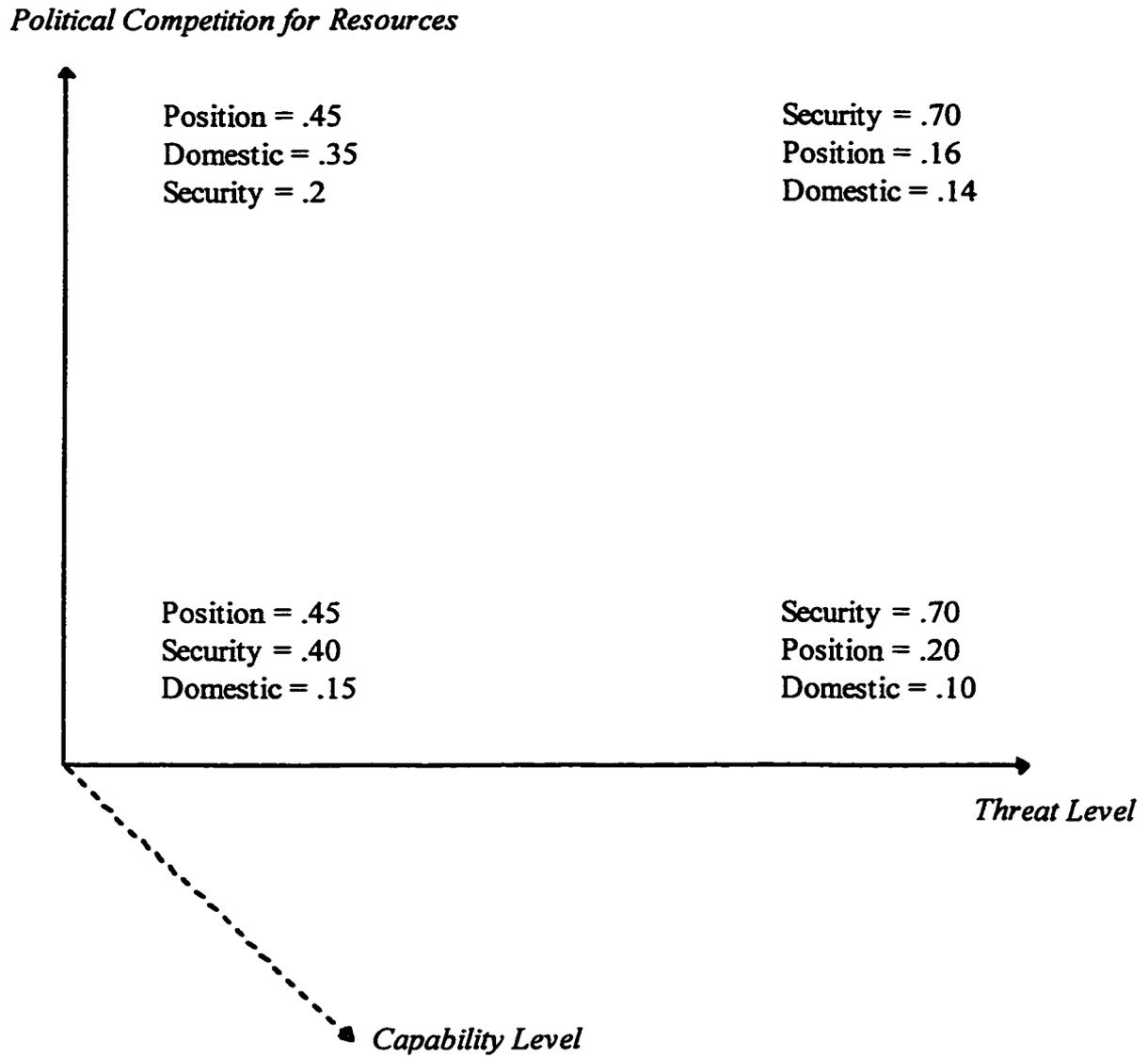
The prioritization of resource allocation for the issue areas will change given the state of both competition and threat. A quick development of the effects of institutions will illustrate how governmental systems impact both resource flows and political competition for these resources. Institutional frameworks systematically influence the distribution of political power within governments and designate their central participants. In this sense, important participants will be those who will seek to gain access or control over resources. Those who are excluded from the system will have no voice or access to resources. As was described in the literature review, Bueno de Mesquita and Siverson (1997a, 1997b) examine the effects of institutional characteristics that shape the goals leaders pursue in conflicts. Here, the size of those who choose the government and the winning coalition of supporters reflect the central participants who compete for resources in the system. Democracies hold much larger selectorates and winning coalitions. Consequently there is a much larger number of individuals competing

for resources. The institutional structure is much more complex. Centralized political systems have fewer participants and therefore fewer individuals competing for resources. The governmental systems in these cases are more streamlined.

Figure 3.1 illustrates the theoretical framework. In figure 3.1, four different resource allocations are depicted. Those to the right of the figure represent environments with higher levels of threat than those to the left. Threat increases from 0 at the origin and moves outward. Environments with higher levels of competition for resources are found towards the top of the illustration as institutionalized competition moves from 0 at the origin outward. Consequently, the configuration represents four cases: higher levels of competition and threat, lower levels of competition and threat, higher threat and lower competition, and higher competition and lower threat. Resource allotments for each of the issue areas are displayed as well. These are hypothetical values developed to illustrate the framework.

The two cases on the right in Figure 3.1 depict environments in which international threat is high. In both cases, leaders will prioritize resources for national security. Furthermore, leaders will apply resources for position and then domestic considerations. High threat will dominate the competition for resources. As posed above, under conditions of high threat most, if not all, individuals will focus on similar policy outcomes -- a further reflection of the house of fire analogy. Unanimity of preferences appears to rise. Consequently, the institutional structure of the governmental system does not appear to have a great deal of impact on resource allocation. Leaders will

Figure 3.1.
 Prioritizing the Issue Areas in a Dynamic Decision-Making Environment



have greater autonomy to apply resources towards security ends. The differences between these cases are reflected in the levels of resources allocated for leadership position and domestic initiatives. For cases with higher competition, decision-makers will allocate more resources for domestic circumstances than their less competitive counterparts. Leaders in these situations will remain cognizant of domestic circumstances as these factors readily influence their political survival. Leaders facing lower competition have greater latitude in their resource allocation decisions.

The case closest to the origin represents conditions with low threat and low competition. Here the institutional structure of the state reflects centralized political power and lower levels of competition. Leaders will not be concerned with a breadth of political actors, but a few specific individuals or groups. In this respect, as Bueno de Mesquita and Siverson (1997a, 1997b) conclude, the distribution of benefits or goods will be more easily conducted. Fewer participants will reflect smaller winning coalitions and selectorates. Leaders will not be as pressured to address high levels of competition. Consequently, they will focus on position, national security and then domestic political considerations. As individual interests will be much clearer, leaders should be able to rationally calculate the resources needed to satisfy important constituents to receive support. With these calculations in mind, they will focus on security and then regulatory policies to satisfy these actors.

The final case to the upper left of the figure reflects conditions of low external threat and high political competition. Decision-makers must try and identify an

acceptable level of security under conditions when political actors are focused on the domestic political arena. The central dilemma is providing security while providing other goods in an environment where threat is low and other wants are high. Given the finite pool of resources, the resource trade off dynamic will be highest here. Consequently, unlike the other cases, leaders will be forced to increase their bargaining, log rolling and pork barrel efforts. A general consequence of such an environment will be the higher level of vigilance of political participants towards policy decisions. Leaders will face higher levels of political pressure and opposition. The institutional framework of the governmental system will be influential in terms of the aggregation of preferences, political participation, and the extraction of resources. In this context, institutional checks and balances and opposition will have their greatest effects. Given the lower levels of threat and higher levels of political pressure, leaders will focus on political position and maintaining political support to keep position. The preferences of important actors and domestic issues will therefore move before security in the prioritization of resources.

This theoretical framework develops a general approach towards resource allocation given the dynamic effects of threat and competition. A number of general hypotheses can be distilled from this approach. Focusing on the impact of threat, I posit that competition for resources will accommodate individual perceptions of security. Institutions should have little impact during high periods of threat. This is a straight forward intuition commonly seen in history. For example, the United States during W.W.II focused resources on the war effort and generally limited political competition.

Popular opinion supported these measures. In periods of low threat, competition should increase. Individuals will focus on the domestic environment and consequently pursue their preferences.

H3.1a: As threat increases, competition for resources decreases.

H3.1b: As threat decreases, the competition for resources increases.

The level of competition in the political system will be predicated on the institutional framework of the governmental system. The breadth of participation will increase the number of the actors vying for resources. As participation increases or is institutionalized at a high level, more stringent checks and balances on leadership behavior will develop. Individuals will be more aware of resource extraction and policy development. Leaders will thus face greater decision-making hurdles. Furthermore, leaders will face more difficult tradeoffs as a result of increasing numbers of preferences. Coalitions will be more difficult to form. Leaders will be forced to address domestic concerns in order to maintain position. Consequently, when threat is low, leaders in competitive environments will emphasize the domestic over security interests. In systems with limited participation, leaders will have an easier time addressing the relevant interests and distributing resources. Consequently, the maintenance of position should not be as difficult. Here, leaders will be more attuned to focusing on security issues than on domestic issues. Three general hypotheses are developed from this logic.

H3.2: Competition for resources is a function of institutional design.

H3.3a: Leaders in highly competitive political systems will be forced to focus on interests stemming from the domestic sphere.

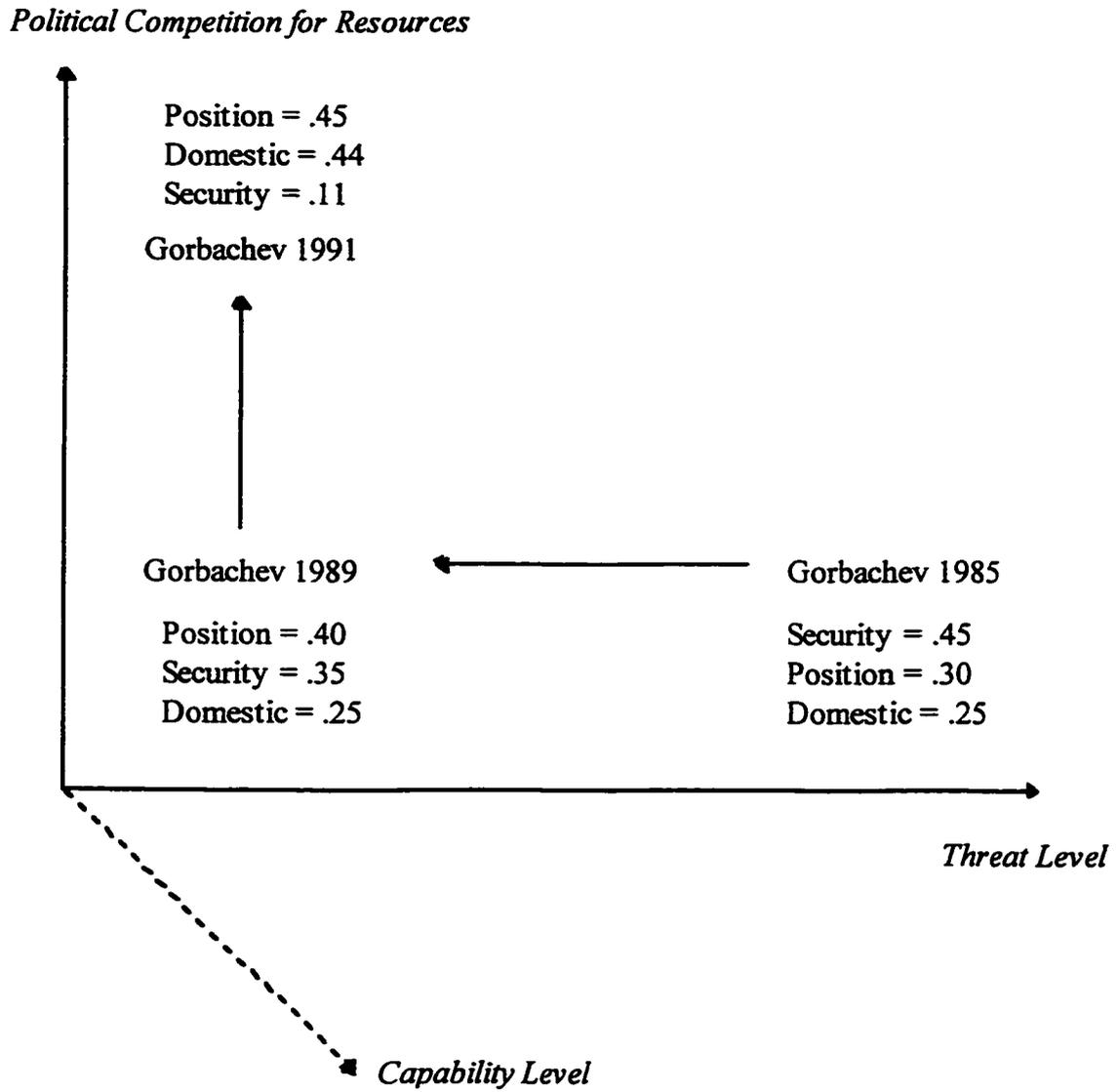
H3.3b: Leaders in less competitive political systems will focus on security interests.

The theory developed above is predicated on the flow of resources from the society to the government and leaders. A state's ability to extract resources must inherently affect not only its policy choices but the scope of policies that can be applied. Consequently, identifying how regime type affects the extraction of resources is an important first step in identifying resource flows. A leader's ability to both acquire and distribute resources will be a product of the institutional structure of the political system. A leader's choice of policy will be a function of the interaction between the international and domestic environments.

Re-examination of the Soviet Case

This chapter describes a resource allocation theory of security policy. A re-examination of the Soviet case presented at the beginning of the chapter provides an illustration of this theory. Recall that upon assuming office in March 1985, Mikhail Gorbachev was faced with a very tense international system. He did head a very centralized political system with clearly defined actors. Political competition was limited to coalition building within the Politburo. The individual interests of the important actors

Figure 3.2.
A Reflection of Gorbachev's Issue Area Prioritizations



were closely tied to the foreign policy/security establishment. Given these conditions, one can place Gorbachev at position one of the preference environment.

Gorbachev's foreign policy program changed the threat environment being faced by the Soviet Union. He developed a period of détente with the United States, pulled out of Afghanistan, and relaxed the Soviet hold on Eastern Europe. Each of these actions allowed a greater flow of resources towards the domestic environment. One can assume that a decreased threat level permitted the distribution of resources away from the military-industrial complex and towards internal political interests.

Domestic political competition remained largely centralized. Gorbachev did create opposition in Politburo. He was, however, able to maintain a coalition, via personal appointments and policy rewards. I conclude that in mid to late 1989, Gorbachev's preferences reflected those found in an environment with reduced international threat and low levels of institutionalized political competition. He was concerned about solidifying position and continued security issues. The movement from point 1 to point 2 reflects the change in the international environment and its effects on Gorbachev's preferences. His foreign policy success permitted a turn towards the domestic environment.

In the following two years, radical domestic reforms produced broader levels of political competition. Gorbachev initiated a series of institutional changes which revolutionized Soviet politics. The development of a democratic legislature selected via elections emasculated the Soviet party system. Furthermore, the movement towards an open market economic system unleashed new political movements. Gorbachev opened

the door to broad political competition. However, he did so before establishing a firm base of support in these new movements. His reform efforts alienated traditional political actors while at the same time he failed to meet the rising expectations of liberal reformers who pushed for greater political latitude. In efforts to regain political stability, he vacillated between conservative and liberal positions. Inevitably, this lack of direction resulted in the Coup attempt of August 1991. A third movement in the political environment takes Gorbachev from point 2 to point 3. Threat remains unaltered, but the breadth of political competition has increased.

The Soviet case illustrates the general framework of the theory in Figure 3.2. The interaction between competition and threat defines the particular areas where resources will be applied. By further defining the competitive nature of the domestic environment, specific expectations about leaders' preference orderings can be identified. The theory provides a general framework from which to address more specific security policies. Thus far, security has been defined very broadly. In the next chapters, I will turn to individual policy choices, military expenditure and military alliances. As each of these policy choices use varying levels of resources and provide varying levels of security, the theory will address each uniquely. Chapter 4 examines the development of military expenditure across different political environments. In particular, the effects of threat, political competition and bureaucratic momentum are addressed. Chapter 5 investigates how political competition and institutional constraint affect the formation of military alliances as well as the honoring of alliances in different environments. Chapter 6

addresses security policy choice from a substitution perspective. Here each policy choice is a part of a menu of potential choices. Again, resource cost and political competition will help to produce expectations about specific policy selections. The development of these security policy behaviors is predicated on resource choices and the ability of decision-makers to prioritize policy across a variety of issues. The individual examination of each security policy will serve as a check on the validity of this framework.

Chapter 4: Arms Development

The two preceding chapters lay the foundation for a theoretical framework integrating both the external (threat) and domestic decision-making environments and their influences on security policy choices. This chapter builds upon both of these efforts by applying this framework to internal arms development. Policy-makers have long emphasized the reliability of military expenditure as a security building mechanism. However, this policy also receives greater scrutiny from political participants given its resource allocation or trade-off costs. Resources used for arms development can obviously not be applied to other policy areas. In this sense, the competition for these resources, reflected in institutional frameworks and governmental systems, is expected to have a high degree of influence on spending levels in the domestic policy-making arena. Budgetary processes and the formulation of allocation decisions often reflect the interests of important political actors as funneled through institutional networks. A variety of influences are thus exerted on resource distribution. Given the domestic arena, the external environment or the interaction between the state and other states will also have a impact on the application of resources for military expenditure. Chapters 2 and 3 propose that threat is a central motivation for security policy action. Consequently, as hostility is directed at the state, internal arms development efforts are expected to rise. Conversely, as threat subsides, competition for resources increases and distribution becomes more aggressive. This chapter explores the theoretical relationships between

the threat, political competition, and capability dimensions and internal arms development.

Introduction: Arms Development, Threat and Domestic Context

Traditionally, arms development has been the most reliable and universally adopted method of building state security. However, the decision-maker confronting this policy choice is faced with a serious tradeoff, increased security at the cost of other policy goals or issue areas. Furthermore, some working in the “guns verses butter” literature¹ have posited that the increased application of resources for security has long range negative economic effects. For the individual decision-maker or leader, her or his trade-off may have a serious impact on their ability to maintain political power, while satisfying important constituents or “stakeholders” within their government, and implement other security building measures. Consequently, foreign policy decisions can have a direct influence on both domestic and external political environments. Certain policy selections of leaders, such as those associated with conflict involvement and war, hold a direct impact on their ability to survive in office (Bueno de Mesquita and Siverson, 1995). Given the close relationship between arms development and conflict, a similar argument can be developed for defense expenditures. Internal development does indeed provide for increased and reliable security, but under conditions of finite resource availability and budgetary priorities,

¹ The findings of the “guns verses butter” and “peace dividend” literatures are often contradictory. Some have concluded that defense expenditure helps economic performance while others have

the decision-maker's ability to implement such policies becomes increasing constrained by political competition and institutional frameworks. Decision-makers are bound by their need to provide a public good, state security, while at the same time satisfying the "important" actors in the political system to maintain position as well as a variety of domestically oriented public goods.

Given the decision-maker's ability to balance the allocation of these goods, existing political institutions directly affect the foreign policy behavior of leaders (Miller, 1995). Political competition, decision-making power and institutional constraints are most easily identified in conjunction with highly visible policies such as those associated with foreign policy and security building measures (Morgan and Campbell, 1991). Extending this logic suggests the influence of institutional structure on defense spending should differ across regime type given the opportunity cost and availability of resources (Dabelko and McCormick, 1977). This point is exemplified in the way military and civilian regimes differ in their allocation of defense resources (Looney, 1989, 1990; Sloan and Tedin, 1987). This study proposes that these domestic influences are likely to have the greatest effect when internal political conditions are most competitive and resources are most limited. However, under conditions of increasing external threat and diminished security, most -- if not all -- political participants will prefer to allocate resources for security ends. The competitiveness of the political system should have little effect under such

concluded the opposite. Chan (1992) provides an in-depth discussion of this literature.

conditions. In these environments, defense allocation will be a function of the level of threat facing the state and the levels of domestic competition for resources. This chapter extends the theoretic framework developed in chapter 3 and applies it to military expenditures relative to both the internal and external environmental factors associated with foreign policy behavior.

The study seeks to fill two theoretical gaps found in the arms acquisition literatures. First, the theoretical framework integrates political competition, bureaucratic processes and threat in a comprehensive fashion. Past studies of arms races and resource trade-offs have exclusively focused on the external environment or the domestic environment rarely integrating both into an overarching framework (exceptions include Ostrom, 1977,1978; Cusack and Ward, 1981; Ward, 1984). Second, the underlying theoretical basis, a reflection of resource allocation and distribution across issue areas, offers explicit expectations about state behavior. Again, one of the central criticisms of the arms acquisition literatures has been the failure to provide well founded theory. By integrating the external and the internal decision-making environments along a resource allocation dimension, I formulate consistent expectations about expenditure behavior.

Literature Review

Military expenditure is the most widely examined of the security policy behaviors. A large portion of this scholarly attention has been devoted to the

examination of arms acquisition processes associated with the Richardsonian arms race model. Work in this area has been motivated by the compelling descriptive nature of the equations, easily accessible indicators, and a form of equations which lends itself to parameter estimation by a variety of econometric techniques (Stoll, 1982:78).

However, the empirical results associated with Richardson's equations have repeatedly failed to find causal mechanisms in arms races (Stoll, 1982). Furthermore, this literature has been fueled by a debate between alternative arms race models focusing the external, internal, and less frequently external-internal motivations for arms development. Conflicting results and conceptual problems have clouded our understanding of arming processes. A second literature, the resource trade-off or "guns verses butter" approach, is a direct product of Richardsonian study. The resource trade-off literature exclusively examines the short and long term consequences of military expenditure on both economic and political development. These literatures develop important insight into the arms process, but both also open the door to criticism associated with loose and ad hoc theoretical development. Given the breadth of methodological and substantive application, the studies of central concern here are those which highlight two factors associated with the arms building efforts: (1) those emphasizing the impact of external threat on arms development; (2) those focusing on the role of domestic political institutions and environments in arms building policies. In this context, I highlight both the external and internal models.

The general Richardsonian arms race model constructs an interactive relationship between a pair of states. In its development, the actions of one state inherently influence the security policies of the other. The opponent's actions, or specifically the rival's policy choice to arm, form the basis for hostility. This type of model thus relies on notion that competitive or hostile environments exist between states, exemplifying Singer's notion of hostile intent (1958). Threat is therefore operationalized as the competitor's expenditure level or application of resources towards the development of military goods. Literature reviews by Rattinger (1976), Moll and Luebbert (1980), and Russett (1983) each outline numerous studies employing this type of theoretical and operational approach. Although providing impetus for arms development, this approach is somewhat limited in its ability to explicitly define the external environment facing a state's decision-makers.

However, a number of studies go beyond the simple dyadic approach and formulate more explicit measures of threat. Russett (1983) notes: "States react not merely to the weapons that other states possess or acquire, but to the level of hostility being generated by others states which includes estimates of what they will do with their weapons," (546). In particular, Rattinger (1975), Cusack and Ward (1981), Cusack (1985), Ward (1984), Ward and Mahajan (1984), and Oren (1995) all specify fuller pictures of the hostile interactions between the states. Ward and Mahajan suggest that the reaction to the opponent's expenditure level continues to be important, but that reaction to grievances between states is also an important arms

development motivation. Here the authors identify hostility as a product of the aggregated cooperative and conflictual events occurring between states. Ward (1984) and Cusack (1985) proposes a similar development of threat as a function of both cooperative and conflictual behavior between states. Both studies hypothesize that as conflict between the states increases, military expenditure is also expected to increase.

Cusack and Ward, and Oren incorporate explicit measures of conflict participation in their examinations of expenditure. Each of these studies posits that increasing levels of dispute involvement over time will lead to higher allocation of resources for military expenditure. Oren takes this logic a step further by emphasizing the interaction between hostile intent and capability. He posits: “the same amount of belligerent action requires more exertion from a weak state than from a stronger one,” (1995:312). Rattinger incorporates the concept of threat as a function of elite perceptions of hostility coming from survey information. All these studies share the common approach that the external actions of opponents provide motivation for arms development, more so than just the opponent’s armament levels. Each also makes a contribution to the study of arms development processes by providing a better specified picture of the decision-making environment. A central weakness of the externally based arms race model is the lack of a well specified decision-making context, these works attempt to alleviate this problem.

A number of the literature reviews of the arms race studies, specifically Moll and Luebbert (1980), Russett (1983), and McGinnis (1991), are critical of studies which focus exclusively on the external-external relationships in arms development processes. Moll and Luebbert suggest:

The efforts of Ostrom, Lucier, and Dennis all raise questions of the kind of environmental changes (domestic and international) and leadership changes that are both necessary and sufficient to model parameters of state behavior. (1980:164)

Russett further reinforces this position:

We need, therefore, more careful speculation of what is meant by domestic or internal influence. . . The most sophisticated negotiations to bring international action-reaction processes under control are doomed if they do not take into consideration the realities of bureaucratic inertia and wider domestic processes. (1983:552-53)

A number of studies seek to meet the central weakness of the Richardsonian model, the lack of attention to domestic circumstances, by integrating indigenous actors, economic interests, electoral competition, and institutional frameworks into the arms development processes. In a series of articles, Ostrom (1977, 1978), Ostrom and Marra (1986) and Marra (1985) develop a reactive linkage model incorporating an organizational processes approach to military expenditure. In this context, expenditure is developed as a function of synthesized bureaucratic politics, organizational processes, and arms race dynamics in the United States. Ostrom concludes that the institutional networks and timing involved in budgetary allocation

are central influences on military expenditure patterns. Consequently, institutions, such as Congress and bureaucratic organs, do affect the distribution of resources in the arms processes. Two articles mentioned above, Cusack and Ward (1981) and Rattinger (1985) also focus on this approach in cross national perspective. I will here expand on their findings.

Cusack and Ward (1981) broaden the traditional action-reaction arms race approach by integrating a domestic political economic approach towards military expenditure. In their examination of expenditure patterns for the United States, the Soviet Union, and China, the authors examine a traditional model reflecting changes in military expenditure as a function of (1) change in the spending of rivals, (2) the defense burden (the previous year's defense allocation, (3) tension with rivals and (4) war mobilization. However, Cusack and Ward also develop a political and economic model from the domestic environment affecting military expenditure incorporating: (1) the characteristics of leadership processes of recruitment and tenure maintenance of the decision-making elite; (2) the general performance of the economy; (3) regularities in the way resources are allocated during the planning period; (4) organizational momentum; and (5) domestic political strife. Given the empirical results, Cusack and Ward conclude that the domestic political economic model does a much better job than does the traditional arms race model in explaining military expenditures for the United States and the Soviet Union. Their results for China are highly dependent on the data used in the models, thus they are reluctant to offer generalizations about China's

expenditure behavior. This work makes a great contribution to the study of expenditure by offering a comparative approach given varying domestic institutional structures.

Bureaucratic budgeting processes across governmental systems are often overlooked for military expenditure. Rattinger (1975) provides an in-depth development of this factor. Building from Allison (1974), he suggests that the behavior of defense bureaucracies in competition for funds corresponds to the organizational routine behavior of other governmental agencies. Given the finite level of resources available to decision-makers, Rattinger states that "the basic problem for any governmental agency is to arrive at a request for funds that is likely to survive the interaction of competing claims with appropriation procedures without major modifications," (1975:575). Bureaucratic momentum is also expected to be higher in the military expenditure case than in other issue areas given the long range programming of weapons and national security. Given this linear trend upward, jumps or deviations in expenditure are only expected under conditions when external stimuli render redistribution feasible, environments associated with threat. Under these conditions, military expenditure is pushed upward. Rattinger integrates this bureaucratic argument with a traditional action-reaction model of arms development. He finds that bureaucratic momentum is the single most important determinant of defense spending, but also finds that reaction processes to threat are also identifiable. In his sample, NATO nations are more likely to react than are Warsaw Pact states.

Arms development decisions are highly influenced by the contextual factors associated with political system structure, demographics and levels of development. The defense exertion and trade-off literatures do provide a more thorough examination of the internal arms development process than do traditional Richardsonian studies. Instead of focusing on the environments which lead to arms races, these literatures examine the internal processes associated with increasing military expenditure and its long term affects on the domestic political and economic environment. Chan (1991) provides an excellent review of this literature. A number of studies attempt to isolate the influence of domestic regime type on military expenditure levels. Defense spending does appear to fluctuate given the attendant conditions associated with regime type and level of development. Benoit (1972, 1973, 1978), Looney (1989, 1990), Frederiksen and Looney (1983), Looney and Frederiksen (1987), Sloan and Tedin (1987), Zuk and Thompson (1982), Dalbelko and McCormick (1977), and Chan (1985), each examine spending patterns relative to regime type. General guidelines differentiating state types, often dichotomous variables reflecting military or civilian regime or Robert Dahl's (1971) typology of state types using personalist, centrist and polyarchic designations to differentiate regimes, are employed.

Much like the empirical results associated with the Richardsonian studies, the trade-off literature has come to few definite conclusions concerning the influence of regime type on spending. Benoit (1972, 1973, 1978) and Zuk and Thompson (1982) obtain mixed empirical results. Both conclude that the difference between military

and civilian regimes has little impact on public policy. However, Looney (1989,1990), Frederickson and Looney (1983), Sloan and Tedin (1987) and Dalbelko and McCormick (1977) identify differences. Sloan and Tedin (1987) examine a number of public policy outputs. By incorporating the type of regime and the influence of institutionalization, a reflection of political continuity over time, the authors do find significant differences in policy expenditures across 20 Latin American states. In this study, regime type reflects a general typology examining bureaucratic authoritarian, personalist authoritarian, democracies and communist systems. Examining a number of policy outputs, education, welfare, military expenditure and their related demographic factors, the authors find distinct behavioral differences across state performance. Consequently, they conclude that both regime type and institutionalization or stability affect outcomes. Dalbelko and McCormick (1977) focus on the opportunity costs of policy distribution assuming resource scarcity. The authors differentiate regimes into three types, personalist, centrist, and polyarchic and find that personalist regimes have the highest opportunity costs. In this context, regime type appears to matter.

Domke, Eichenberg, and Kelleher (1983) examine defense and welfare tradeoffs in advanced industrial democracies. Here budgeting is proposed to be less a systematic comparison of alternatives than a disjointed aggregation of spending decisions reached in isolation. Government cycles are often disjointed. Their findings suggest: (1) defense spending is largely determined by budget conditions and foreign

policy; (2) welfare spending is influenced by budget constraints and political pressure; (3) total spending levels are affected by revenue performance. Tradeoffs do not seemingly occur under normal conditions, but do arise surrounding conditions of war. Johnson and Wells (1986) offer a parallel examination of how institutional arrangements in the Soviet Union provide for clearer allocation and resource trade-off trends towards military expenditure than do the institutional frameworks found in Western industrial democracies. Trade-offs are much more identifiable and prevalent in centralized political systems like the Soviet Union than democratic political systems. A number of individual state studies do point to the effects of institutional structures on military decisions -- examples include Rasler and Thompson (1992), Bobrow (1992), Bobrow and Hill (1991), Mintz and Russett (1992). These studies emphasize the domestic context associated with decisions and how varying governmental frameworks affect military expenditure.

These literatures present the researcher with a paradox. There is a cumulative pool of knowledge emerging from both the arms race and resource trade-off work. We have a much more defined picture of arms acquisition processes than we did thirty years ago. However, given conflicting empirical findings, there is still no broadly accepted starting point from which to begin investigation. A number of problems continue to plague these areas of study. Eichenberg (1992) emphasizes the lack of defined theory in resource trade off studies resulting in "post hoc speculation that has characterized the literature in the past". Second, there is little consensus on how to

study these relationships empirically. Some have argued for individual country longitudinal study, others for cross sectional analysis, and still others for cross sectional and time series analysis. Rasler and Thompson (1992) conclude that how we approach expenditure questions relative to our selection of cases and time periods will have significant effects on our conclusions.

Finally, with reference to the examination of regime type, the definitional framework used to identify regime is extremely broad and not particularly precise. Regime has generally been defined by the type of leadership body, not by the institutional configuration. Dahl's typology differentiates political systems according to the particular decision-making body and not the institutional framework supporting it. I would suggest that such a differentiation is superficial. Unlike regimes in this typology may in fact share similar institutional frameworks. The true regulator of military expenditure may not lie in the regime itself, but in the institutional framework lying at the heart of the governmental system. Consequently, similar policy choices may be undertaken by apparently unlike regimes due to institutional structures and/or restrictions.

The next section of this chapter builds from some of the consistencies found in these works. The theoretical framework developed in Chapter 3 is applied to military expenditure emphasizing varying environmental conditions found in the international and domestic arenas. A number of propositions are outlined. The following sections

describe the research design, empirical analysis, and offer conclusions about the this examination.

Theoretical Development

Leaders undertake guardianship policies in order to insure the long term stability of their respective states as well as governments. Security building policies, such as arms development, reflect the interaction between two political environments, the domestic and international political arenas. Traditional international relations theories, realism and neorealism, have long held these environments independent with respect to policy formation. Here the domestic structure is not considered relevant to international relations. Rosenau (1967) and a great deal of recent study has concluded that the intersection of these arenas plays a crucial role for development and implementation of policy, particularly those associated with the development of security. In this regard, leaders must recognize the events occurring in both arenas and identify the impact of these events in their policy decisions. Consequently, foreign policy bridges the gap between internal and external political environments. Any theory attempting to explain foreign policy behavior must therefore take both environments into account. The theory developed in this study will focus on how these dimensions interact. The impact of external stimuli, here threat, will initially be examined. The role of threat will have a clear impact on decisions to increase or decrease expenditure. Secondly, the domestic political environment will be examined.

The internal decision-making mechanisms, particularly the institutional frameworks, will affect the distribution of resources across issue areas. Finally, both environments will be joined in a general model. A number of hypotheses will be developed through the examination process.

Recall that the theoretical framework developed in Chapter 3 is predicated on the interactions between three dimensions: threat (t), domestic political structure (c) and state capability (ps). Within these dimensions, decision-makers formulate policy in order to increase/maintain national security (n), achieve domestic political goals (d), and maintain political position (p). Given the finite levels of available resources (represented with the upper bound 1), the allocation of resources for each of these issue areas is defined by the environmental conditions rising in the three dimensions. Each issue area will receive resources at all times, but the level of resources or the resource trade-offs between issues will be defined in relation to the domestic and international arenas. The policy portfolio (s), or the goods and services provided by a state, will be restricted by budgetary priorities or more specifically a budget frontier (this type of model is thoroughly developed in Altfield, 1984; McGinnis, 1990; Morgan and Palmer 1996, 1997, forthcoming). Leaders will allocate all available resources across these three issue areas in the form of policy choices. As suggested in Chapter 3, I assume that all policy preferences lie in at least one of these issues. Leaders may prefer to allocate more resources towards one issue area, but the environments facing them force decision-makers to allocate or distribute more

resources to one area and less to another. In this sense, resource trade-offs and the motivation for policy change stress the dynamic nature of both international and domestic politics and the importance of resources in policy formation.

Given the development of the resource function, I make a number of central assumptions about leadership preferences in the context of varying environmental conditions. In chapter 3, I outlined the underlying motivations behind each of the issue areas, national security, the maintenance of political position, and domestic goals relative to leadership preferences. As domestic and external conditions change, the resource emphasis moves between the issue areas. I assume that leaders are predisposed to security issues, but they are also rational actors about personal position. When threat is low, leaders will be more willing to make trade-offs, security for other goods, because political participants will become increasingly focused on the domestic arena. Political competition for resources will be greatest when attention is directed towards the internal political agenda.

External Conditions and Defense Allocations

Foreign policy behavior is oriented towards increasing the security of the state and limiting the potential threats which affect this security. As has been suggested by the neorealist literature, state security serves as the predominate motivating factor in the development of external policy: "Basic to the anarchical system, a virtue of its structure, is the need for member units to rely on whatever means or arrangements

they can generate in order to ensure survival and enhance security,” (Dougherty and Pfaltzgraff, 1990: 120). External threat has long been associated with internal arms development, particularly in relation to the development of arms races. Threat plays a crucial role in the formulation of foreign policy choices, particularly those associated with security building measures.

The most stable method of increasing security and addressing threat, yet one of the more costly, is through self help or internal arms development. All states do use internal resources for military expenditure and the development of arms in the face of threat. Security thus becomes a public good shared by all members of the society. As threats develop externally, or the perceived level of threat rises, leaders will take efforts to alleviate threat by increasing security. Wolfers’ discussion (1962) of national survival illustrates this point. Furthermore, the central motivation for the Richardsonian arm race approach is predicated on the influence of external hostility on internal armament. This threat-arming relationship is a clear dynamic:

H4.1: As external threat increases, leaders will increase military expenditure to develop internal security.

This proposition is universally applied to all states, regardless of political regime type and inherent capability level.

Domestic Conditions and Defense Allocation

Internal arms development is clearly influenced by institutional frameworks, political-economic processes, and indigenous actors. In particular, I propose that domestic political influences on military expenditure are expressed in two distinct ways: (1) in the level of institutionalized competition for resources found in the political system; and (2) as a function of bureaucratic politics. These factors are interrelated, both reflect elements of the governmental structure, but both also maintain independent effects on the arms acquisition process. Furthermore, these forces can work against each other in the development of resource distribution policies. Bureaucratic momentum can attempt to push expenditure levels upward, while other political actors can attempt to reallocate resources away from military expenditure and towards other political goods or across issue areas. Consequently, I will examine each force independently and then in an interactive relationship.

Sprout and Sprout (1968) make an important observation about how resources are allocated in the pursuit of foreign policy in all political systems:

Available goods and services in any political community are allocated in accord with more or less discernible patterns and priorities. Allocations are determined in various ways, depending in part on the ideological format, in part on traditional mores of the society. But decisions of public authorities, the legitimate rulers, affect in some degree, usually a large degree, of who gets what share of what's available. (1968:683)

The Sprouts posit that the form of government found in the state directly affects the resource dilemma facing leaders. Leaders do have the ability to revise the order of

priorities and balance domestic pressures given the institutional structure of their governments. However, leadership selection processes, institutional checks and balances, and political competition will impinge on decision-makers' desires to freely allocate resources.

The important theoretical element of the Sprouts' commentary is the articulation of the conditions of how and when leaders use their authority to distribute resources. The preceding section of the study outlines the importance of external threat as a reallocation motivation. Intuition and policy both reflect the importance of national security in allocation decisions. The key, however, is identifying the decision-making power the authority has in making and implementing policy. Chapter 3 outlines the importance of political competition for resources. This line of logic becomes particularly relevant concerning military expenditure. The domestic environment, specifically institutions, provide identifiable channels for leadership actions. The competition for resources and individual leadership motivations frame how distribution decisions are made. McGinnis (1991) succinctly states the relevance of these factors:

Reaction of one state to the policies of another must be mediated through two interrelated steps : (1) the decision-making processes of all relevant individuals and (2) some means of aggregating individual actions to arrive at a collective outcome . . . In short, military expenditure levels merge out of some complex and changeable processes of political competition. (448)

The level of institutionalized political competition within a state is an important factor in determining military expenditure.

It is necessary to define institutionalized political competition. I assume that all political systems have an inherent level of competition for resources and power. However, some systems, such as democracies, have collectivized mechanisms for determining outcomes through rules, patterns and practices of authority. In this sense, “the political rules of the resources game” are predetermined norms of behavior played out through various institutional frameworks. Other types of political systems retain the competitive aspect, but do not have consistent authority patterns or rules. These latter systems have institutional frameworks which are not developed or are ignored. In this context, leaders functioning in competitive political systems are likely to have less autonomous power and are likely to be checked by other political actors in an organized manner. Leaders will be forced to bargain and log rolling with other political participants to implement policy. The greater participant involvement, the greater difficulty leaders will have to form coalitions and achieve policy outcomes (Bueno de Mesquita and Siverson, 1997a, 1997b). Leaders in less competitive systems will also face political checks, but these will be less formal or uninstitutionalized. The political ramifications from not following unregulated political checks are rarely clear. Consequently, leaders in these systems have greater opportunity to centralize political power, form smaller, more homogeneous political coalitions and formulate policy more autonomously.

The theoretical framework emphasizes the finite nature of the social pool of resources. In this resource based approach, policy choices -- reflected in distributive, regulatory, or redistributive types -- diminish the available cache of resources. The competition for resources and the allocation of these resources relative to participant preferences determine both the levels of support and opposition for the leadership. The levels of permitted opposition mirror the openness of the governmental system. The central features of any political system reflect the distribution of decision-making power, the aforementioned levels of political opposition which arises as a function of political competition and the aggregation mechanisms for social preferences and public goods. In short, these characteristics can be further broken down into leadership selection processes and power sharing across decision-making groups. Leadership selection processes and power sharing thus represent the competitive nature of most political systems. Invariably, a leader's political decisions are calculated as a function of these mechanisms. This competition influences resource decisions, particularly in relation to the personal preferences of the leader to maintain office as well as other national goals.

Military expenditure is a reflection of a distributive type of good in which most, if not all participants, benefit from its development. Individual citizens and political participants are concerned about security, but are also concerned about a myriad of other public and private goods. Consequently, the more open the political system, the greater the level of political competition for resources and the greater the

scrutiny the leader receives for his/her allocation decisions. Cusack and Ward conclude that competition for resources in the domestic sphere is a driving influence on military expenditure:

Internal political competition among elite decision makers, linked in varying degrees with competition for mass support coupled with the ability of budgetary instruments to influence economic conditions is the main force driving the decisions about the level of military expenditure. From this perspective, political economic fluctuations and internal coalition and bureaucratic politics, not international competition or security races, undergird the salience of the military establishment in contemporary nation-states. It is the importance of these establishments which determine the flow of resources to them. (1981: 440)

The general thrust this statement and the preceding logic point to the central influence of political competition on a leader's military allocation.

The leader's utility function is used to specify theoretical propositions about spending levels in the domestic context. When conditions of external threat are low, political actors focus on domestic preferences as consequence of broad constituent interest. In highly competitive systems, leaders concentrate on allocating resources for domestic programs (d) while de-emphasizing resources allocated for national security (n). Given their individual goals to maintain political position, leaders will gain the greatest levels of utility by allocating more resources for position (p) and domestic programs (d) and less for military expenditure (n).

In uncompetitive political systems, leaders have greater decision-making autonomy due to lower levels of political constraint. Given this greater policy making

latitude and their predispositions towards security, leaders will allocate greater resources towards the maintenance of political position, but continue to emphasize military expenditure. Broad domestic interests will not have a great deal of influence over leaders in these environments. Decision-makers will be concerned only about the preferences of specific political actors or groups. Consequently, their resource allocation designs are much clearer. Domestic programs will continue to receive allocations, but at lower levels compared to competitive political systems.

H4.2: Leaders in highly competitive political systems will allocate fewer resources for military expenditure than their counterparts in less competitive political systems.

However, arms allocation processes are much more complicated than the transfer of resources between issue areas. They reflect systematic calculations often associated with Lindblom's theory of incremental decision-making and Wildavsky's theory of budgeting. Furthermore, given the planning element of defense, arms allocations require a great deal of time. Bureaucratic momentum illustrates a process in which military expenditures continue to increase over time in competitive political systems given the entrenchment of organizations. Simply, given the turnover of political figures representing various constituencies and the competition for political resources between them, bureaucratic organs are the few constants in democratic political systems and will maintain a consistent approach towards calling for resources. Once the budgetary ball is set in motion, leaders will have difficulty in reallocating or redistributing funds away from entrenched organizations. Only under

conditions of war or threat do leaders have greater autonomy to reallocate resources. In uncompetitive political systems with centralized political power, leaders will have greater ability to allocate resources across issue areas. Bureaucracies will have a limited effect on resource allocation decisions.

Given this discussion, it is important to recognize that the effects of bureaucratic politics or organizational momentum are not uniform, but vary across political environments. Russett articulates this point: "the strength of bureaucratic inertia may vary substantially in different circumstances, or different regimes have very different perceptions of threat and hostility," (1983:542). The particular causal influence of bureaucratic momentum is therefore hypothesized to behave in accordance with the institutional structure of the political system.

H4.3: States with higher levels of bureaucratic development will have greater levels of military expenditure than states with lower levels of bureaucratic development.

The competitive nature of the political systems in which bureaucracies function also influences the effect of bureaucratic momentum. Given the results of Rattinger (1975), Cusack and Ward (1981), Domke et al. (1983), and Johnson and Wells (1986), states with higher levels of institutionalized competition, as reflected in electoral systems, do not appear to have resource trade-offs while states with centralized political authority and lower institutionalized competition do implement identifiable resource trade-offs at varying times. The effect of political competition appears to be damped by the requirements for long range defense planning and the

difficulty in financing weapons programs. Given the turnover of leaders and varying constituent interests coupled with the time elements required in the budgeting processes of defense, bureaucratic inertia takes over. Johnson and Wells (1986) state:

Political institutions prevalent in the industrialized capitalist countries that entail a pluralistic diffusion of power and influence also undermine the kind of synoptic decision-making that might impose a systematic and enduring set of priorities in budget construction . . . The periodic transfer of executive and legislative power among competing parties with differing constituencies, programs, and priorities, no doubt works against the statistical identification of clear-cut and long-persisting patterns of trade-offs between military spending changes and any specific civilian economic sectors. (1986:197)

In this sense, the competitive nature of the political process will force leaders to address specific interests through resource allocation decisions, but such decisions can rarely be implemented immediately. Furthermore, security being such a central issue area, leaders may be less likely to step in and make changes.

The domestic environments found in centralized political systems offer a much different dynamic. As suggested above, political competition for resources still exists, but the competition is generally limited to very specific interests, individuals or institutions. Consequently, coalitions are much more easily formed. Furthermore, as Johnson and Wells conclude about the Soviet Union, the organizational structure is “an unitary bureaucratic chain of command”. Resources are much more easily shifted between issue areas if the need arises. This point does not suggest that fewer resources will be applied to military and security interests, actually more may be the

case, but that the bureaucratic momentum associated with organizational goals is lessened. Leaders thus have greater autonomy to distribute resources.

H4.4: Highly competitive political systems will have greater bureaucratic momentum than do less competitive political systems.

State Capability and Defense Allocation

The level of internal arms development is limited by demographic factors which can not be adjusted in the short term. Major powers have access to more resources and are expected to have much higher levels of military expenditure relative to minor powers. Consequently, given these larger latent resource pools, major powers will have higher levels of expenditure levels across all issue areas.

H4.5: Major powers will hold higher levels of gross military expenditure than minor powers.

Research Design

The research design employed in this chapter focuses on state military expenditures over time. The hypotheses developed in the previous section are at the monadic level, consequently, state-year serves as the central unit of analysis. The analysis involved here is a cross-sectional time series. Five variants of this method are applied to two time periods, 1817-1913 and 1919-1985, with the World War years excluded. The data used in these empirical tests come from the Correlates of War Capability and Militarized Interstate Dispute data sets, and the Polity II and III data sets.

Military Expenditure

The dependent variable is military expenditure as measured in current British pounds from 1817-1913 and current United States dollars from 1919-1985. These amounts reflect aggregate expenditure levels as opposed to defense burden measures. In order to assure the reliability of the data employed in the analysis, a number of years are removed from the data set. First, all years associated with World War I and World War II are removed. Given the variation in estimates and the potential for over and under inflation due to the war efforts, I chose not to use these years or the years immediately after these crises. Finally, given the cross sectional nature of the data, I chose to include only those states with 10 or more observations in each of the periods. Consequently, 37 states are included in the first time period and 129 in the second time period². This decision is predicated on the potential collinearity effects associated with variation problems within states over time. The sample some nation-states have limited numbers of observations including cases where a nation-state only has one observation. Given the inclusion of dummy variables for nations in the fixed effects models to be discussed below, collinearity problems would clearly emerge in these circumstances. The decision to use ten as a cut point is an arbitrary decision, but one which attempts to maximize the number of cross sections in the analysis while minimizing estimation problems.

² Furthermore, after reviewing the data, I chose to eliminate seven years for China from 1978-1985. Again, given variation in reported expenditure levels and what are drastic changes in expenditure levels, removing these cases appears to be the best method of assuring stable estimates.

Domestic Political Structure

Three variables are used to tap the domestic dimension of the model: democratic score, institutional constraint, and persistence. Theoretically, democratic score reflects the levels of political participation and executive autonomy found in political systems. Its focus is a reflection of authority patterns associated with the selection of leaders, the openness and competition of elections, and the interaction between branches of government and executive decision making powers. Gurr, Jagers, and Moore identify three characteristics of democracy: (1) the presence of institutions through which citizens can effectively express preferences about policy and leaders; (2) the existence of institutionalized constraints on the power of the executive; (3) the guarantee of civil liberties and political participation of citizens (1991:79). They identify common properties of autocratic regimes as the lack of regularized political participation and concern for political freedom (1991:80). The democratic score variable is operationalized by creating two eleven point scales, one reflecting democratic characteristics and one autocratic characteristics, and then subtracting the autocratic from the democratic to produce a twenty-one point index. The precise indicators used in the index are detailed in the appendix. The democratic score, given its focus on leadership selection processes, serves as a good proxy measure for political competition.

The institutional constraint index, created by Maoz and Russett (1993), captures the loci of political power within different institutional structures and its

effects on a wide scope of control economic and social life (629). In particular, this index examines the institutional checks and balances placed on leaders, the centralization of political power as distinguished by unitary and federal polities, the scope of governmental action on citizens lives, and the degree of one man rule found in the political system. I am here employing institutional constraint to reflect bureaucratic momentum and inertia. Rattiner alludes to federalism as being a central characteristic of bureaucratic inertia. Ostrom's reaction-linkage model incorporates the United State's institutional structure, particularly Congress, as representing organizational momentum. Given the institutional focus of the constraint index and its emphasis on power centralization or decentralization, I believe the index can be used to reflect the individual goals of bureaucracies. With power sharing and limitations on one man rule, bureaucracies and employ their own goals and choose not to employ leadership policy desires. Conceptually, the variable offers a reflection of the complexity of the policy implementation process and how leaders are constrained in their policy efforts. Again this variable is described in the appendix. Maoz and Russett identify the close relationship between the democratic score and institutional constraint measures, but suggest that the variables are substantially different in the effects they represent³.

³ In footnote 11 of their study, Maoz and Russett (1993) identify that the executive constraint variable is used in both the institutional constraint and democratic score variables. Consequently, correlation between the two variables is expected. As they suggest "But because other elements also determine both measures, the empirical association is moderate . . . This allows us to use both measures in the same analysis without serious problems of multicollinearity," (637). The correlations undertaken for the data in this study are actually lower than those found by Maoz and Russett. This point is elaborated further below.

A final domestic variable, persistence, is employed to reflect the long term stability or institutionalization of the government structure. This is a control variable used to account for the maturity of state regimes. A simple expectation is that mature regimes will allocate resources away from military expenditure and towards other programs due to lack of need to arm for internal purposes.

Threat

A threat variable is developed to address the level of external hostility which confronts each state. Developed in Chapter 2, it is a proxy measure for the relationship between the state and external environment reflecting security conditions -- the variable allows for the identification of conditions which motivate increases in military expenditure. Conceptually, this variable offers a reflection of the conflict facing each state in each year and provides for both a qualitative and quantitative indicator of the foreign policy decision-making environment. Chapter 2 and the appendix contains a complete description of the operationalization of this variable.

Capability

A simple capability variable is implemented as a control for the status of the state as a major or minor power. Theoretically, major powers have been identified to be sought after allies because they bring greater levels of strength to the relationship.

Interactive Terms

In addition to these individual variables, three interactive terms are developed to isolate the particular influences between political competition and bureaucratic inertia, reflected by the interaction between democratic score and institutional constraint, between political competition and threat, reflected by the interaction between democratic score and threat, and finally between bureaucratic inertia and threat, reflected by institutional constraint and threat. The interactive effects seek to isolate the particular influence threat has across different domestic environments. Furthermore, given the institutional structure of a state and its level of competition, the potential effect of bureaucratic inertia is isolated.

Methodology

A cross sectional time series analysis is the methodology employed. I will go into to some detail concerning the methodology as this method has been the focus of a great deal of discussion in analysis of expenditure. Time-Series Cross-Sectional (TSCS) data includes a number of properties which make analysis problematic. The data generally violate a number of the theoretical assumptions of standard linear models associated with correlations across time, across cross sections, or time points between cross sections (Sayrs, 1989). Consequently, misspecification due to error problems are common. Beck and Katz (1995a, 1995b) provide an extensive discussion of the bias associated with downward trends in error and its consequences

associated with overconfidence of statistical significance. The authors suggest that techniques used to account for the heteroskedasticity and serial correlation problems, feasible generalized least squares or the Parks method, do not solve the error bias. Consequently, ordinary least squares (OLS) with panel corrected standard errors (PCSE) should be applied as a more accurate measure of panel error structures. Furthermore, Beck and Katz argue that the OLS with PCSE is also superior to GLS-ARMA techniques as it allows for better examination of model dynamics, particularly with respect to short and long term phenomenon. The type of time-series cross sectional model addressed by Beck and Katz focuses on situations in which the data include more time periods than cross sections, or $T > N$. This type of model, TSCS, requires a minimum number of time points equaling cross sections, but for reliability, three times the number of time periods to cross sections.

A second type of model, I refer to as a panel model, holds more cross sections than time points, or $N > T$, such as seen in election studies. Beck and Katz suggest that a random effects model (REM) is the proper form of analysis -- see footnotes 3 and 4 of the article. Election studies generally have very large numbers of cross sections and very few time points. The heteroskedastic nature of the data is the dominant concern.

The data involved in this analysis is separated into two periods. In the first period of analysis, 1817-1913, the sample has a T level of 97 possible time points and a maximum of 37 potential nations. The second period, 1919-1985, has a T level of

67 possible time points and a maximum of 129 potential nations. The data is unbalanced with respect to the time periods. The first period reflects the $T > N$ conditions. However, the second period reflects an intermediate case involving more cross sections than time points, but not a situation which is as skewed as the election study example. Beck and Katz's Monte Carlo simulations of the OLS with PCSE do reflect this intermediate case in which $N > T$.

William Greene (1993) proposes using three different models to examine the time-series cross-section relationship: ordinary least squares (OLS), a fixed effects or least squares dummy variable model (FEM), and a random effects (REM) or feasible generalized least squares model. Each has its strengths and weaknesses:

One can argue that certain institutional factors or characteristics of the data argue for one or the other, but unfortunately, this approach does not always provide much guidance. From a purely practical standpoint, the dummy variable approach is costly in terms of degrees of freedom lost, and in a wide, longitudinal data set, the random effects model has some intuitive appeal. On the other hand, the fixed effects approach has one considerable virtue. There is no justification for treating the individual effects as uncorrelated with other regressors, as assumed in the random effects model. The random effects treatment, therefore, may suffer from inconsistency due to omitted variables.
(479)

Greene provides a systematic method of determining which is the proper model to employ in the panel analysis.

1. Run OLS, FEM, and REM to obtain coefficient estimates of the desired models and measures of model fit.

2. A comparison of the models is made by examining the results of a Breusch-Pagan lagrange multiplier statistic. In particular, the REM is compared to the OLS model. A high level of the statistic suggests that groupwise heteroskadicity exists and that the REM model better represents analysis of the data than does the OLS model.

3. A second comparison of the models is made by employing a Hausman statistic. A specification test developed by Hausman calculates a chi-squared measure of significant difference between the covariance estimations of the FEM model and the REM model. REM assumes no difference in variation. If a significant difference exists, then the FEM model is a better method of estimation. If there is insignificance then the REM is a better method (see pages 479-80 for an in-depth discussion).

4. A third comparison of the models is made using a likelihood ratio hypothesis test between the OLS and FEM. If the effect of the groupwise dummy variables are significant, then FEM should be employed. If not, the OLS should be employed.

5. A high level of the Lagrange multiplier and a low level of the Hausman suggests using REM. A high level of the Lagrange and high level of Hausman suggests using FEM. A low level of Lagrange suggests using OLS if the dummy variables are not significant.

As the data used in the empirical test is divided into the two periods with the varying N and T values, I chose to employ both Greene's approach coupled with the Beck and Katz's method for correction of the panel standard errors. The Beck and Katz method requires removing auto and serial correlation by incorporating a lagged dependent variable or an AR1 process, running an OLS model and then incorporating the panel-corrected standard errors. The authors suggest: "The combination of OLS and PCSEs allows for accurate estimation of variability in the presence of panel error structures without inducing the severe problems caused by the Parks method," (Beck and Katz, 1995:645). Using both techniques enables me to address both the

heteroskedasticity and the temporal concerns emphasized by the Beck and Katz approach. Consequently, this intermediary case can be correctly diagnosed.

The model developed to empirically evaluate the theory is composed of variables reflecting the individual dimensions of theory, particularly institutional constraint, political competition and threat, and interactive terms composed of these dimensions:

$$\begin{aligned} \text{Gross Military Expenditure (US Dollars and British Pounds)} = & \beta_0 + \beta_1 \text{Threat} + \\ & \beta_2 \text{Institutional Constraint} - \beta_3 \text{Democratic Score} - \beta_4 \text{Persistence} + \\ & \beta_5 \text{Threat} * \text{Institutional Constraint} + \beta_6 \text{Threat} * \text{Democratic Score} + \beta_7 \text{Institutional} \\ & \text{Constraint} * \text{Democratic Score} + \beta_8 \text{Power Status} + \beta_9 \text{Lagged Military Expenditure} \end{aligned}$$

Analysis

The central research question posed in this chapter examines the conditions which affect military expenditure levels. The theory proposes that three central dimensions, the domestic political environment, the latent capability level of the state and the interaction between the state and external actors reflected in threat, dictate environmental conditions influencing state expenditure patterns.

The hypotheses offer clear predictions about the directional influence of each variable. Threat is proposed to have an overarching influence on military expenditure patterns across all political systems. External rivalry and threat increase the efficiency of resource allocation by creating internal cohesion (Weede, 1986).

Consequently, the threat variable and the two interactive terms involving threat,

threat*democratic score and threat*institutional constraint, are expected to have positive effects on military expenditure. Institutional constraint is also proposed to positively influence military expenditure. As constraint is employed to represent a proxy measure of bureaucratic momentum, those states with complex bureaucratic system are predicted to maintain general upward trends in expenditure patterns.

The power status variable offers a representation of great demographic capability. Larger and more powerful states will naturally have greater resource allotments and abilities to expend more resources on the military. Democratic score is predicted to negatively influence spending patterns due to the increased influence of political competition. Higher levels of political competition reflect greater scrutiny of leadership allocation decisions. Given desires to maintain political position, leaders will be highly cognizant of political interests and will react to them. Persistence is expected to diminish military expenditure. Past studies, Tilly (1990) and Morgan and Palmer (forthcoming), conclude that as regimes become more mature, they shift resources from defense and apply them towards social programs. The lagged dependent variable is proposed to positively influence spending given an upward trend in defense allocation over time. Defense requirements have become more costly due to technological changes and research.

The interaction term between institutional constraint and democratic score is hypothesized to have positive influence as well. Returning to hypothesis 4.4, states with greater political competition will have lower influence over bureaucratic

momentum while states with less political competition will have greater control over the bureaucracies. This relationship suggests that as competition and bureaucratic moment increase so will expenditure.

The results for the 1817-1913 period are presented in Table 4.1. Comparison of the models produces a Lagrange Multiplier test with a probability level of .045 and a Hausman statistic with a probability of .088. Given the selection criteria, higher levels of both the Lagrange and Hausman tests reflect the conditions associated with a FEM with PCSE model. The resulting coefficients are, in certain cases, counterintuitive. Recall that the theory posits that bureaucratization, threat, and state capability will increase military expenditure while political competition and persistence will decrease expenditure. The models reveal that institutional constraint reduces expenditure levels. Constraint is significant at the .021 level. Conversely, democratic score increases expenditure levels while holding a .0036 significance level. Although neither threat nor power status reach the .10 significance level, both are approaching it at the .1395 and the .1987 levels and both maintain the predicted positive effect. The persistence variable is in the predicted negative direction, but is not significant (.9273). The lagged expenditure variable is positive and highly significant (.0000). Of these variables, power status holds the greatest magnitudinal effect followed by democratic score.

The interactive terms also provide mixed support for the theoretical framework. The domestic interaction term reflects the influence of the institutional

Table 4.1.
Estimations of Yearly Military Expenditure, 1817-1913

	OLS	OLS with PCSE	Fixed Effects	Fixed Effects with PCSE	Random Effects	Predicted Signs
Constant	-769.08 (-0.492)	-769.08 (-0.78)	-	-	1430.4 (0.685)	
Insitutional Constraint	37.796 (0.421)	37.796 (0.693)	-248.62 (-1.598)	-248.62** (-2.209)	-81.810 (-0.673)	+
Democratic Score	15.765 (0.914)	15.765 (0.130)	681.68** (2.405)	681.68** (2.914)	286.1 (1.356)	-
Power Status	2971.3** (6.987)	2971.3** (4.446)	4235.5** (3.512)	4235.5 (1.4785)	3593.5** (4.858)	+
Persistence	2.921* (1.867)	2.921* (1.805)	-0.236 (-0.090)	-0.236 (-0.0916)	1.919 (0.871)	-
Threat	271.53 (1.615)	271.53 (1.53)	275.27 (1.403)	275.27 (1.2858)	257.75 (1.382)	+
Interaction Constraint* Democracy	-0.551 (-0.072)	-0.551 (-0.08)	-26.542* (-1.742)	-26.542** (-2.2825)	-10.287 (-0.899)	+
Interaction Democracy* Threat	13.483** (2.834)	13.483** (2.281)	13.263** (2.349)	13.263* (1.922)	13.242** (2.485)	+
Interaction Constraint* Threat	-9.335 (-0.942)	-9.335 (-0.87)	-9.114 (-0.771)	-9.114 (-0.682)	-8.241 (-0.739)	+
Lagged Military Expenditure	0.825** (66.832)	0.825** (31.29)	0.794** (57.485)	0.794** (26.29)	0.809** (61.722)	+
R ²	.864	.864	.866	.866	.862	
n	1811	1811	1811	1811	1811	

Note: The number in the parentheses reflects the t-score with a two tail test

** : significant at the .05 level

* : significant at the .10 level

Lagrange Multiplier = 4.01 with probability of 0.045

Hausman Test = 15.09 with a probability of 0.088

Chi-squared of group effects = 1079.74 with a probability of .00000

constraint variable having a negative impact at the .0226 significance level. The threat-democratic score variable is positive at the .0547 significance level. Finally, the threat-institutional constraint term is negative and insignificant at the .25 level.

What is the substantive meaning of these results? Traditional theories of military expenditure are supported by the behavior of both power status and threat. The level of capability held by a state increases its allocation of resources towards expenditure. In theory, larger states should have greater gross allocations for all policy choices, not just expenditure (Hypothesis 4.5). This premise is supported by the status variable. The positive effect of threat supports hypothesis 4.1 and reflects the influences of external factors in increasing expenditure level. External threat does have a positive influence on expenditure. Furthermore, this relationship appears to be generalizable across different regime types. The positive and significant effect of the threat-democratic score term reflects the general tendency for all states to increase expenditure levels in the face of external hostility. The levels of political competition in a state are minimized under severe tension. Leaders receive greater support allowing them greater freedom in resource distribution policies. The negative value of the threat-institutional constraint does not support the threat relationship, yet given its insignificant level, it can be discounted.

The domestic variables present a much different environment than posed by the theoretical framework. The expectation specified in the theoretical portion of the study predicted that higher levels of competition lead to lower levels of military

expenditure (hypothesis 4.2) while greater levels of bureaucratization lead to higher levels of military expenditure (hypothesis 4.3). Furthermore, the interaction between the variables is expected to have a positive impact on expenditure (hypothesis 4.4). The empirical results reflect contrasting relationships. In this early period, a higher democratic score produces increased levels of military expenditure while higher levels of institutional constraint reduced expenditure. The interaction term also reduces expenditure. More competitive domestic environments are more prone to spending. The more bureaucratically driven the political system, the less likely a leader will allocate resources for the military. Although the magnitude of the democratic score is approximately two times that of institutional constraint, the sign of the interaction term reflects that constraint dominates the resource allocation arena.

A potential explanation for the domestic effects is predicated on the disparity in regime frequencies during this period. The period is dominated by autocratic political systems -- 80% of the observations analyzed are non-democratic regime types. Furthermore, 100% of the democratic regimes are highly constrained, while 45% of the non-democratic regimes are highly constrained. The skewed nature of the data suggests that the results are dominated by autocratic regimes. As detailed by the theory, autocratic states will generally have low levels of competition. In this sense, the aggregated levels of political participation reflected by the data illustrate the disparities observed in the democratic score coefficient. This point is compounded by the lack of institution constraint variation found in the democratic regimes. A second

point to emphasize is the time needed for bureaucracies and organizations to become ingrained in political systems. The institutional networks may not be firmly enough entrenched to develop bureaucratic momentum. Consequently, the behavior reflects competition between emerging bureaucracies in younger, developing states. This picture presents autocratic states where political competition drives expenditure upward and institutions push it downward.

The results for the analysis of the 1919-1985 period are presented in Table 4.2. The model selection criteria reflect a significant Lagrange multiplier statistic and an insignificant Hausman suggesting that a REM is the correct choice for this period. In evaluating the t scores across all of the models, produced as a function of the standard errors, there are no great differences between the FEM with PCSE and the REM models. Only the lagged dependent variable has a dramatic change going from 915.62 for the REM to 150.92 in the FEM. Both reflect the highly significant nature of the variable.

The results offer general support for theoretical framework in terms of the predicted direction of the variable effects. Each of the independent variables is in the hypothesized direction -- two of three interaction terms are not. Institutional constraint, a reflection of bureaucratic moment, power status and threat all have positive effects on expenditure levels. Power has the greatest individual impact on the magnitude of expenditure. Conversely, democratic score, a proxy for political competition, and persistence negatively influence expenditure. Threat, democratic

score, and institutional constraint are approaching significance (.28, .16 and .26 respectively). Although not reaching the traditional threshold of significance at .10, the variables do reflect the hypothesized influences. Political competition restrains the allocation of resources, while both threat and bureaucratic momentum push for additional spending. Given the magnitude of the parameter estimates, competition holds the greatest impact.

These relations are better defined through examination of the interactive terms. The domestic interaction term holds a positive coefficient with a level of significance of .1843. The interaction suggests that institutional relations or bureaucratic momentum is the dominant influence in the determinant of the domestic influences. The threat interactions present negative coefficients. Threat does not override the domestic political structure in the expenditure realm. The institutional constraint-threat interaction has a significance level of .24 again approaching standardized significance. However, the democratic score-threat variable has a much high level of .676 suggesting limited impact.

The coefficients for the second period offer support for the theory. The domestic variables perform in the predicted manner. Competition does restrict the allocation of resources for expenditure. Furthermore, the level of institutional constraint increases military expenditure. The interaction term also provides impetus for higher expenditure levels. The domestic environment upholds the theoretical

Table 4.2.
Estimations of Yearly Military Expenditure, 1919-1985 with World War II years removed

	OLS	OLS with PCSE	Fixed Effects	Fixed Effects with PCSE	Random Effects	Predicted Signs
Constant	-143170 (-1.343)	-143188* (-1.663)	-	-	-142380 (-1.248)	
Institutional Constraint	9205.6 (1.188)	9202.6 (1.59)	9159.4 (0.875)	9207.7 (1.08)	9131.8 (1.109)	+
Democratic Score	-14058 (-1.431)	-14072.57 (-1.623)	-20309 (-1.387)	-20411 (-1.372)	-14714 (-1.391)	-
Power Status	26542 (0.384)	25147 (0.12)	158230 (0.977)	154898 (0.880)	38892 (0.511)	+
Persistence	-193.89 (-0.504)	-190.132 (-0.386)	605.98 (0.675)	613.838 (0.977)	-174.25 (-0.403)	-
Threat	9977.4 (1.139)	10003 (1.046)	10142 (0.942)	10248 (0.759)	9859.6 (1.077)	+
Interaction Constraint* Democracy	862.16 (1.364)	862.37 (1.58)	1453.2 (1.449)	1459.2 (1.358)	906.76 (1.328)	+
Interaction Democracy* Threat	-176.23 (-0.483)	-172.88 (-0.390)	-85.146 (0.855)	-82.46 (-0.126)	-159.94 (-0.418)	+
Interaction Constraint* Threat	-812.81 (-1.218)	-814.98 (-1.174)	-906.03 (-1.111)	-914.22 (-0.967)	-818.26 (-1.175)	+
Lagged Military Expenditure	1.0775** (960.130)	1.0775** (184.11)	1.0765** (803.112)	1.0765** (150.92)	1.0773** (915.685)	+
R ²	.996	.996	.996	.996	.996	
n	4726	4727	4726	4727	4726	

Note: The number in the parentheses reflects t score for a two tailed test.

** : significant at the .05 level

* : significant at the .10 level

Lagrange Multiplier = 36.61 with probability of .00000

Hausman Test = 4.68 with a probability of .861050

Chi-squared of group effects = 2437 with a probability of .00000

conjecture. The different elements of the domestic system produce distinct and identifiable effects on military expenditure.

The traditional variables, threat and power status, also support the theoretical framework, but in a more limited fashion. Both increase the gross level of military expenditure. Power status has the greatest potential impact on spending given its magnitude. Threat also has a relatively large coefficient. The interaction terms involving threat, however, do not conform to theoretical expectations. Instead of increasing expenditure across regime type, both the democratic score and institutional constraint threat interactions are negative. In this period, domestic considerations appear to dominate resource allocation decisions.

The results from this recent period illustrate a decision-making environment dictated by domestic considerations. Political competition and bureaucratic inertia influence resource allocation. Furthermore, these domestic processes are in rivalry for resources. Leaders allocate resources across issue areas, distributing resources between domestic political interests and international political interests. However, there are also organizational processes which complicate the resource allocation process. Bureaucracies and organizations inherently have their own goals and seek their own resources to accomplish these goals. This logic has been described by Niskanen (1971) in the general context and Allison (1971) in the foreign policy context. As the levels of political competition and bureaucratization increase, resource allocation decisions appear to become more inefficient or cloudy.

Consequently, bureaucracies can continue to obtain resources while at the same time, leaders can reallocate and distribute other resources. Lower levels of competition allow for better articulation of political interests and more efficient resource allocation. External considerations are also applied in the resource allocation context. Threat does have a positive influence on the gross levels of expenditure, but does appear to be limited given the domestic institutional structures.

Conclusion

This chapter examines the multidimensional relationship between external threat, domestic political competition, state capability and military expenditure. The goal of this study is to formulate a better specified theory of defense allocation incorporating both the domestic and international policy arenas. The theory provides clear expectations about defense allocation under varying environmental conditions. Logically, military expenditure is expected to fluctuate across political system and regime type given the particular interests of leaders and important political actors. Furthermore, external factors, hostility, tension, and threat are expected to influence expenditure levels. Few studies have accounted for the variation in these conditions. The findings and conclusions developed here make three contributions to the body of arms acquisitions literatures: (1) they better specify the effects of internal structures on military expenditure; (2) they identify the interactive relationship between the

internal and external political arenas; and (3) they examine a broad sample of regime types over an extended temporal domain.

The empirical results indicate that domestic environments affect military expenditure in two ways: (1) as a function of political competition; and (2) as a function of bureaucratic inertia and momentum. The specification of a state's political system is an important indicator of military expenditure patterns. Rather than applying broad regime type categorizations, such military or civilian, the analysis incorporates a fuller development of domestic characteristics by applying the Polity III data and a much better specified representation of political system components. The results illustrate that the competitive nature of the political system and the institutional framework influence expenditure. This study thus integrates two theoretical explanations about expenditure patterns into a more comprehensive design. The competitive level system and its level of bureaucratization have individual effects but also interact to influence allocation decisions. Although not reaching high levels of statistical significance, the results do offer support for this theoretical logic.

Second, the study builds from previous work in an effort to better examine the interactive relationship between the internal and external environments in military expenditure decisions. Ostrom (1978), Cusack and Ward (1981) and Ward (1984) integrate components of the domestic and international arenas into their arms acquisition studies. These studies find that both environments have influence on military expenditure, but that the domestic arena has a greater impact. This chapter

extends this work by specifically examining the interaction between the arenas. The two time periods reflect differences in the interactions between threat and the domestic. In the first period, threat dictates the arms acquisition process relative to political competition. Threat does appear to dominate the political environment. However, the remaining interactions, threat and institutional constraint, in the 1817-1913 and the 1919-1985 periods, and democratic score in the 1919-1985 period, have negative effects on expenditure levels. Although only two of these terms are approaching statistical significance, the results suggest that a slight dampening effect arises under conditions of threat. Domestic environments may be hesitant to react to external conditions of hostility. This finding is somewhat unique as it has not been specifically examined in the past. Future examinations should thus continue this line of inquiry.

Third, this study examines a broad sample of states over extended time periods. In the past, cross sectional studies have employed only narrow samples. Single country studies frame a great deal of our knowledge about military expenditure patterns. Here, both the number of cross sections and time are maximized. Furthermore, given recent statistical advancements, a better defined cross sectional time series methodology is employed. The results produced are consistent with previous study. Furthermore, given the better specified domestic environment, we gain a much fuller picture of internal arms development processes.

Chapter 5: Alliance Formation and Reliability

This chapter continues the examination of the effects threat and domestic political environments on security policy behavior through an investigation of military alliances. Alliances are a policy option which can provide an immediate and low cost boost in a state's security. However, they are not extremely reliable measures as alliance partners often renege on their agreements. Furthermore, alliances can undermine security and increase threat by drawing states into unwanted conflict initiated by their partners. In the resource context, alliances thus have an important resource trade-off potential, but also unforeseen consequences. This chapter explores the theoretical relationship between threat, political competition for resources, and capability dimensions and alliance formation and honoring behaviors.

Introduction: The Role of Alliances

A great deal of scholarly work has addressed the role of alliances in international relations. In many respects, alliances have served as the backbone of general theory about state security orientations and conflict development. But although alliances are common events, the frequencies of their formation and dissolution have rarely been addressed in analytical study. This examination explores the development of alliances by focusing on the particular effects of two decision-making factors: (1) the level of domestic political competition resulting from internal institutional frameworks; and (2) the level of threat being faced by the state. The traditional or realist theory of alliances

has long argued that states seek alliances for increased security or to balance threat. Recently, two other rationales have been posited: (1) alliances are formed to gain political goods besides security, such as increased decision-making influence; and (2) alliances develop or are constrained as a function of domestic political systems. Both are asserted to influence alliance formation. These are not mutually exclusive positions. I argue that each of these approaches can be integrated into a more cohesive alliance theory by emphasizing that decision-making contexts are affected by the interaction between domestic and international circumstances.

The individual motivations behind alliance formation become clearer as we address the environments in which such decisions are developed. In short, we can begin to parse out different expectations about alliances given the contexts in which they are formed. We presume that the development of external threat should lead to the formation of alliances. However, traditional alliance theories say little about alliance behavior under conditions of low threat or periods of peace. Furthermore, only recently have studies offered explicit expectations about alliance behavior given domestic political environments. Finally, the interaction between governmental system and threat on alliance development has been largely neglected. Past approaches towards the study of alliances have been largely one-dimensional¹ -- the central motivation behind alliance development is the reaction to an external threat. Here I attempt to provide a more robust examination of alliances by integrating external environmental conditions,

¹ Exceptions are Morrow (1991), Morgan and Palmer (1995, 1996, 1997), and Smith (1995, 1996). Each discusses alliance formation for the development of security and other goods.

threat levels, and domestic conditions, governmental and institutional systems. The inclusion of these factors provides a fuller picture of the alliance development process and alliance frequencies. Peace time alliances may hold different motivations than alliances formed under conditions of threat. Furthermore, a leader's ability to both form and honor alliances will be strongly influenced by domestic political conditions, and domestic recognition of threat. In the next sections, I specifically focus on the impact of domestic politics, the effect of threat on alliance development, and the reliability of alliances given these contexts and then offer an empirical examination of the theoretical expectations.

Alliance Formation and Domestic Politics

Recent alliance studies make explicit connection between the influence of domestic political environments and alliance behavior. Osgood (1968) argues: "Even if mutual military needs exist, the creation or maintenance of an alliance often requires the convergence of interests that go beyond a common interest in security," (1968:23). Domestic environments should theoretically form the foundation of similarity -- as a product of institutional framework, ideology or some other factor. Gaubatz (1996), Bennett (1997) and Reed (1997) all address the duration of alliances involving democracies. Gaubatz suggests that democracies maintain institutions which can link internal and external commitments. The transparency of democratic political systems allows domestic costs to be easily observed from the outside. Given the stability of

public preferences and institutional constraints, democratic policy behavior is more static than that of other types of states. These linkages enhance the ability of democracies to form more effective commitments resulting in more alliances between democracies and longer and more durable alliances. Reed (1997) corroborates these findings using a longer time period, an alternative estimation method, and a slightly different operational definition of democracy. Bennett (1997) examines four alternative models of alliances through a test of alliance duration. These models, capability-aggregation (the traditional realist perspective), security autonomy trade-offs (an extension of Altfield, 1984, and Morrow, 1987,1991), domestic politics (an extension of Gaubatz, 1996, and Siverson and Starr, 1994), and alliance institutionalization reflect a variety of motivations for alliance formation behavior. Given his results, Bennett concludes that security-autonomy trade-offs and domestic politics have important effects on alliance behavior. He suggests that the best empirical fit of the data reflects the integration of these perspectives rather than relying on any one model.

Barnett and Levy (1991) examine the impact of domestic conditions on alliances. They conclude that decision-makers generally attend to immediate threats first. Regime (or the politically empowered group) stability or survival is more frequently at stake than is state survival. The potential costs of alliance -- here a tradeoff between the state's security and autonomy -- is assessed in terms of domestic political costs to leaders. The loss of autonomy associated with alliances can have a negative affect on domestic support, yet increased economic resources associated with reduced internal

military spending can have a positive affect on support. The net outcome of this additive relationship influences alliance decisions. Leaders opt to solidify their own positions rather than face losing power, a risk that can accompany an alliance decision. In this regard, domestic environments influence alliance development as a function of leadership self interest.

Siverson and Starr (1994) focus on the shifting patterns of alliances closely connected to shifts in political interests in the domestic sphere. Regime changes, including leadership and political institutions, affect the manner in which states develop security arrangements.

Siverson and Emmons (1991) focus of that examination, whether or not democracies form more alliances with each other than would be expected on the basis of chance, is developed through a dyadic analysis of alliance partners. The authors propose that democracies align most frequently with other democracies due to similarities in both norms and institutional structures. Here they assume that democracies have common interests with non-democracies, but in the long run, interests diverge and the alliances dissolve. The common interests bind democratic alliances reflecting more alliance stability. They find a strong relationship between joint democracy and alliance formation from 1946-1965; and overall they find democracies were not more likely to ally with other democracies from 1919-1939. Simon and Gartzke (1996) extend the Siverson and Emmons study for the period from 1815-1992. They argue that democracies are less likely to ally with each other and more likely to

ally with autocracies. The authors suggest that the 1946-1965 time period is an aberration because of bipolarity and the ideological components of the Cold War.

Farber and Gowa (1997) in a recent examination of the democratic peace provide a third take on this approach. Their findings suggest that “democratic states are not natural allies”. The analysis reveals that the probability that members of a democratic dyad will ally with each other varies across time. The probability is greater after World War I than before World War I where non-democratic states are more likely to ally. In the alliance relationship, the authors conclude that prior to World War I democracies allied at lower rates than did their non-democratic counterparts. After World War II, democracies allied at higher rates.

These last studies share a common approach; each examines alliance patterns in terms of regime dyads. As they stress the effect of being a democracy, they may offer an incomplete picture of alliance configurations; involving other types of regimes. Furthermore, the stark differentiation used to determine the regime type, often a dichotomous variable, overlooks a great deal of the variability across state institutional frameworks.

In this study, I address the domestic-alliance relationship from the monadic level. Although alliances reflect mutual or dyadic decisions, I assume that the underlying political system and institutional structure of a state should have a great impact on all policy decisions. Consequently, policy decisions should be accepted internally before being negotiated externally. The individual state thus becomes the

focus on analysis. By turning the focus towards the institutional structure, I begin to examine the effect of different degrees of democratization or autocratization on alliance behavior. A more complete picture of the role of domestic politics on foreign policy behavior is thus presented.

By placing alliance behavior in the monadic context, I emphasize how institutions affect politics as a product of the political constraints they place on leaders. The central features of any political system reflect the distribution of decision-making power, the level of competition, the levels of political opposition which arises as a function of competition and the aggregation mechanisms of social preferences and public goods. These characteristics can be further broken down into leadership selection processes and power sharing across decision-making groups. In this sense, institutions affect foreign policy behavior such as alliance formation in the same manner as they affect domestic policy: they influence the decisions leaders make. The interaction between institutions and norms is particularly important in this context. I am not emphasizing institutions over norms or vice versa. Instead, I am placing both under the same theoretical position. As Ray (1995) suggested: "the distinction between the cultural and structural explanation of the democratic peace does not seem either stark or crucial, nor does the available evidence seem to indicate one is clearly superior to the other," (pp. 37). The institution-norms dimensions are not easily disentangled and are thus difficult to separate (Kegley and Raymond, 1990; Morgan and Campbell, 1991; Dixon, 1993, 1994). Consequently, when I address either norms or institutions, I am

doing so from the perspective that they affect policy in both interactive and individuals manners. I therefore conclude that both are necessary in theoretical development.

The alliance studies developed above outline the effects of domestic institutions and regime type of alliance behavior. In this work, domestic institutions are postulated to affect the frequency with which states employ alliance formation policies -- of particular interest is the extent to which domestic political structures limit policy latitude. States will seek to align with those sharing similar preferences. Assuming that these preferences reflect shared concerns, regime characteristics invariably enter into alliance decisions. The intensity of shared interests and characteristics have an effect on the choice of alliance partners (Siverson and Emmons, 1991; Simon and Gartzke, 1996), but this point is not examined here -- I focus explicitly on the frequency of alliance development rather than the particular choice of partners. Hagan (1987) concludes that the political environments found in open (democracies) and closed (autocracies) systems are fundamentally different. Open systems maintain a high degree of competition, opposition, tolerance for autonomous groups, and acceptance of constraints on political power. Democratic systems require mobilization of domestic support in order to take action. In democracies, internal norms associated with community and participation lead to the development of stability. Democratic regimes gain legitimacy both through popular participation and by encouraging participation in the system. Participation inherently involves competition resulting in political winners and losers, but in democracies the losers are allowed to continue participating in the

system (Maoz and Russett, 1993). The dispersion of decision-making power, leadership accountability as function of electoral systems, and the nature of political competition and mobilization all constrain leadership action (Morgan and Campbell 1991). These factors inhibit policy implementation. In order to implement policy, leaders are forced to increase bargaining, log rolling, and pork barrel efforts to form supportive coalitions. Consequently, they are often handcuffed in their ability to both implement and change policy as a function of support. Once in place, policies are very stable.

Closed systems produce centralized political processes. The leadership tries to eliminate all competition and challenge. Without competition, leaders are able to concentrate political power and reduce constraint on their leadership. For non-democracies, internal norms associated with stability are predicated on the centralization of power and the limitation of participation. Politics is assumed to be a zero-sum game, and the losers of the political game are eliminated from the political arena in order to reduce future competition and influence (Maoz and Russett, 1993). In these environments, leaders will be concerned about the interests of specific groups or individuals. Benefits are more easily distributed and support garnered (Bueno de Mesquita and Siverson, 1997, focus on the size of groups involved in selecting leaders and the distribution of goods in this fashion). This narrower nature of political interests thus allows for easier implementation of policy and the ability to change policy.

These beliefs about domestic contexts allow me to formulate expectations about alliance frequencies. The competitive nature of the political system and the centralization of power determine who the important actors in the political system will be. Intragovernmental and public opposition constrain the formal entrance of a state into alliances. The requirement of public mobilization in the policy process lessens a leader's ability to act autonomously and forge alliance agreements. In situations without dispersed decision-making power (or high levels of responsibility) and centralized power, constraints are less inhibiting. Centralized authority and simple institutional networks provide greater leadership autonomy and less constraint. Decentralized authority and complex institutional networks decrease autonomy and increase constraint. Political systems with lower competition and higher centralization of power should have less decision-making constraint. Power centralized in the hands of a dictator gives the leader more autonomy in the policy formation process. In situations with less centralized power, domestic institutions play more of a role. Leaders are forced to bargain with important actors over policy choices and address domestic issues given the broad nature of political concerns. Consequently in systems with high levels of participation, decision-making constraints should be relatively high. Policy decisions face higher scrutiny in open systems than in closed systems

These conditions suggest that democratic and constrained leaders will not have great latitude to form alliances. However, when leaders do have the ability to form alliances, they are generally more stable than autocratic or unconstrained alliances

(Gaubatz 1996; Bennett 1997; and Reed, 1997). This stability is a function of the difficulty in changing policy in democracies. Alliance behavior is limited by domestic processes, but once in place, alliances are very stable. Democracies will have fewer allies, but much stronger alliance bonds.

Non democracies and unconstrained governments develop policy from a more zero sum perspective. Leaders in these environments have greater freedom to form and terminate alliances. In these contexts, alliance choices appear to be related to very specific political issues, particularly security and specific interests. Compared to democratic alliances, there is less interaction across alliance dimensions because leaders have greater ability to formulate agreements given narrow interests. Consequently, autocratic and unconstrained states form and break alliances more easily. Non democracies and unconstrained leaders implement more alliances, with weaker alliance bonds. These expectations lead to the development of the following hypothesis:

H5.1: Non democracies and lower constrained states will have more allies than do their democratic and highly constrained counterparts.

Threat and Security as Alliance Motivations

Realism has long suggested that national survival is the central motivation of all states and a primary motivation for the development of alliances (Waltz, 1979).

National security therefore becomes of primary interest for leaders, regardless of state structure or regime type. States seek to increase security by accumulating power.

Alliances provide states increased policy mobility allowing them to quickly aggregate

power and to balance against the development of threat. Gulick (1955), Haas (1953), and Hoffman (1968) all conclude that alliances are the primary mechanism associated with balancing in the international system. Without them, the system could not adjust to realigning power, and the international system would collapse. Cusack and Stoll, building from traditional realism, thus suggest: "Alliances are the principal instrument used by states in dealing with threats from the interstate environment. They are the most efficient means of augmenting states' power," (1990:39). Given the traditional focus of realist scholars, alliances are developed strictly for security without recognition of other factors, such as domestic traits or the alliance partner's traits. Studies of alliances have been couched in realist terms where security is being sought without regard to domestic conditions or other available goods as suggested above by Gulick, Haas, and Hoffman.

This *security process* is predicated on increasing national power via informal and formal alignments to ensure support in times of need as suggested above. Here, the increased power that comes with allies deters potential adversaries by increasing the cost of aggressive action against a state (Russett, 1968). The security approach examines the conscious decisions undertaken by leaders to produce increased security. The choosing of alliance partners is a deliberate action undertaken to achieve certain outcomes. In this sense, alliance choices reflect a type of rational decision-making incorporating interaction opportunities. Siverson and Starr (1990) conclude that alliances are conscious choices among foreign policy behaviors. Here, the willingness to

form an alliance with a specific partner may be seen as an indicator of shared policy preferences. From the realist perspective, these policy preferences are only related to security concerns and nothing else. Consistent with this perspective, Riker's coalition theory (1962) assumes that the institutional decision-makers are rational actors.

Alliances develop regardless of specific political type. Decision-makers focus on the maximization of gains to be garnered as a result of the alliance and not the specific characteristics of the partners themselves. The size of alliance will be limited to allow maximum payoffs for the participants and still achieve success (the minimum winning coalition). Altfeld and Bueno de Mesquita (1979) and Lalman and Newman (1991) reiterate this position. Their discussion implicitly suggests that only increased security and policy success matter in the choice of alliance.

As much of the alliance literature posits, alliances are generally sought to increase security in the face of threat. Walt (1987) concludes that states tend to ally with or against the state that poses the greatest threat (23). Iusi-Scarborough and Bueno de Mesquita (1988) extend this logic: "threat alters the costs of alignment . . . the expected benefits of security enhancing alignments make alliance formations an attractive vehicle in the face of threat," (87). Here security may be defined as the ability to deter hostile acts or to compel other's to accept one's own policy objectives (Iusi-Scarborough and Bueno de Mesquita, 1988: 86). Foreign policy choices to maximize or increase security develop from perceptions of threat. Threat may be defined as a

demand accompanied by a statement of intent to inflict punishment if that demand is not satisfied (Iusi-Scarborough and Bueno de Mesquita, 1988:86).

The security of the state is the pre-eminent interest. Arnold Wolfers postulates that decision-makers are expected to place an exceedingly high value on the so-called possession of the state—above all on national survival, national independence, and territorial integrity—and react in fear to threats against these possessions. These traits are generally shared among all citizens (1963:12). A change in the security of the state is likely to bring about a change in policy; as external threat increases, a change in the foreign policy behavior of state becomes more probable. This is a dominant preference for all political participants when threat is high. Threat will increase political consensus lessening the impact of political competition. Wolfers' analogy of the house on fire is representative of this environment; a realistic expectation is for all individuals, regardless of their differences, to run for the exits to save their lives. In such environments, most citizens will focus on security issues in the face of external threat.

In the alliance context, this logic proposes that states facing high levels of threat are likely to react by forming alliances. Walt (1987) clearly articulates this reasoning in his examination of bandwagoning verses balancing behaviors in the Middle East. Reiter (1996) builds from Walt's approach by specifying differences in direct verses systemic threat. Direct threat reflects a specific demand of a state with the implicit or explicit promise of military action if the demand is not met (1996:49). Systemic threat reflects conditions of rising ambitions of a regional power (1996:49). Reiter proposes that

alliance formation should occur under increasing conditions threat. Given the theoretical positions of Wolfers, Walt, and Reiter, threat provides a clear motivation for the formation of alliances.

This point can be further refined by refocusing on the interaction between domestic political environments and threat. As has been argued above, higher levels of political competition and lower levels of power centralization, associated with democratic and highly constrained regimes, are likely to limit the number of allies or the frequency of alliance development. However, the development of threat creates political consensus as most, if not all, political participants turn attention towards external actors. Leaders should thus have greater policy latitude resulting from unified social preferences, and alliances are therefore more likely to be formed. Leaders in autocratic and unconstrained regimes already have policy making freedom. Rising threat should also provide increasing motivation for alliance formation. This logic proposes that political constraints are lessened in times of crisis. All states are expected to behave in similar manners. A second hypothesis arises in the threat context:

H5.2: Under conditions of rising external threat, all states will increase their efforts in forming alliances. There will be no differences across regime type.

This logic is further extended to address other motivations beyond security. The argument presented suggests that threat unifies preferences allowing for easier policy implementation. As threat diminishes, domestic interests return to prominence and decision-making constraints rise. Morgan and Campbell (1991) propose that the

influence of institutional constraints will be highest when the decisions are most visible. Alliances formed in peace time will be highly visible to the public. Given the influences of the domestic environment and the general orientation towards domestic preferences, democracies and constrained leaders will be less able to develop alliances for security under these conditions. Other motivations for alliance formation are necessary. Autocratic and unconstrained leaders can continue to develop security oriented alliances or seek some other goal given their policy freedom.

An emerging theoretical view of alliances examines the benefits of alliance participation in conjunction with the security relationship. Morrow (1987, 1991, 1994), Morgan and Palmer (1995, 1996, 1997, forthcoming) and Smith (1995 and 1996) each suggest that states enter into alliances to gain goods beyond security. Here “autonomy” or “proaction” reflect increased external influence gained by a state as a result of an alliance relationship. Certain states provide increased security for their alliance partners while gaining increased authority in their alliance partner’s policy network. These benefits include better terms of trade, control over resources, territorial issues, military bases, expansion of influence, etc. (Morgan and Palmer, 1996:4).

Given the benefits of alliance other than security, the position stressed here is that in democratic and constrained regimes leaders are forced to address domestic concerns when threat is low. Although leaders may individually prefer to focus on security issues, they are directed towards fulfilling domestically oriented preferences. Consequently, the motivations for alliance development must come from domestic or

institutional groups in these environments and will not be specifically focused towards security issues if they arise. Conversely, leaders in autocratic or unconstrained governmental systems continue to have greater latitude. Alliances will stem from the specific influential interests found in the political system and may be more security oriented or vary by the leader's and important constituent preferences. Given the mix of alliance related goods, Morgan and Palmer suggest that a leader's ability to implement policy decisions will have a strong influence on the volatility of the state's alliance portfolio (1996:25). The logic developed here extends this position by focusing on two conditions in times of peace: (1) the need for leaders to have enough support to reduce institutional hurdles for alliance development; and (2) the importance of specific interests or issues generating motivations for alliance development. Given the policy freedom for non-democratic and unconstrained leaders, the first condition should have little impact on their alliance behavior during peace time as they already have the policy latitude to meet specific interests given their governmental structures. A third hypothesis arises:

H5.3: Under conditions of peace or low threat, democratic and constrained states pursue alliances for broader goals than just security as a result of domestic preferences. Given greater policy making latitude, autocratic and unconstrained states pursue alliances for security as well as other specific interests and goods.

Alliance Reliability and Domestic Politics

One of the central problems for international relations theories is the frequency with which states actually honor alliance commitments when their own national

interests are not directly challenged by threat (Moriarty, 1997). Singer and Small (1966a) and Holsti, Hopmann, and Sullivan (1973) suggest that alliance members are more likely to assist and less likely to attack their fellow pact members, yet they tell us nothing about the reliability of honoring alliance commitments. Sabrosky's (1980) findings suggest first, that alliances composed of major-major or minor-minor powers functioned more efficiently. Second, alliances were honored at a higher frequency during the nineteenth century than during the twentieth century. Third, the period from 1900-1945 represents a structurally different type of international alliance system than the periods 1816-1899 and 1946-1965. The war and interwar periods held an abnormally high abstention rate of 78% and a decrease in the number of active alliances at 23%. Kegley and Raymond (1990) build from Sabrosky focusing on the post World War II period. In the period following World War II, alliances have represented well-defined internally cohesive groups. In part, this a direct reflection of the bipolar nature of the international system in which most states were members of one of the existing political blocks. However, none of these studies alludes to how national characteristics affect the reliability of honoring commitments.

Smith (1995, 1996) fills part of this theoretical void. He assumes that democratic states face higher domestic costs for failing to honor commitments and are therefore more reliable partners. This argument is similar to Fearon, (1994), Eyerman and Hart (1996) and Bueno de Mesquita and Lalman (1992) for war commitments. Each proposes that leaders in democratic systems will face high costs from domestic

audiences by failing to follow through with their commitments. These costs are further emphasized by the international reputation costs in failing to honor an alliance commitment discussed by Snyder and Diesing (1977), Kegley and Raymond (1990a, 1990b), and Moriarty (1997).

In this chapter, this examination of alliance reliability offers two sets of arguments presenting conflicting expectations about alliance reliability given domestic factors. Both offer plausible logic. The first presented below is derived from the theoretical framework developed in Chapter 3 and above. The second argument produces expectations relying strictly on the structural variant of the democratic peace that institutional constraints dictate foreign policy behavior regardless of domestic and international environments.

Given the stability of democratic and constrained state alliances discussed above and the legitimating component of participation, democratic and constrained states are expected to honor their commitments at a relatively high rate. The theory presented here proposes that leaders must garner enough support to get over the institutional hurdles associated with alliance formation processes to enter into alliances. This activity is more easily done under conditions of higher external threat. Once committed to ally, institutions and constituents will push leaders to honor state engagements because failure will produce a reputational cost both within the state and in the international environment. In this sense, once the alliance action has been implemented, institutional constraints push towards ensuring that it will be honored. Institutions and

norms make the activity of forming alliances more difficult in democracies and constrained states, but they also increase reliability given these participatory influences.

Conversely, this logic proposes that autocratic and unconstrained leaders are not as bound to their alliance commitments by domestic interests. As has been posed above, non-democratic alliances are not as durable. This finding suggests that non-democratic and unconstrained leaders may be more willing to renege on their commitments. The central costs here will not be related to the domestic context as it is in democracies and constrained states, but will be associated with the international reputational costs.

H5.4: Democratic and constrained regimes are expected to honor their commitments at higher rates than are their non-democratic and unconstrained counterparts.

An equally plausible expectation proposes the opposite alliance actions. Highly constrained executives have difficulty undertaking policy actions which are visible. Actions requiring formal support, associated with institutional acceptance and general public support, thus take both time and resources to implement. Actions, such as honoring an alliance commitment and entering a conflict, are difficult to undertake. In this regard, foreign adventures associated with alliance commitments will be rare events undertaken by constrained governments. Democratic and constrained leaders faced with honoring alliance commitments will be restricted by the need to garner domestic support for undertaking this type of policy. They will thus be less likely to honor an alliance commitment under most circumstances. Leaders in autocratic and unconstrained

regimes who do not have high institutional constraints should more easily implement policy decisions. Under these conditions, their policy latitude suggests that honoring alliance commitments will be high.

H5.5: Democratic and constrained states will be more likely to renege on alliance commitments than are their non-democratic and unconstrained counterparts.

Hypothesis 5.4 is derived directly from theory produced in this study whereas hypothesis 5.5 is developed from an ad hoc application of a body of theory. The empirical analysis will present an exploratory examination of these expectations as well as the other hypotheses. The next sections of this study outline the research design, perform and discuss the empirical examination and provide conclusions.

The International System and Time

These hypotheses address the interaction between the domestic politics of the state and the international system. Although not explicitly presented here, the structure of the international system has been theorized to have a significant impact on alliance formation. A number of alliance studies, Sabrosky (1980), Kegley and Raymond (1990), Duncan and Siverson (1982), Li and Thompson (1978), McGowan and Rood (1975), Siverson and Emmons (1991) and Simon and Gartzke (1996), and democratic peace and conflict studies, Farber and Gowa (1995, 1997) -- for a critique of this type of differentiation see Thompson and Tucker (1997) -- divide their longitudinal examinations into distinct periods. Kegley and Raymond (1990) provide an in-depth

discussion of cycles in alliance norms given historical periods. Both Sabrosky and Farber and Gowa provide justification for such divisions suggesting that after 1946, the growing number of states in the system dominate the number of observations found in earlier periods and obscure variation. The number of states in the system and capability distribution provide rationale for these types of differentiation. Farber and Gowa conclude that disaggregation is important: "A key feature of our analysis is that we use variations in the structure of the international system across time to help distinguish a 'pure' effect of democracy and dispute rates and an effect of democracy due to other factors" (1997:400).

The complete longitudinal span of all of these studies is consistent with the Correlates of War coding, generally from 1816 to 1965 or later. In this study, the time frame runs from 1816-1985. The common separation points have been 1816-1918, 1919-1946, and 1946 to the end of the data. The 1816-1918 period generally reflects a multipolar international system focused on balancing behavior. The 1919-1946 period is the interwar period prone to more isolationist policies and conflict leading Sabrosky to conclude that it is a structurally different period. Finally, the 1946 and beyond period is strongly bipolar and reflects an infusion of post colonial states. An examination of the number of states in the system suggests that these are empirically observable cut points. Given the past application of this approach and its justification, I choose to employ a similar application here by using the complete time period, and three subset periods, 1816-1918, 1919-1945, 1946-1985.

Research Design

The research design employed in this study focuses on the state-year as the unit of observation. Given the development of the hypotheses from the monadic level, this is the most appropriate framework. The analysis involved here includes a simple test of means comparing alliance frequencies between regime types, a negative binomial model to offer an estimation for the projected yearly number of allies across vary environmental conditions, and a probit model to examine the probability of honoring alliances given alliance opportunities. The data used in these empirical tests come from the Correlates of War studies, the Formal Alliance and Militarized Interstate Dispute data sets, and the Polity II and III data sets. A complete description of the operationalization of the variables is contained in the appendix, but brief descriptions are offered here. The variables are developed to represent the dimensions described in the theoretic portion of the study, particularly domestic political factors and external threat.

Alliance Frequencies and Reliability

The dependent variables employed throughout the analysis reflect alliance participation. In particular, the number of allies held by each state in each year reflects the aggregation of alliance partners for all alliance types -- defense pacts, neutrality pacts and ententes. The data reflecting the maintenance of commitments for reliability is a product of

alliance opportunities associated with war². Here a state's ally has become involved in a war. The state has a decision to maintain the alliance bond, take no action, or defect and join the ally's opponent³. A group of 1120 observations is identified for the period between 1816 and 1985. Each observation reflects a state's decision to honor the alliance commitment or not to honor the commitment when an ally becomes involved in war.

Domestic Political Structure

Two variables, democratic score and institutional constraint, widely employed in the examination of the democratic peace, are used to capture the different characteristics of domestic political environments. Both democratic score and institutional constraint are described in the chapter 4 as well as in the appendix.

Threat

A threat variable is developed to address the level of external hostility which confronts each state. Chapters 2 and 4 and the appendix contain a complete description of the operationalization of threat.

² Alastair Smith's investigation of alliance reliability (1996) suggests that the study of alliances has long suffered from selection bias associated with conflict. Most studies only focus on alliance cases in which commitments were called into action due to war and not on the deterrence associated with alliances. This portion of the study admittedly falls into this same pitfall.

³ A number of coding decisions were made in identifying honoring opportunities. First, some state dyads held multiple alliances with varying classes. The highest class was used as the determinant in the honoring decision. Second, neutrality pacts and ententes were coded as honoring if the state did not enter or entered on the ally's side.

Capability

A simple capability variable is implemented as a control for the status of the state as a major or minor power. Theoretically, major powers have been identified to be sought after allies because they bring greater levels of strength to the relationship.

Analysis and Discussion

The first task in this analysis is to determine if a quantitative difference does exist in the number of alliances held by democracies and non-democracies, and highly constrained and medium and low constrained states. This comparison will serve as a direct test of hypotheses one, two, and three. In these T tests, the variables of concern are dichotomized to provide a rough context for comparison. The democratic score is dichotomized at the six value, democracies having scores 6 or above and autocracies and autocracies having score of 5 and below. This point has been used elsewhere to differentiate democratic states from non-democratic states (Jagers and Gurr, 1995). The institutional constraint variable is dichotomized with high constraint at 16 and above and medium and low constraints at 15 and below. Again this level has been defined and used elsewhere (Maoz and Russett, 1993: 630). Finally, the threat variable is dichotomized at 4. This cut point reflects very limited dispute involvement. Consequently, it is a general reflection of the lack of external threat or the development of very low levels of threat. The number of allies per year is trichotomized to identify

the influence of threat on alliance tendencies. Three alliance measures are thus displayed for each time period: one representing alliances for all years, one representing alliances for years involving moderate to high levels of threat, and one representing alliances for years with no or very low levels of threat. This differentiation allows for examination of hypotheses two and three, all states will seek allies when confronted threat and alliance motivations during periods of low threat.

Table 5.1 displays the mean number of allies for democratic and non-democratic states held by year. Examination reveals three general trends. First, as was suggested by both Sabrosky and Farber and Gowa, the alliance measures for the entire period are dominated by the comparatively larger numbers of states and alliances found in the recent period, 1946-1985, verses the other periods. Consequently, the aggregate period number of allies is more reflective of this period than the interwar, 1919-1946, or the multipolar period, 1816-1918. Second, examination of the differentiated period means reflects an increasing number of allies through time. All states increase the number of allies held in times of high and low threat in all periods. In this regard, the structure of the international system and the number of states found in the system is reflected in the growing number of alliances through time, regardless of individual threat patterns. This trend suggests that alliances have become increasingly employed as a security policy option as the number of potential partners increases.

Third, in the individual periods, the two categories differentiated by threat for democracies and non-democracies reveal that the non-democracies have greater numbers

Table 5.1.
Mean Number of Allies for Democracies and Non-Democracies

Mean Number of Allies Per Year	Aggregate (1816-1985)		Multipolar (1816-1918)		Interwar (1919-1946)		Bipolar (1946-1985)	
	Democracy	Non-Democracy	Democracy	Non-Democracy	Democracy	Non-Democracy	Democracy	Non-Democracy
Allies (n)	6.17 (2149)	4.94 (6533)	0.62 (444)	1.27 (2622)	2.61 (491)	6.06 (1059)	9.65 (1214)	7.90 (2852)
<i>t values (Prob> T)</i>		<i>-5.78</i> (.0001)		<i>7.16</i> (.0005)		<i>8.05</i> (.0001)		<i>-5.57</i> (.0001)
Allies with Threat (n)	7.44 (997)	5.30 (3105)	1.05 (249)	1.19 (1127)	4.30 (195)	7.58 (508)	11.43 (553)	7.66 (1470)
<i>t values (Prob> T)</i>		<i>-6.20</i> (.0001)		<i>.978</i> (.329)		<i>4.32</i> (.0001)		<i>-7.49</i> (.0001)
Allies with Low Threat (n)	5.08 (1152)	4.62 (3428)	.07 (195)	1.33 (1495)	1.50 (296)	4.66 (551)	8.16 (661)	8.16 (1382)
<i>t values (Prob> T)</i>		<i>-1.78</i> (.076)		<i>15.94</i> (.0001)		<i>6.63</i> (.0001)		<i>.011</i> (.992)

of allies in 4 of the 6 categories. Democracies have greater allies only during conditions of moderate to high threat in the 1946-1985 period and share equal number of allies in during conditions of low threat for the same period. Regime type thus helps a identify a behavioral difference in alliance frequencies -- non-democracies are more likely to have expanded numbers of allies than democracies. Two further findings emerge concerning motivations associated with threat. Democracies held more allies under conditions of high threat than they did under conditions of lower threat, while non-democracies actually decreased the number of allies they held during conditions of threat in two of the three periods. Democracies and non-democracies appear to have different motivations for the development of alliances. Given the increases in allies associated with threat, democratic alliance behavior represents the security capability-aggregation motivation suggested by realism. Non-democratic alliance motivations appear to be representative of the "goods in addition to security" argument suggested by Morrow, Smith and Morgan and Palmer.

In Table 5.2, the institutional constraint variable offers very similar patterns to those associated with democratic score. Medium and low constrained states held more allies than their highly constrained counterparts in 5 of 6 threat categories, the exception being allies under conditions of moderate to high threat for the 1816-1918 period. The level of constraint has a significant dampening effect on the number of allies held by a state. Leaders facing lower constraint appear to be more likely to develop alliance treaties. Turning to alliance motivations, highly constrained states increased their allies

Table 5.2.
Mean Number of Allies for States with High Institutional Constraints and Medium to Low Institutional Constraints

Mean Number of Allies Per Year	Aggregate (1816-1985)		Bipolar (1816-1918)		Interwar (1919-1945)		Multipolar (1946-1985)	
	High	Medium and Low	High	Medium and Low	High	Medium and Low	High	Medium and Low
Allies (n)	3.23 (2850)	6.24 (5832)	1.06 (1299)	1.26 (1767)	2.35 (653)	6.88 (897)	7.00 (898)	8.83 (3168)
<i>t values (Prob> T)</i>	18.70 (.0001)		2.34 (.0194)		10.78 (.0001)		5.714 (.0001)	
Allies with Threat (n)	3.91 (379)	6.76 (2749)	1.23 (651)	1.10 (725)	3.60 (288)	8.80 (415)	8.32 (414)	8.79 (1609)
<i>t values (Prob> T)</i>	11.16 (.0001)		-1.097 (.273)		7.33 (.0001)		.894 (.371)	
Allies with Low Threat (n)	2.61 (1497)	5.77 (3083)	.88 (648)	1.38 (1042)	1.36 (365)	5.22 (482)	5.87 (484)	8.87 (1559)
<i>t values (Prob> T)</i>	18.81 (.0001)		3.95 (.0001)		8.09 (.0001)		7.74 (.0001)	

in all periods under conditions of threat. Medium and low constrained states did not show a consistent pattern. They increased their allies in the 1919-1945 period, decreased them in the 1816-1918 period, and showed no significant difference in the 1946-1985 period. Institutional constraint appears to reinforce the security motivation. Constraint levels are reduced under conditions of threat; political consensus develops as a reaction to threat. Consequently, alliances are more easily developed. Greater policy latitude associated with lower constraint is actually reflected in the lack of a significant pattern of action found here.

The empirical findings suggest that democracies and constrained states do not develop alliances as readily as their non-democratic and less constrained counterparts. As hypothesis 5.1 posed, the decentralization of political power and high levels of political participation increase policy making hurdles associated with alliance formation. Consequently, there is an identifiable pattern of higher numbers of allies for states with fewer policy constraints. Hypothesis 5.2 predicted that the development of external threat would increase alliance formation efforts of all states. The empirical findings here offer only partial support for this premise. Democracies and states with high constraints did behave in this manner. When democracies and constrained states do increase their numbers of allies, it appears to be a function of security needs. The data tend to confirm the security building nature of alliances as compared to the other goods nature of alliances for democracies. However, non-democracies and low to medium constrained states develop their allies in periods of limited threat. Given greater policy

freedom and narrower constituent interests, autocratic/anocratic and unconstrained leaders may develop alliances for security interests, but also for other interests, perhaps economic aid or trade. Unconstrained leaders have greater ability to form alliances and appear to do so more regularly during peaceful periods. The traditional alliance formation motivation, the reaction to external threat, is not supported by these types of states. This behavior contradicts the security motivation long developed in the alliance literature. Regime type thus appears to have a significant impact on alliance behavior relative to traditional alliance theory motivations. Security does indeed motivate alliance choices, but it is obviously only one of many impacts as exemplified by non-democratic behavior under conditions of threat. These results indicate that highly constrained leaders have limited ability to develop alliances in times of peace, but may actually gain a great deal of autonomy in times of threat. Consequently, the number of allies increase along with the addition of threat.

The complete relationship involving alliance frequencies, regime type, institutional constraints, threat and power is more fully examined in a series of negative binomial regression models -- an extension of the Poisson regression model. Poisson regression is generally used when the dependent variable reflects a count holding discrete values and a preponderance of zeroes and small values (Greene, 1993: 676-679). Here two underlying assumptions, independence and homogeneity, allow for maximum likelihood estimation of the parameters from the Poisson distribution (King, 1989, provides an in-depth discussion of these assumptions and the mathematical

development). Given the independence assumption, Benoit (1996) suggests that Poisson processes are implicitly “memoryless” neglecting previous circumstances on current environments. Furthermore, in the context of international relations, he concludes that the assumptions do not allow for adequate assessment of international circumstances (Benoit offers a complete development of the negative binomial model (1996: 641-644)⁴--the appendix provides a representation of a similar model. Instead, the negative binomial model allows for greater variance, while the Poisson limits the value of variance to the value of the mean or less, better reflecting international conditions. Theoretically, the negative binomial model better represents alliance relationships given the alliance associations between states and the linkages across time.

The negative binomial model is used to examine the impact of domestic and external factors on the alliance behavior of states. The dependent variable reflects alliance behavior as the number of allies a state holds in a given year. The independent variables reflect the state’s power status, democratic score, institutional constraint, threat, and a lagged measure of the dependent variable. The inclusion of the lagged dependent variable is a control for autocorrelation. The number of allies held by a state is not a static measure, however, it is a measure which is “sticky” or maintains trends in time -- alliances are generally maintained for significant periods. Consequently, in

⁴ A diagnostic test for overdispersion and the use of the negative binomial regression was used. The test, developed by Cameron and Trivedi (1990), showed significant signs of overdispersion giving support for the use of the negative binomial model over the regular Poisson model. The test is presented in appendix 2.

order to control for autocorrelation, the lagged dependent variable is included⁵. Given their theoretical development, the predicted signs should be negative for the democratic score variable and negative for the institutional constraints variable. The sign of the threat variable will be positive. Power status should also have a positive impact -- Siverson and Duncan (1976) conclude that major powers tend to be more alliance prone. Finally the lagged dependent variable is always expected to have a positive sign given the increasing trend in the number of allies over time identified in Tables 5.1 and 5.2. The signs of these variables are easily identified through examination of the negative binomial regression parameter estimates found in Table 5.3.

Table 5.3 displays negative binomial regression models for each period. The variable coefficients, the overdispersion parameter (γ), the variance and the log-likelihood estimate are provided in the table. The coefficients offer initial support for hypotheses 5.1 and 5.2. The aggregate period reflects the predicted signs for all variables, although the democratic score and threat variables are just over the .10 significance level. In the individual periods, democratic score is negative in 2 of 3 periods, institutional constraint is negative in 2 of 3 periods, threat is positive for all periods, power status is positive for 2 of 3 periods, and the lagged dependent variable is always positive. The coefficients reflect the general inhibition that the democracy score and institutional constraints place on alliance formation. Participation, institutional

⁵ A Poisson regression using time-series cross sectional data is not commonly undertaken. Given methodological limitations associated with maximum likelihood techniques in this study, I chose to employ the lagged dependent variable as suggested by Beck and Katz (1995) to limit bias.

Table 5.3.
Negative Binomial Regression Models by Period: The Number of Allies held by Year

Variable	Aggregate (1816-1985)	Multipolar (1816-1918)	Interwar (1919-1945)	Bipolar (1946-1985)	Expected Signs
Constant	0.342** (5.087)	-4.027** (-10.959)	0.31735* (1.686)	0.74398** (9.527)	
Democracy Score	-0.00329 (-1.627)	-0.06802** (-6.592)	-0.03823** (-6.998)	0.005817** (2.054)	-
Institutional Constraint	-0.04526** (-9.919)	0.1268** (6.091)	-0.02681** (-2.047)	-0.032285* (-5.645)	-
Threat	0.00244 (1.590)	0.0156** (3.279)	0.01715** (4.315)	0.001896 (1.087)	+
Power Status	0.50180** (10.605)	1.0069** (13.559)	0.38545** (3.405)	-0.16840** (2.841)	+
Lagged Number of Allies	0.17933** (85.106)	0.4618** (35.541)	0.14451** (15.036)	0.01404** (.000771)	+
γ	0.76448** (44.580)	0.4200** (11.457)	1.6989** (19.566)	.29002** (.008385)	
σ^2	3.1477	2.5220	6.4679	2.3365	
Log- Likelihood	-17105.81	-2550.894	-4320.586	-10198.13	
N	8537	3011	1528	3998	

Note: Figures in parentheses are $z = \beta / \text{Std. Error}$.

** : Significant at the .05 Level

* : Significant at the .10 Level

limitations, and decentralized power all obstruct the development of alliances.

Conversely, threat and power increase the likelihood of formation. The coefficients support hypothesis 5.1. Democratic and constrained leaders have difficulty forming alliances. Non-democratic and unconstrained leaders have greater latitude and therefore develop alliances with greater frequency. The negative binomial coefficients also support the security motivations for alliances associated with threat as posed in hypothesis 5.2. Threat has a consistent positive impact on alliance frequency. Power status also increases the frequency of alliance development. Major powers hold more allies than their minor counterparts -- an exception here is the coefficient of the 1946-1985 period. Finally the lagged number of allies reflects the general trend of increasing alliance development over time.

The coefficients offer insight into the relationship between alliance formation, domestic structure and international threat. However, the substantive effects are difficult to interpret solely from the coefficients. A discussion of the conditional effects of the variables and an examination of these effects on the number of calculated allies will aid in interpretation. Using the coefficients, the variable means and the constant a conditional β is calculated using the following equation (see Greene 1993:672-681 for a representation of this terminology):

$$\beta = \beta_0 +/\- \beta_1(\text{mean Institutional Constraint}) +/\- \beta_2(\text{mean Democratic Score}) +/\- \beta_3(\text{mean Power Status}) +/\- \beta_4(\text{mean Threat}) +/\- \beta_5(\text{mean Lagged Number of Allies})$$

Table 5.4.
The Predicted Number of Allies for Each Year

		Aggregate (1816-1985)	Multipolar (1816-1918)	Interwar (1919-1945)	Bipolar (1946-1985)
Democracy Score	maximum	2.00	0.14	1.38	5.08
	std.dev. above	2.03	0.22	1.51	4.98
	std. dev. below	2.12	0.49	2.62	4.55
	minimum	2.14	0.53	2.95	4.52
Institutional Constraint	maximum	1.29	0.99	1.62	3.45
	std.dev. above	1.75	0.48	1.81	4.20
	std. dev. below	2.47	0.22	2.18	5.39
	minimum	3.20	0.17	2.63	6.18
Threat	maximum	2.16	0.44	2.72	4.92
	std.dev. above	2.11	0.36	2.27	4.83
	std. dev. below	-	-	-	-
	minimum	2.04	0.29	1.77	4.69
Power Status	Major	3.26	0.76	2.80	4.06
	Minor	1.97	0.28	1.91	4.80
Lagged Number of Allies	maximum	1275.33	48.14	127.22	146.66
	std.dev. above	8.39	1.04	6.17	16.36
	std. dev. below	-	-	-	-
	minimum	0.82	0.19	1.08	1.43

The exponential of the β is then used as a prediction of the number of allies developed by the state in that given year:

$$\text{where } y_i = 0, 1, \dots, \sigma^2 > 1, \lambda_i = \exp(x_i \beta)$$

Table 5.4 displays the number of allies computed by substituting values of a specific variable while holding the rest of the variables stationary at their means. Substantively, the changes in the number of allies reflect the magnitudes of the effect of the independent variables on predicted values for the number of allies. Four values for each variable are implemented, the maximum, the minimum, one standard deviation above the mean, and one standard deviation below the mean. Cases which produced negative counts are eliminated.

An overview of the table reflects that the aggregate time period and the individual periods reflect the expectations developed from the theory with three exceptions: (1) democratic score in the 1946-1985 period which is positive, (2) institutional constraint in the 1816-1918 period which is positive, and (3) power status in the 1946-1985 period which is negative. Otherwise all values are in the predicted direction. The individual effects of the variables are clearly recognizable. The greatest effect stems from the lagged number of allies. This is clearly anticipated given the relationship between the current and previous years allies. For the other variables, institutional constraint has the largest range of impact across all individual and the aggregate periods. States with the minimal constraint level generally hold two more allies per year than states with the maximum constraint level. States with lower

democratic scores also hold more allies. For the complete period, the most autocratic state held .14 more allies than the most democratic state, a negligible difference.

Democratic score has its greatest impact during the interwar period where the most democratic states held 1.38 allies compared to the 2.95 held by the most autocratic states.

Threat has a significant influence in two of the time periods, 1816-1918 and 1919-1945. During the multipolar period, 1816-1919, the maximum level of threat resulted in .44 allies while the minimum level reflected .29 allies. The greatest impact of threat is found in the interwar period resulting in 2.72 allies for its maximum values and 1.77 for its minimum value. Given the relative effect of threat compared to institutional constraints and democratic score, it appears to have a lesser influence on the number of allies held than the domestic variables. The development of alliances for increased security is supported, but domestic structures have an overriding influence on alliance behavior. Consequently, these predicted values suggest that even in the face of external threat, domestic factors influence policy decisions.

Power status holds a positive effect on the number of alliance partners in the aggregate and two of three individual periods. Powers greatest influence is seen in the aggregate period when major powers are predicted to have 1.29 more allies than minor powers. This finding concurs with previous empirical evidence that major powers are those states which are most likely to ally and have large numbers of allies.

What do the predicted values generated from the negative binomial models suggest? The general models do provide support for the hypotheses. Constrained and democratic states have fewer alliance partners than do autocratic and unconstrained states. The relationship between the democratic score and institutional constraint is moderately correlated, having a Pearson's r of .692⁶, and tend to be mutually reinforcing, but do not necessarily have to be so. It is important to note that democratic states often have high institutional constraints, but non-democratic states can also maintain high constraint levels⁷. Threat and power status also increase the likelihood of forming alliances, but these effects do not have as great an influence as do the domestic factors in the alliance context⁸. The general model provides a better depiction of the factors which affect alliance formation than the one dimensional security theories long

⁶ Multicollinearity should not be problematic under these conditions. A number of linear based diagnostics were run for this data. The pairwise correlations and partial correlations for the model do not exceed .80, and the two variables of interest, institutional constraint and democratic score, are correlated at .692. Auxiliary regressions using only one of these variables in the negative binomial regression do not reveal significant changes in the estimates. Furthermore, Gujarati (1992) suggests that measures to avoid multicollinearity, such as dropping one of the correlated variables, is often "worse than the disease." I should emphasize that this approach is predicated on the common techniques used in ordinary least squares regression. Little work has examined this question in maximum likelihood techniques such as the negative binomial model.

⁷ A simple 2x2 table reflects this relationship:

	Medium/Low Constraint	High Constraint
Non-Democracy	5329	1204
Democracy	503	1646

⁸ An analogue of a F test was applied to the general binomial model by estimating the log likelihood functions of the complete model, representing all the variables, a domestic model including the institutional constraint, democratic score, and lagged dependent variable, and a traditional model including threat, power status and the lagged dependent variable. A log likelihood ratio was then calculated by subtracting the general model from both the traditional and the domestic models. Statistically, the log likelihood ratio was slightly higher for the domestic model, -93.88 to -109.42. Converting these values to a χ^2 values produced results of 187.6 for the domestic model and 218.8 for the traditional model. The traditional model appears to produce slightly better results when examined individually.

associated with alliance development. The inclusion of the domestic variables clearly differentiates alliance behavior across state types. We can now see that non-democratic states are much more likely to develop alliances than democracies. Furthermore, non-democracies are less likely to form alliances under conditions of threat than are democracies. Security and threat are central factors, but they are far from the sole determinants influencing alliance policies.

The second relationship in this study, the reliability of alliance commitments relative to regime type, is examined via a probit model and an associated development of conditional probabilities. Two competing hypotheses were formulated about alliance relationships. One suggests that democratic and constrained states to be more likely to honor alliance commitments due to the domestic costs of not following through with their pledges. Leaders will therefore be predisposed to following through. Autocratic and unconstrained leaders do not face the same domestic costs and consequently can renege on alliance commitments. The other hypothesis offers opposite predictions. Democratic and constrained states will be limited by the visibility of honoring commitments. Institutions and public opinion will limit leaders' abilities to make good on their commitments. Again, unconstrained and autocratic leaders have greater policy latitude and therefore can honor their commitments. The predicted signs for these variables are thus positive for the democratic score and institutional constraint for the hypothesis 5.4 and negative for hypothesis 5.5. Control variables for power and the threat level facing the state are included in the model and are also expected to have

positive signs. Sabrosky (1980) has shown major powers to honor their commitments. Iusi-Scarborough and Bueno de Mesquita (1989) conclude that states under higher levels of threat are more willing to honor commitments than are states in peaceful environments.

Table 5.5 displays the binomial Probit coefficients for democratic score, institutional constraint, threat, and power status variables in each period. The Aggregate, Multipolar, and Bipolar models are all significant at the .01 level given the χ^2 values⁹. The fourth model associated with the Interwar period does not reach a high level of significance nor have any significant coefficients. Consequently, this period will be ignored in the remainder of the analysis. Recall that the one theoretical position proposed that domestic factors should limit alliance reliability, hypothesis 5.5, and that the other argued domestic factors should increase this reliability, hypothesis 5.4. The probit models serve as a critical test between these positions. For the Aggregate period, two variables are significant: democracy score and threat, with democracy score being in the predicted direction for hypothesis 5.5 and threat being in the predicted direction for all hypotheses. Institutional constraint and power status are not significant. The sign of constraint does support for hypothesis 5.4 and the sign of power status supports both hypotheses 5.4 and 5.5. All variables are significant in the Multipolar and Bipolar

⁹ The binomial probit data was also analyzed for multicollinearity as suggested in footnote 8. Here the pairwise correlation between institutional constraint and democratic score is somewhat higher with a Pearson's correlation coefficient of .718. In this case, the auxiliary regressions do show changes in the coefficients, levels of significance and some sign changes. Faced with a decision to drop a variable or employ the complete model, I chose to default to Gujarati's advice, "The best practical advice is not to

Table 5.5.
Binomial Probit Regression Models Honoring Alliances under Conditions of War

Variable	Aggregate (1816-1985)	Multipolar (1816-1918)	Interwar (1919-1945)	Bipolar (1946-1985)	Predicted Signs
Constant	-0.3060 (-1.466)	2.1408 (1.583)	0.9344** (1.491)	-1.47061** (-5.006)	
Democracy Score	- 0.026379** (-3.511)	0.10373** (3.097)	0.00866 (0.358)	-0.078612** (-7.061)	H5.4:+ H5.5:-
Institutional Constraint	0.01467 (0.996)	-0.16629** (-2.086)	-0.05224 (-1.247)	0.10532** (4.851)	H5.4:+ H5.5:-
Power Status	0.19578 (1.576)	-.44104* (1.734)	0.3392 (0.994)	.74935** (3.547)	H5.4:+ H5.5:+
Threat	0.0190** (3.584)	0.0743** (3.767)	-0.000076 (-0.004)	.14398** (2.387)	H5.4:+ H5.5:+
Log- Likelihood	-746.01	-86.74	-115.57	-508.0443	
χ^2	41.549	35.553	7.857	63.387	
Frequencies					
0	487	68	65	354	
1	633	84	119	784	
Predicted Outcomes	.623	.724	.630	.630	

Note: Figures in parentheses are β /Std. Error.

Dependent Variable: Honoring an Alliance Opportunity

** : Significant at .05 level

* : Significant at .10 level

drop a variable from an economically viable model just because the collinearity problem is serious," (1994:308), and use the complete model.

periods. In the Multipolar period, institutional constraint supports hypothesis 5.5, democratic score supports hypothesis 5.4, and threat supports all hypotheses. In the Bipolar period, democracy score supports hypothesis 5.5, institutional constraint supports hypothesis 5.4, power status and threat are in the predicted direction for all hypotheses. Given the three significant models, both hypotheses 5.4 and 5.5 accurately predicted significant variable signs in 7 of 12 opportunities. Much like the negative binomial parameter coefficients, substantive interpretation is difficult solely from examination of the estimates. Consequently, the coefficients are converted into predicted probabilities by creating another latent β in a similar manner to the negative binomial models:

$$\beta = \beta_0 \pm \beta_1(\text{mean Institutional Constraint}) \pm \beta_2(\text{mean Democratic Score}) \pm \beta_3(\text{mean Power Status}) \pm \beta_4(\text{mean Threat})$$

The normal distribution of the β is then used as the probability that a state will honor its alliance:

$$\text{where } y_i = \phi(x_i, \beta)$$

The substantive effects of the variables are presented in Table 5.6. An overview of the table reveals that only threat offers a consistent predicted pattern across all periods. Threat has a positive influence on the probability of honoring. Its effect is greatest for the Multipolar period having a range of increase of .65 moving from the minimum to the maximum level. The Aggregate and Bipolar periods offer similar, but

Table 5.6.
The Conditional Probabilities for Honoring Alliance Opportunities

		Aggregate (1816-1985)	Multipolar (1816-1918)	Bipolar (1946-1985)
Democracy Score	maximum	.434	.940	.207
	std.dev. above	.489	.777	.319
	std. dev. below	.642	.326	.764
	minimum	.645	.302	.775
Institutional Constraint	maximum	.622	.251	.883
	std.dev. above	.588	.419	.693
	std. dev. below	.545	.697	.399
	minimum	.518	.796	.240
Threat	maximum	.671	.822	.638
	std.dev. above	.629	.756	.598
	std. dev. below	.502	.352	.500
	minimum	.488	.175	.497
Power Status	Major	.630	.471	.793
	Minor	.554	.645	.527

less extreme patterns, having a ranges of .18 for the Aggregate and .14 for the Bipolar using the extreme values. High levels of threat clearly increase the probability of honoring alliance commitments.

The democratic score, institutional constraint, and power variables, however, do not have consistent patterns across the time periods. Democratic score has a negative relationship for the Aggregate and Bipolar periods, but is significantly positive for the Multipolar period. This behavior can be attributed to the limited number of democracies found in the Multipolar period. The Bipolar period suggests highly democratic states are .57 less likely to honor than their most autocratic counterparts. The Aggregate period reflects this general trend in a .21 higher reliability for autocratic states over democratic states. The Multipolar period presents a contrasting environment. Democracies are .64 more likely to honor than are the autocracies. These mixed results offer support for each of the reliability hypotheses in the democratic score context. In this sense, no definitive conclusion can be offered about which theoretical position more adequately models commitment behavior.

Institutional constraint behaves in a similar manner. Here the Multipolar period is significantly negative reflecting the domestic limitations placed on alliance reliability. The range of effect is .54. The Aggregate and Bipolar periods produce the opposite relationship, institutional constraints increase the probability of honoring commitments. In the Bipolar period, highly constrained leaders are .64 more likely to honor than are unconstrained leaders. Similarly, in the Aggregate period, highly constrained leaders are

.104 more likely to honor alliances than are unconstrained leaders. Again, it is difficult to identify the underlying effect of constraint given its varying behavior across time.

The power status variable is significant at the .10 level in only the Multipolar and Bipolar periods and has opposite signs. The Bipolar period reflects the predicted direction with major powers being .27 more likely to honor than minor powers. The Multipolar period predicts that minor powers are .17 more likely to honor.

The structural environments of the specific time periods do appear to affect the influences of democratic score, institutional constraint, and power status on alliance reliability. The mixed signs associated with these variables make generalization about their effects difficult. If employing the aggregate time period, the democratic score supports the theoretical view that participation limits a leader's ability to honor commitments. Conversely, institutional constraint, increases a leader's ability to honor. The net ranges of the variables indicate that the democratic score has a larger impact when both are taken in tandem. The one constant in the reliability examination is threat. Threat consistently increases the probability of honoring in all time periods. Power does not have a significant impact in the complete time span. Given the individual period discussions, overarching conclusions are difficult to make about alliance reliability. However, these results indicate that domestic environments and threat do have an impact on honoring behavior. Given their individual effects, the results show that across these periods, domestic and international environments are key determinants of alliance reliability.

Conclusions

The findings of this study make three contributions to the broad body of alliance literature: (1) they specify the effects of internal structures and norms on the formation and honoring of alliance commitments; (2) they suggest underlying motivations for alliance development beyond security concerns; and (3) they integrate the domestic and international environments into a broader theoretical perspective of alliance behavior. It is argued that domestic political environments have a direct impact on alliance behavior, both with respect to the forming of alliances and the honoring of alliances when partners are involved in war. The findings here reflect varying alliance behaviors across regime type. Non-democracies and medium-low constrained states generally maintain higher number of allies than their democratic and highly constrained counterparts. This conclusion echoes empirical examination found by others (Simon and Gartzke, 1996). Alliance decisions do take into account domestic considerations or are forced to via institutional networks. Consequently, it is possible to identify clear behavioral differences across regime types given alliance frequencies.

The empirical results also indicate that domestic environments affect alliance reliability. However, the patterns of behavior are not as clear. Alliance behavior varies given the particular international context, as illustrated in the distinct longitudinal periods presented above. This finding is congruent to previous examinations by Sabrosky (1980), Siverson and Emmons (1991), Kegley and Raymond (1990), and

Farber and Gowa (1997). Consequently, there appear to be distinct differences in the effects of the domestic variables on alliance reliability given the time period. Regardless of direction, these are significant effects on external behavior.

Second, given the effect of internal structures on alliance development, differing motivations for alliance formation are identified. Alliance theory is largely predicated on the security-building process associated with increasing capabilities. The findings here reinforce this motivation for some states: democracies and highly constrained states, but also suggest that other motivations enter into alliance development. In particular, non-democracies and medium-low constrained states reflect the opposite behavior, these states become more autonomous when threat increases, a time when we would generally expect all states to attempt to form alliances. The intriguing aspect of this relationship is the opposing alliance efforts given the conditions of threat. The alliance development process thus appears to involve motivations other than security. In this regard, the findings here support alliances theories by Morrow (1987, 1991), Smith (1995), Gowa (1994) and Morgan and Palmer (1996, forthcoming). States act for the benefit of external goods beyond security reflected in increased influence, trade or other goods. Given the underlying goals of alliance formation as a function of domestic choice, such motivations are clearly externalized in the alliance processes.

Third, the integration of both domestic and international factors has allowed me to formulate expectations about alliance behavior that have previously been ignored, particularly alliance development under conditions of low threat or peace. The

development of theory in narrower decision-making environments, those associated with realism, have focused solely on the relationship between the state and the international system. In this sense, realist alliance theories had little to say about alliance behavior not predicated on security concerns. Others have concluded that other motivations do lead to formation of alliances. The inclusion of domestic factors in this process identify an underlying impetus for non-security motivations. By expanding the decision-making scope to address both the domestic and international arenas, we gain a fuller picture of policy formation. By focusing on either one arena or the other, we overlook a great deal. The conclusions reached here reinforce the need to integrate both domestic and systemic effects on foreign policy behavior.

Chapter 6: Foreign Policy Substitution

This chapter applies the resource theory of security policy choice developed in Chapter 3 to foreign policy substitution. Traditional examinations of security policy have focused on a very narrow subset of policy activity, war behavior, arms development, and alliance formation often neglecting the potential linkages between these policy choices. However, under varying environmental conditions states may choose to substitute one policy for another in their foreign policy behavior (Most and Starr, 1989). The substitution of policy is particularly relevant under conditions of finite resources. Resources used for security can obviously not be applied to other policies. When competition for these resources is high, the substitution of high cost security policies for lower cost security policies is expected. Conversely, when external threat is high, the substitution of more effective high cost security policies is expected. Changes in these political environments directly affect this substitution dynamic. This chapter explores the theoretical relationships between threat, political competition for resources, state capability and foreign policy substitution.

Introduction

Foreign policy behavior, particularly dispute and war involvement, has long been an area of interest in the study of international relations. A myriad of theories have developed positing different rationales for policy choice. Traditionally, most of these theories have focused on the interaction between the state and the international system

from the realist perspective. Conversely, alternative bodies of theory examining the impact of domestic influences on foreign policy decisions have developed in waves throughout the last thirty years -- gaining interest and then dying away (See for example Rosenau, 1966, 1967; Rummel, 1975-1981; East, 1978). Recently, however, the effect of domestic actors on foreign policy behavior has gained a renewed interest. In part, this resurgence is associated with the empirical results produced by the democratic peace studies and their ensuing debate. Most of these studies examine the interaction between the domestic structure and the war/dispute behavior of the state. The findings of the democratic peace studies and empirical examinations of diversionary theory suggest that domestic factors are important causal determinants of foreign policy choice.

In this chapter, I continue this focus on the domestic-foreign policy interaction, but do so from a more general perspective. Instead of examining one foreign policy behavior, military expenditure or alliance formation, I focus on the development of security policy behavior which takes into account a continuum of foreign policy activities -- alliance formation, military expenditure and dispute participation. Furthermore, I attempt to broaden the focus on policy inputs by examining both the internal and external environmental conditions associated with policy formation. Leaders address both the domestic and foreign arenas simultaneously in their formation of policy. By limiting focus to one arena, an incomplete picture of the policy formation process is advanced. I develop a theory which focuses on the flow of resources within the state and how the control over resources and decision-making power influence policy choices. Leaders make

decisions in reaction to national and individual preferences, but also in reaction to exogenous events affecting each state's security. Resource allocation and diversion are the central means used in the development of policy.

The theory offers a resource allocation and diversion approach to security policy selection. It is argued that security policies are implemented according to their resource use. As environmental conditions change, reflected in the rise or decrease of an external threat or domestic political competition, security policies are also expected to change. This study seeks to identify the conditions associated with policy change and what types of policy are implemented when change occurs. A number of hypotheses are produced from this resource framework. The hypotheses are then empirically tested and conclusions drawn about the validity of the theoretical model. The objective of this chapter is to develop an overarching approach about foreign policy motivations based on resources taking into account both the domestic and systemic effects on foreign policy behavior. I argue that theory must take into account both arenas in order to offer realistic expectations about security policy.

Literature Review

The development of security policy has been addressed by a number of separate bodies of literature in international relations: alliance formation, arms development and arms races, dispute and war participation, foreign policy substitution, and the influence of

domestic politics on foreign policy behavior. Foreign policy substitution is of relevance here.

Foreign policy substitution theories focus on the implementation of security policy when a state faces increasing external threat (Most and Starr, 1989). A simple definition for foreign policy substitution reflects the choice of one policy over all other policy under certain conditions of threat. Most and Starr conclude that “decision-makers subjected to some stimulus could, *under at least certain conditions, substitute one policy means for another,*” (1989:103). A number of conditions are required for substitution to take place. Diehl (1994) suggests three: (1) a continuum of policy options exist -- leaders have multiple policy options which can be employed; (2) policy options can arise under similar situations -- context will identify relevant policy choices; and (3) options are similar in the goals they achieve -- policy choices will produce increased security. The substitution literature has predominantly focused on a state’s substitution of alliances for arms and vice-versa. Coneybeare (1992, 1994), Altfield (1984), Sorokin (1994), McGinnis (1990), Morgan and Palmer (1995, 1996, 1997, forthcoming) and Simon and Starr (1994, 1996) all develop models focusing on security policy selection based on some type of security maximization process. In most, a comparative statics framework or production efficiency model identifies a particular policy based on a cost benefit analysis.

A number of theoretical questions are left unanswered in many of these examinations. Most focus on the endogenous process of policy selection as a result of

“cost” or efforts to minimize costs. Costs are generally defined in terms of resource use and political support and are equally applied by all leaders in all political environments. Of these studies, only Morgan and Palmer, McGinnis, and Simon and Starr attempt to integrate a domestic political cost variable which can differentiate state and regime types. Consequently, in most studies, the substitution process excludes any potential impact of institutional structure or system variation on policy decisions. Second, these studies rarely take into account the systemic environment in their policy selection process. All assume some type of exogenous threat, but do not offer any explanation of how threat may affect policy selection. The propositions offered in most substitution theories reflect a rational decision-making framework for policy selection, but the motivations for policy selection, outside of cost-benefit analysis, are eliminated. We are left identifying security policy choices devoid of context within the state, and without recognition of varying levels of threat outside of the state.

A general assumption behind substitution is the belief that all states seek to maximize security while minimizing security costs. Institutional frameworks within political systems influence how political decisions are formulated and implemented. In particular, institutions affect how decision-making power is centralized and how resources are allocated for policy decisions. Both of these processes are crucial in the development of security policy. I expect that as these institutions and structures vary so will security policy within the substitution rubric. The role of domestic political environments and structures is a key in developing theory addressing foreign policy

In this chapter, I address some of the theoretical weaknesses found in the study of substitution. I suggest that a theory of security policy selection can be developed as a function of resource flows through domestic institutions. The ability to control and divert resources within the domestic political environment serves as the foundation for policy selection. Leaders with monopolies over resource allocation and diversion are likely to face less domestic constraint and consequently have a greater ability to pursue policy designs. This freedom is reflected in both domestic and foreign policy behavior. The theoretical framework developed in Chapter 3 proposes that security policy choice is a function of resources given internal and external political environments. The selection of a policy choice reflects the interaction of numerous individual, social and political conditions. Leaders make decisions relative to aggregated social preferences and to their individual preferences. In the policy environment, power reflects the ability to institute actions which satisfy preferences. Consequently, policy choices are a function of powerful actors within a given political system. Foreign policy exhibits the same conditions as domestic policy.

Theoretical Development

Recall that the theoretical framework proposed in this study is founded on a simple intuition: leaders are faced with a multitude of individual and group preferences, but given finite resources, they can not satisfy all preferences. Decision-makers thus prioritize the preferences they address through the implementation of public policy. The

ordering or prioritization of this policy agenda is developed in reaction to environmental conditions associated with both international and domestic arenas. Two central conditions emerge, the threat level being experienced by the state as a product of external actors and the competitive nature of the governmental system. Threat reflects the urgency associated with the issues at hand, while institutional structure emphasizes preferences of important political actors. Decision-makers react to these conditions by making resource tradeoffs between the priorities; they adjust the resources flowing between the priorities in accordance with changes in the policy making environment.

Resource constraints force decision-makers to face the difficult tasks of providing security, while at the same time attempting to fulfill individual preferences. Resource allocation and distribution are the mechanisms used to meet all preferences and goods. The particular policy choices, as exemplified by Lowi's policy typology -- distributive, regulatory or redistributive policies -- reflect the disaggregation of political goods. Given the finite nature of resources, states are forced to make decisions about policy, or more specifically devise budgets and rank how resources are allocated. The provision of specific services affects the domestic social environment. Those individuals whose preferences are met will support allocation decisions. Conversely, those individuals whose preferences are not being met will oppose allocation decisions.

Effects of the Domestic Environment

How institutions affect politics is a product of the political constraints they place on leaders. In particular, the central features of any political system reflect the distribution of decision-making power, the levels of political competition, the level of political opposition which arises as a function of competition and the aggregation mechanisms for social preferences and public goods. These characteristics can be further broken down into leadership selection processes and power sharing across decision-making groups.¹ In this sense, institutions affect domestic politics and foreign policy in the same manner: they influence the decisions leaders make.

A simple expectation which arises from any discussion of institutions is the proposition that as institutional structures change policy behaviors can change as well. Regime structure is thus considered to be a central determinant of foreign policy behavior (Rosenau, 1966, 1967; Andriole, Wilkenfield and Hopple, 1973; Salmore and Salmore, 1978; Geller, 1985). Salmore and Salmore (1978) specifically focus on the question of foreign policy outputs resulting from regime structure and resource allocation. The authors identify three central characteristics which influence the flow of resources and, in turn, foreign policy behavior: (1) the unity of the regime in control; (2) the accountability of the regime resulting from political participation and public contestation; (3) the disposition of the regime to exert power and use resources (104-105). A leader's ability to control and dispense political resources is a function of the political institutionalization

¹ In the theory developed here I subsume these characteristics under the heading of political competition for resources. I define politics to be a reflection of competition for resources and decision-making power.

of the regime and the societal support of the regime. Salmore and Salmore conclude that the “domestic political rules of the game” determine the latitude of decision-making freedom for leaders. Consequently they hypothesize that foreign policy behavior is constrained by how these factors affect resource use.

Two institutional characteristics are emphasized: political competition and the centrality of decision-making power. The theory is predicated on the leader’s ability to gain access to or to extract resources. The selection of any policy is a function of the resource constraints placed on the state. The institutional structure of the state, simply the form of governmental system, establishes the resource aggregation and extraction procedures. Thus, a leader’s ability to access resources is a function of the centralization of political power and the extent of participation and competition of actors within the system.

Leaders attempt to develop policy choices which minimize opposition. Increased extraction of resources or the diversion of resources from popular policies have the potential to organize opposition. The type of political system is of great importance in the resource context. Open political systems maintain a high degree of competition, opposition, tolerance for autonomous groups and acceptance of constraints on governmental power (Hagan, 1987). Closed political systems seek to eliminate competition and concentrate political power (Hagan, 1987). Hagan (1993) suggests that opposition towards policy choices is a function of fragmentation within the regime, fragmentation outside of the regime, and system structure. Power centralized in the hands

of a leader or dictator gives the leader more autonomy in the extraction process. With easily accessible resources, dictators have more policy autonomy. In situations with less centralized power, institutions will play more of a role. Leaders are forced to bargain with important domestic actors in order to get access to resources. Decision-making constraints will thus affect policy choices.

As power is distributed through society, political participation becomes increasingly important. I focus on the participation of citizens in the political process and how participation affects political competition. In political systems with high levels of (un)regulated participation, decision-making constraints should be relatively high. Dissatisfaction with leadership policy selection generally results in political opposition. In turn, executive selection processes will reflect that dissatisfaction by the removal of leaders. In competitive, open political systems, the extraction and allocation of resources comes under much more scrutiny than in closed political systems.

The selection of security policies reflects the interaction among the leader, the important political actors in the system and the governmental structure. The competitive nature of the political system and the centralization of power determine who the important actors will be in the system. In the context of the issue area hierarchy, the institutional mechanisms found in the state will have a direct bearing on the type of security policy selected. Political systems with lower political competition and higher centralization of power should have less decision-making constraint. Consequently, the diversion and extraction of resources should be more easily undertaken by leaders. Costly

security policy is therefore more likely to be employed. Leaders in these environments can more easily monopolize power and hold strong bargaining positions within the domestic arena. The majority of political actors will acquiesce to the leader. The fewer stronger actors will be able to influence policy or gain via a policy decision undertaken to secure their support.

Capability and Substitution

The theory proposes that the selection of security policy will be guided by the available resources of the state. The commitment of resources for varying goods and services will be a function of the prioritized issues developed by the leadership. However, the most direct resource constraints are a product of the total pool of resources available to the state. This resource relationship must be further refined. In the international system, the level of resources held by states is not uniform nor is it static. The size, demographic levels, and environmental conditions associated with each state define its pool of resources. Some states have much higher levels of resources and greater capability. Consequently, their natural constraints are lessened relative to less endowed states and their leaders have more latitude in terms of policy choices.

In the foreign policy substitution rubric, capability is a central feature emphasized by Morgan and Palmer (1996, 1997, forthcoming), Sorokin (1994), Diehl (1994), and McGinnis (1990, 1994). For Morgan and Palmer, the search for the optimal security

policy mixture and its associated foreign policy goals, security or proaction, will be a function of the state's capability:

Given the state's capabilities and the foreign policies of other actors, there is a limit to what it can hope to accomplish. Resources are limited and those expended in the pursuit of one goal can not be used in the pursuit of another . . . The presumption is that great powers are better able to provide for their security than are minor powers. . . we assume that the ability of the state to pursue security and proaction increases with the power of the state. (1997:228-229)

Their discussion is very intuitive. Major powers have a greater ability to pursue policy designs because they have acquired the capacity to do so.

The authors believe foreign policy substitution becomes a function of changing levels of capabilities. A state's foreign policy goals will drive the selection of policy, but policies will be constrained by the available levels of resources (Morgan and Palmer, 1996). The particular selection of one policy over another will therefore be contingent upon the interaction between the level of capability held by the state and the goals it is pursuing in the international system. In this sense, resources play a significant role in constraining policy through a zero sum relationship. This relationship exists for all states, but varies given the complete resource pool held by each state. Morgan and Palmer theorize that stronger states and states increasing in power should be more active in foreign policy behavior--alliance formation, military expenditure and dispute initiation--and empirically find support for these premises.

Diehl (1994), McGinnis (1990), and Most and Siverson (1987) also emphasize the role of capability in foreign policy substitution. For Diehl and Most and Siverson,

great power status gives states the luxury to both increase expenditure and pursue alliance formation. Diehl finds complementarity for major powers in their development of alliances and military expenditure during rivalries. In times of threat, major powers seek to increase security through multiple policy choices. Minor powers generally can not solve their security problems via arms development because they do not have the access to resources to do so. Consequently, they are forced to turn outward.

These studies provide both theoretical rationale and empirical evidence that in the resource context, the level of capability held by a state will affect its policy choices. Furthermore, these studies explicitly and implicitly suggest that in the development of foreign policy, specifically in foreign policy substitution, great powers and minor powers act differently. Major powers are better able to implement a variety of policies while minor powers are more severely affected by resource constraint. This differentiation of states by capability is an important distinction. However, it is also necessary to emphasize that regardless of the size of the pool of resources, there will invariably be domestic competition for these resources. Leaders will be faced with an insufficient pool of resources to meet all preferences. Sprout and Sprout (1968) conclude that :
“Resources available to rulers have rarely seemed adequate for the ruler’s needs and those of their constituents. Allocations have just as rarely satisfied all the demands of the political body,” (661). Consequently, the leaders of all states, great and minor powers, will be forced to prioritize their policy issues. The policy making environment, as

defined by the domestic political institutions and international threat, will therefore be central determinants in the foreign policy substitution process.

Substitution and the Theoretical Framework

This theoretical framework enables me to examine more specific policy choices. Here security policy choices will be emphasized, particularly alliance formation, military expenditure and dispute initiation. These are the policy choices most often examined in the foreign policy substitution context. The theory proposes that policy decisions are predicated on the allocation of resources given priorities across the issue groups. The foreign policy choices just described fall into the issue area associated with national security. Each of these choices is assumed to contribute to increasing security. At the same time, each of the policy choices requires a certain level of resources to be undertaken. The resource tradeoffs between issue groups and also between policy choices within an issue group thus become integral in the particular selection of policy. (The cost-benefit and comparative statics frameworks used in substitution largely reflect conditions which lead to policy choice).

Recall Figure 3.1 from Chapter 3. The interaction between the threat being faced by the state and the level of competition within the state determine the importance of each particular issue area. Capability determines the breadth of policy implementation. Changing priorities are reflected in changes in the resources allotted each issue area. The figure reflects these three dimensions -- the X axis reflecting threat, the Y axis reflecting

political competition, and the *Z* axis reflecting states capability. In terms of the selection of security policies, national security will be of greatest importance under conditions of high threat. The allocations to the right of Figure 3.1 reflect these conditions. Resources will be increasingly allocated for security policies, regardless of the level of political competition within the state or the existing institutional framework. Threat will create an atmosphere of consensus among political participants. Arnold Wolfers' analogy of the house on fire illustrates this logic. Most citizens will focus on security issues. Not all resources will be applied towards security, but security allocations will increase relative to resources used for the maintenance of position and important constituent interests.

Conversely, as threat decreases, resources will be moved away from national security and towards other issue groups. This change is reflected in the prioritization of resources between the issue areas. The allocation in the upper left of the figure reflects conditions of low threat and high competition. Decision-makers must try and identify an acceptable level of security under conditions when political actors focus on the domestic arena. The central dilemma is providing security while threat is low and other wants are high. The resource trade-off dynamic is greatest here. Leaders will be forced to bargain, log roll and use pork barrel efforts more here than in the other quadrants. A general consequence of such an environment will be the higher level of vigilance of political participants towards policy decision. In this context, institutional checks and opposition will be greatest.

The allocation in the lower left position reflects conditions of low threat and low competition. Here the institutional structure of the state reflects centralized political power and lower levels of political competition. Leaders will only be concerned about the interests of specific groups or individuals. In this respect, as Bueno de Mesquita and Siverson (1997b) conclude, the distribution of benefits will be more easily conducted.

Security Policy Choice

I now turn to the examination of specific security policy choices. The three types of foreign policy to be examined are alliance formation, military expenditure and dispute participation. State behavior is theorized to be a function of resource allocation between broad groups of policy interests. In each issue group, the policies can be hierarchically ordered in terms of their resource allocation. Policies are compared not just within an issue group, but also across issue groups. Leaders are forced to be cognizant of how their policy choices interact across these issue groups and the potential reactions of important constituents, interests groups, or coalitions. I offer a simple ordering of security policy choice along the resource allocation dimension. Given this ordering, I then examine propositions about policy choice given the interaction of threat and the competitive nature of the decision-making environment.

There are different kinds of costs associated with each of the policy choices. Foreign policy substitution specifically focuses on the trade-offs between policy choices. In the context of this discussion, I am examining the resource trade offs associated with

levels of security². As Diehl proposes, substitution focuses on options that seek similar goals (1994:160). I assume that the goal associated with these policy decisions is to limit external influence or threat thereby increasing the security of the state. Comparison of the costs of alliances and internal arms development have been described by both Sorokin and Morrow:

The difference between a security policy choice based on arms and one based on alliances is a matter of control over decisions: when a state relies on its own arms, it decides whether and what ways to use them; when it relies on allies, it may have access to a bigger pool of capabilities, but it sacrifices control. In short a policy that is based on arms allows the state to avoid risks of abandonment and entrapment, whereas a policy that is based on allies allows the state to avoid the costs of purchasing arms. (Sorokin, 1994:424)

Arming . . . produces more reliable improvement in security slowly at the political costs of diverting resources to the military. Alliances . . . produce additional security quickly but with less reliability and at the political costs of moderating conflicting interests with the prospective ally. (Morrow [in Sorokin] 1991:208)

Both Sorokin and Morrow assess the costs of these policy choices. For arms development, they emphasize the reliability of self help verses the resource drain of arming. For alliances, they emphasize the costs the political concessions and possibility of abandonment verses resource flexibility. As I am ordering these policy choices on a

² I am employing an extremely broad meaning for the idea of security. I simply mean to infer that security is a goal to protect important values of the state. Wolfers (1962) refers to these values as national survival, national independence and territorial integrity. Others, particularly Morrow (1991) and Morgan and Palmer (1995, 1996, 1997) have much more precise meanings for security. They differentiate preferred resolutions to existing issues in terms of changing the status quo, autonomy or proaction, and preserving the status quo, security. In this sense, I am examining only part of the foreign policy puzzle, those instances in which threat leads to action. Morrow and Morgan and Palmer formulate behavioral expectations for the complete puzzle given multiple policy motivations.

resource allocation dimension, I posit that alliances are less costly than the internal development of arms. Under these limitations, this is a reasonable conjecture.

The third policy choice, dispute initiation is more difficult to rank. As I am seeking to explain security building behavior by reducing the existing level of threat, dispute initiation is a policy selected to increase the potential of limiting the impact of an opponent. Simply, the dispute is an effort to serve notice on the opponent or to eliminate the opponent entirely. Strategically, initiation provides an advantage. The opponent can react hostility and escalate or the opponent can back down. In the latter case, the threat is eliminated. In the former case, initiation carries the prospect of ending up in war. War is the costliest policy choice available. Initiation thus carries without the probability of high resource use. Furthermore, in order to initiate a dispute, the state must have a certain level of capability already at hand. Dispute initiation has long been theoretically tied to capability and the expected probability of success (see for example Bueno de Mesquita, 1981). In this sense, arms development and/or alliance formation serve as prerequisites for such a policy choice. I conclude that dispute initiation is a more encompassing policy choice than either arms development or alliance formation. Not only must a certain level of capability be existing, but also the expectation that these resources will be used -- for example military equipment and personal -- and the need for more resources arise. Here dispute initiation is assumed to be more costly than the other policy choices on the resource allocation dimension.

A final policy choice is associated with dispute reaction. When confronted with a dispute, leaders face a number of decisions -- to acquiesce or do nothing, to react back in kind, or to escalate. The use of resources is high for this type of reaction in the same manners as for initiation. Resources are consumed through the use of equipment and manpower and have to be replaced. However, in most cases, I assume that targets have the ability undertake defensive policies. From an allocation approach, these policies are considered to be cheaper than offensive or initiative strategies (Levy, 1984; Anderton, 1989). Consequently, I rank dispute reaction as more costly than alliance development or military expenditure, but less costly than dispute initiation. The ranking is therefore alliances, arms development, dispute reaction, and dispute initiation.

The ordering of these policy choices permits the development of expectations about state behavior in the national security issue area. The intuition behind the ordering focuses on the application of resources for security. Recall that leaders are expected to allocate resources for security even under circumstances when it is not a high priority. The ordering of policy choices according to resource use thus defines certain parameters about policy implementation. Since these policies are considered to be substitutable (they all provide some element of security), such an ordering is consistent with the emphasis placed on the finite nature of resources. Furthermore, the sequence reflects increasing intensity of policy choice. As the policies become more concentrated on reducing threat or reacting to threat, more resources will be used. This point makes an important theoretical distinction. Leaders are expected to be more willing to undertake

costly or intense policy choices when confronted with extreme circumstances in the international arena. Conversely, they will not be as willing to allocate high levels of resources during periods of limited threat. A number of propositions can thus be developed about the implementation of security policy choice given the interaction between the domestic and international arenas. The ordering serves as a heuristic element with its advantage being its continuity with the theoretical argument.

Three central influences on resource allocation for policy have been described: threat, political institutions and competition, and capability. Focusing on threat, competition for resources will fluctuate given perceptions of security. In this sense, threat is a factor which should increase policy consensus-- as threat increases competition for resources should decrease and as threat decreases competition for resources should increase. Institutional structure should have little impact during high periods of threat. All states should behave in similar fashions under these conditions. The allocations to the right of Figure reflect the similar resource allocations. Consequently, the issue hierarchy allocates the most resources for national security regardless of the level of political competition. Under conditions of high threat, leaders have the ability to implement policy decisions more freely. I assume that more costly policies are those most effective against threat. Leaders will thus focus on implementing those policies which will increase security the most rapidly. Two hypotheses are developed:

H6.1: Under conditions of threat, all states will attempt to increase their security building behavior by allocating resources for this issue -- domestic political

institutions and structure should have little effect on resource allocations under these conditions.

H6.2: As conditions of threat rise, leaders will move up the policy continuum and apply more costly policies.

As threat decreases, the theory posits that priorities turn towards the domestic political environment. All political systems have competition for resources. Institutional checks impose constraints on the leaders and their abilities to distribute resources according to their individual preferences. High levels of political participation and associated levels of competition infuse more stringent checks. In these instances, individuals are more aware of resource extraction and allocation and policy development. Leaders face greater decision-making hurdles and more difficult resource trade offs resulting from increasing numbers of preferences. Coalitions to implement policy are more difficult to form. Similarly, in situations with distributed decision-making powers, leaders will be constrained by other decision-making groups. When threat is low, leaders in competitive environments will be forced to emphasize the domestic over the security interests. Their maintenance of position depends on their ability to allocate resources to the most important interests. A simple example is the increasing nature of pork barrel and log rolling politics in election years. This logic is again represented by the upper left allocation in Figure 3.1. Constituent interests supersede national security.

In systems with limited political participation and more centralized decision-making powers, leaders will have an easier time addressing relevant interests and distributing resources. The maintenance of position should not be as difficult because

fewer actors are involved in decision-making processes -- coalitions are more easily formed. Leaders have the ability to allocate resources more freely and can better address the interests of important actors. Leaders should be able to rationally calculate the resources needed to satisfy important constituents. With these calculations in mind, they focus on position, security and then regulatory policies to satisfy these actors as seen in the lower left of allocation of Figure 3.1.

Three hypotheses are developed from this logic about domestic political competition and resource allocation during periods of lower external threat.

H6.3: Leaders in competitive political systems are more easily constrained by political interests in the domestic sphere. Security policy will be allocated fewer resources under these conditions. Higher constraints will result in lower cost security policies being implemented.

H6.4: Leaders in uncompetitive political systems have greater latitude in their allocations of resources. Security policy will be allocated more resources under these conditions. Lower constraints will result in a wide variation in security policy choice.

H6.5: Leaders facing lower constraints will be more likely to undertake "costly" security policies than their counterparts facing higher constraints.

A final hypothesis addresses the role of capability in the development of policy.

States with high levels of capability inherently have more resources available to use.

Morgan and Palmer (1996, 1997, forthcoming) and Diehl (1994) propose that capability leads to more active foreign policy orientations in terms of foreign policy substitution.

Particularly, these authors hypothesize that stronger states are can do more things while smaller weaker states are more constrained by resource limitations. Capability leads to

more complementarity of policy for major powers while minor powers employ substitution to a greater extent.

H6.6: High levels of capability provide less policy making constraint and the application of more costly policies. Constrained capability produces the implementation of lower cost policies.

These hypotheses offer expectations about security policy selection as a function of capability, external threats to the state, and domestic political environments. The next section of this chapter empirically examines these propositions and offers an evaluation of the resource model.

Research Design

The empirical examination of these hypotheses is predicated on the operationalization of key concepts derived from existing data sources. A number of variables are drawn from the Correlates of War Formal Alliance Data Set³, the Correlates of War Capability Data Set, the Correlates of War Militarized Interstate Dispute Data Set, and the Polity II and III Data Sets⁴. The data itself is arranged in a state-year design. This configuration is employed to reflect the dynamic processes occurring within the state and between the state and other actors over time. It permits me to identify policy changes in conjunction with changing decision-making environments. A limitation of the design is that each observation is an aggregate for each year. Consequently, it is difficult

⁴ The data is arranged according to Correlates of War coding rules. The states used in the study are those states defined by these rules.

to examine changes in the short term, or how threat immediately affects security policy or vice versa. Even with this limitation, the design does appear to offer a concrete test of the resource theory.

Policy

The dependent variable, Policy, is a reflection of the security policy choice of the leader or central decision-maker in that year. Seven individual policy choices are offered: cutting military expenditure, dropping an alliance, a status quo policy, developing an alliance, an increase in military expenditure, reacting or reciprocating to a dispute, and initiating a dispute. These policy choices are also aggregated to form more costly levels for years in which states employed multiple policies. The policy choices are hierarchically ordered given the levels of resource implementation as was discussed above. The choices are ordered from the cheapest to the most expensive policy. The cheapest policy is a cut in military expenditure of greater than 10% of the previous year. Expenditure is drawn from the Capability data set. Dropping an alliance is the elimination of an alliance measured by a decreasing number of allies. This variable is drawn from the Formal Alliance data set. A status quo policy reflects the continuation of the current alliance portfolio and expenditure patterns. Given the budgetary processes long associated with expenditure, the expenditure measure is permitted to fluctuate between a cut of 10% to an increase of 10%. Alliance formation reflects the addition of new partners or the development of new alliances. An increase in military expenditure

represents an increase of greater than 10% over the preceding year. The fourth policy choice, target in a dispute, reflects a theoretical construction. Here I assume that an external actor makes a demand on a state. The leader of the state can comply to the demand eliminating any potential escalation or the leader can ignore the demand with knowledge that the failure to comply may bring dispute involvement. Consequently, I code the target of a dispute as being a costly policy choice. Dispute initiation serves as the most costly individual policy choice. Given the possible application of multiple policies, aggregate values are developed. States employing multiple policies are assumed to use increasing levels of resources and incur greater costs. A complete hierarchical representation is provided in the appendix.

Domestic Political Structure

The variables representing domestic political structure are again democratic score, institutional constraint and persistence.. The combination of democratic score and institutional constraint variables provides a general reflection of the competitive nature of resource allocation. More precise development is provided in the appendix. A final domestic variable, persistence from the Polity II data set, acts as a control variable assessing the effect of regime stability on policy choice.

Capability

A capability variable, Power, serves as a simple control variable identifying the status of a state as a major power or a minor power. Theoretically, major powers are those states with large resource caches and reserves. This point suggests that resource availability is less of a problem, permitting greater policy freedom.

Threat

A final variable, threat, is developed as a measure of external hostility that confronts each state. It is a proxy measure for relationship between the state and external actors. The threat variable provides for both a qualitative and quantitative indicator of the foreign policy decision-making environment. This variable is developed in Chapter 2. Threat takes into account a rolling five-year period of dispute participation, the location and capabilities of the opponents, and the historical legacies associated with long-term ongoing conflicts. The threat index provides a context for the decision-making patterns associated with security policy. Again, a discussion of the variable is provided in the appendix.

Interaction Terms

In addition to these independent variables, three interactive terms are developed to isolate the particular effects between political competition and power centralization, reflected by the interaction between democratic score and institutional constraint,

between political competition and threat, reflected by the interaction between democratic score and threat, and finally between institutional constraint and threat. The interactive effects are employed to isolate the influences of threat across different domestic environments. Furthermore, given the institutional structure of a state and its level of competition, the domestic interactive term offers a complete specification of the domestic structure.

Analysis and Discussion

Two empirical examinations are employed to evaluate the theoretical viability of the resource hypotheses. The first is a simple measure of observed policy frequency. The second is an ordered probit assessing the probability of implementing each policy choice.

Table 6.1 displays the frequency distribution of the policy choice variable. Two policies, the status quo policy and the increase in military expenditure policy account for over 55% of the observations. Furthermore, aggregation of the five least-costly policies explains 70% of the observed policies. This suggests that states tend to limit the level of resources applied for foreign policy to lower cost options. Higher cost options appear to be reserved for special situations. Given this logic, the frequency of higher cost policies diminish as the costs increase.

The hypotheses are more strenuously examined through an ordered probit model. The policy variable is measured along an ordinal scale characterizing a continuum of

Table 6.1.
Frequency Distribution of Policy Choice

Policy	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0-Decreasing military expenditure \geq 10%	952	11.0	952	11.0
1- Dropping an alliance	182	2.1	1134	13.1
2-Status quo reflecting the continuation of the alliance portfolio and the application of military expenditure not increasing or decreasing greater than 10% of the previous year	3051	35.1	4185	48.2
3-Forming an alliance	247	2.8	4432	51.0
4-Increasing military expenditure \geq 10%	1751	20.0	6183	71.2
5-Forming an alliance while increasing expenditure \geq 10%	160	1.8	6343	73.1
6-Participating in a dispute as a target	541	6.2	6884	79.3
7-Initiating a dispute	748	8.6	7632	87.9
8-Participating in a dispute as a target while also forming an alliance OR increasing expenditure \geq 10%	391	4.5	8023	92.4
9-Initiating a dispute while also forming an alliance OR increasing expenditure \geq 10%	558	6.4	8581	98.8
10-Participating in a dispute as a target while also forming an alliance AND increasing expenditure \geq 10%	32	0.4	8613	99.2
11-Initiating a dispute while also forming an alliance AND increasing expenditure \geq 10%	69	0.8	8682	100.0

Note: Policy is a reflection of the policy choices for a state in a given year--the unit of analysis is state year.

security policy choices moving from low resource allocation to high resource allocation.

Consequently, an ordered probit model provides a statistical method to examine how each policy choice develops as a probabilistic function of the independent variables. Ordered probit does not require a precise interval difference in the distinct policy choices. The simple requirement is that the levels are ordered. This type of model reflects a latent regression as seen in a binomial probit model (Greene, 1993:672). Greene suggests that the dependent variable, y^* , is unobserved in the latent equation:

$$y^* = \beta'x + e.$$

but can be observed when:

$$\begin{aligned} y=0 & \text{ if } y^* \leq 0 \\ y=1 & \text{ if } 0 \leq y^* \leq \mu_1 \\ y=2 & \text{ if } \mu_1 \leq y^* \leq \mu_2 \\ y=3 & \text{ if } \mu_2 \leq y^* \leq \mu_3 \\ & \vdots \\ & \vdots \\ & \vdots \\ y=11 & \text{ if } \mu_{10} \leq y^* \end{aligned}$$

Assuming a normal distribution for e across the observations, the probabilities for each policy choice can be identified.

Table 6.2 displays the probit coefficients, standard errors, z scores, and means for the independent variables. The μ s reflect unknown parameters associated with each individual policy choice. All the variables are significant at the .01 level with the exceptions of the interaction terms involving threat. High levels of significance are not unexpected given the large number of observations. The directions of the coefficients

Table 6.2.
Ordered Probit Coefficients for Policy Selection

Variable	Coefficient	Standard Error	Z Score (β /S.E.)	Mean
Institutional Constraint	-0.0307	0.0064	-4.818	13.60
Democratic Score	-0.0172	0.0087	-1.973	-1.325
Power	0.2608	0.0401	6.502	0.0990
Threat	0.0615	0.0085	7.205	6.212
Persistence	-0.0006	0.0002	-3.770	42.53
Domestic Interaction	0.0023	0.0005	4.218	0.6225
Threat- Constraint	0.0005	0.0006	0.873	81.91
Threat-Dem Score	-0.0004	0.0003	-1.178	-6.305
μ_1	0.1041	0.0077	13.576	
μ_2	1.2688	0.0187	67.950	
μ_3	1.3504	0.0189	71.367	
μ_4	1.9945	0.0220	90.674	
μ_5	2.0663	0.0224	92.189	
μ_6	2.3277	0.0233	99.964	
μ_7	2.7668	0.0248	111.485	
μ_8	3.0828	0.0280	110.209	
μ_9	4.0789	0.0447	91.271	
μ_{10}	4.2437	0.0531	79.870	
Constant	1.3419	0.0934	14.375	

n=8651

Log-Likelihood=-15731.50

$\chi^2(8)=2237.156$

Significance Level =.00000

offer initial support for the hypotheses. Threat and power status both have positive effects on the selection of policy as expected. Increasing levels of threat and power are reflected in the applications of higher cost policy choices. Institutional constraint and democratic score have negative effects on policy as expected. Here the decentralization of decision-making power and higher levels of political participation reflect higher levels of constraint on policy choice. Leaders appear to be checked by institutions resulting in lower-cost policy choices. Persistence produces a negative effect on policy choice. The influence of regime longevity limits policy choice to lower-cost options.

The interaction terms highlight the relationships between the different dimensions of theoretical framework. The domestic interaction term has a positive affect on the policy choice. Given the significant individual negative influences of both democratic score and institutional constraint this result is not unexpected. The interaction terms involving the domestic factors and threat better specify the relationship between the internal and external policy realms. The interaction involving institutional constraint and threat holds a positive effect. This is the expected direction posited by hypotheses 6.1 and 6.2. Greater levels of threat will increase resource allocation for security regardless of political system structure. However, the coefficient associated with this variable is not significant. The interaction term between threat and democratic score has a negative coefficient suggesting that the effect of threat is overwhelmed by the domestic structure particularly in relation to political participation and leadership selection processes. This

result is contrary to the hypothesized effect. Again the coefficient is not significant at a standardized level.

The coefficients do offer insight into the relationship between policy choice, threat, domestic competition, and capability, although substantive effects are difficult to interpret. Furthermore, the coefficients themselves do not always reflect the actual effects of variables across the different policy categories. Greene (1993) notes that the magnitudes are likely to differ across categories and that the partial effects can have opposite signs from the estimated coefficients. Given these points, a discussion of the conditional probabilistic effects of the variables and examination of the conditional effects aid in interpretation. Using these coefficients, the variable means, and the constants, a conditional β can be calculated with the following equation:

$$\beta = \beta_0 - \beta_1(\text{mean Institutional Constraint}) - \beta_2(\text{mean Democratic Score}) + \beta_3(\text{mean Power Status}) + \beta_4(\text{mean Threat}) - \beta_5(\text{mean Persistence}) + \beta_6(\text{mean Domestic Interaction}) + \beta_7(\text{mean Threat*Constraint}) - \beta_8(\text{mean Threat*Democracy Score})$$

Employing the β , the particular effect of each independent variable on the probability of each policy choice is calculated by substituting the maximum and minimum values of that variable while holding the others constant at their mean levels. The maximum and minimum are selected in order to present the complete range of probability change.

Table 6.3 displays all calculated probabilities for the minimum and maximum values of each variable. The policy choices with the highest probabilities are highlighted for each value. In fourteen of the sixteen estimations, policy 2, the status quo policy receives the highest probability for selection. This is not unexpected given that the status

Table 6.3.
The Conditional Effects of the Independent Variables on the Probability of Selecting Each Policy Option

Policy	0	1	2	3	4	5	6	7	8	9	10	11
Institutional Constraint												
Max	0.1451	0.0251	0.413	0.0303	0.2106	0.0178	0.0545	0.0583	0.0223	0.0202	0.0005	0.003
Min	0.0473	0.0112	0.2851	0.0314	0.2528	0.0268	0.0906	0.1191	0.0576	0.0710	0.0030	0.005
Democratic Score												
Max	0.1188	0.0220	0.3942	0.0321	0.2249	0.0200	0.0623	0.0694	0.0278	0.0267	0.0008	0.001
Min	0.0635	0.0140	0.3210	0.0316	0.2501	0.0252	0.0831	0.1040	0.0476	0.0544	0.0021	0.003
Threat												
Max	0.0057	0.0019	0.0955	0.0153	0.1768	0.0252	0.0983	0.1737	0.1164	0.2301	0.017	0.044
Min	0.1599	0.0266	0.4214	0.0308	0.2025	0.0168	0.0507	0.0531	0.0198	0.0173	0.0004	0.0005
Power Status												
Max	0.0535	0.0123	0.2950	0.0309	0.2523	0.0262	0.0877	0.1130	0.0534	0.0638	0.0025	0.0042
Min	0.0883	0.0179	0.3610	0.0324	0.2405	0.0227	0.0728	0.0839	0.0368	0.0385	0.0013	0.0020
Persistence												
Max	0.1469	0.0253	0.4145	0.0322	0.2096	0.0177	0.0540	0.0576	0.0220	0.0199	0.0005	0.0007
Min	0.0803	0.0167	0.3450	0.0313	0.2440	0.0235	0.0760	0.0912	0.0398	0.0428	0.0015	0.0022
Domestic Interaction												
Max	0.0274	0.0073	0.2227	0.0269	0.2454	0.0194	0.1001	0.1432	0.0761	0.1071	0.0054	0.01
Min	0.1558	0.0262	0.4194	0.0310	0.2048	0.0171	0.0517	0.0545	0.0205	0.0181	0.0005	0.0006
Threat-Constraint												
Max	0.0534	0.0123	0.2998	0.0309	0.2523	0.0262	0.0877	0.1131	0.0535	0.0639	0.0025	0.0043
Min	0.0912	0.0183	0.3647	0.0324	0.2391	0.0225	0.0718	0.0842	0.0358	0.0371	0.0012	0.0018
Threat-DemScore												
Max	0.1014	0.0197	0.3769	0.0324	0.2341	0.0215	0.0681	0.0782	0.0325	0.0327	0.001	0.0015
Min	0.0701	0.0151	0.3332	0.0319	0.2480	0.0245	0.0803	0.0986	0.0442	0.0493	0.0018	0.0028

Notes: The policy choices with the highest probabilities of being employed are those in bold text.

The Conditional Effects are calculated using the following formula: (Normal Distribution)($\beta_0 + \beta_1$ Avg Institutional Constraint + β_2 Avg Democratic Score + β_3 Avg Threat + β_4 Avg Power Status + β_5 Avg Persistence + β_6 Avg Domestic Interaction + β_7 Avg Threat-Constraint + β_8 Avg Threat-Democracy Score). The mean value is replaced the range of values for the variable of interest while holding the remaining variables constant at their mean levels. The conditional probabilities for each policy include the associated effects of the μ constants of that policy choice.

quo policy reflects 35% of the observed cases. The other two cases are associated with the maximum level of threat, predicting the implementation of a high cost policy 9—the initiation of a dispute with either an increase in military expenditure or the formation of an alliance, and the maximum level of the domestic interaction, predicting an increase in military expenditure greater than 10%.

An examination of the three dimensions of the theory finds support for the hypotheses. Each of the variables holds an underlying trend with the probability of policy selection. These trends are more easily presented by aggregating the policy choices into quartiles, 0-2, 3-5, 6-9, 9-11. Table 6.4 displays these aggregated probabilities. In returning to the hypotheses, hypotheses 6.1 and 6.2 propose that increasing and high levels of threat will lead to the implementation of higher cost policies. The extreme values of threat support these propositions. Under maximum conditions of threat, 68% of the probability falls into quartiles 3 and 4. Under minimum conditions of threat, 86% of the probability is found in quartiles 1 and 2. Threat does push for greater resource allocation to security policy decisions. The skewed probabilities for the minimum and maximum threat levels reflect decision-making conditions in which consensus for resource allocation arises during periods of urgency. As this urgency recedes, resources appear to be reallocated to the domestic sphere.

The domestic variables offer support for hypotheses 6.3-6.5. The maximum level of constraint restricts policy to lower resource selections having 84% of the probability appear in quartiles 1 and 2. The minimum constraint level reflects conditions of greater

Table 6.4.
The Conditional Effects of the Independent Variables across Policy Quartiles

	First Policy Quartile	Second Policy Quartile	Third Policy Quartile	Fourth Policy Quartile
<u>Institutional Constraint</u>				
Maximum	.5832	.2587	.1351	.0237
Minimum	.3436	.311	.2673	.079
<u>Democracy Score</u>				
Maximum	.535	.277	.1595	.0285
Minimum	.3985	.3069	.2347	.0595
<u>Threat</u>				
Maximum	.1024	.2173	.3884	.2911
Minimum	.6079	.2501	.1236	.0182
<u>Power Status</u>				
Maximum	.3608	.3094	.2541	.0705
Minimum	.4672	.2956	.1935	.0410
<u>Persistence</u>				
Maximum	.5867	.2595	.1336	.0211
Minimum	.442	.2988	.207	.0465
<u>Domestic Interaction</u>				
Maximum	.2574	.2917	.3194	.1225
Minimum	.6014	.2529	.1267	.0373
<u>Threat- Constraint</u>				
Maximum	.3655	.3094	.2543	.0707
Minimum	.4742	.294	.1918	.0401
<u>Threat-Dem Score</u>				
Maximum	.4980	.2880	.1788	.0442
Minimum	.4184	.3044	.2236	.0539

policy latitude. Here quartiles 1, 2, and 3 each have approximately 30% of the probability. Leaders with lower levels of constraint have greater ability to implement a variety of policies. The democratic score variable produces probability distributions parallel to institutional constraint. Democratic states have leaders who are more likely to employ lower cost policies as 81% of the probability is found in quartiles 1 and 2. Conversely, autocratic states have leaders who are more likely to employ a variety of policies having a probability spread of 40% for quartile 1, 31% for quartile 2, and 23% for quartile 3. These domestic indicators clearly point to the behavioral differences between different types of states. Leaders facing fewer institutional checks have much greater latitude in their security policy choices. Consequently, we observe more high cost policies in these environments than for their constrained counterparts.

The persistence variable reflects that older or more stable regimes are less likely to implement high cost policies. The maximum persistence value distributes 85% of the probability in quartiles 1 and 2. The minimum values of persistence produce slightly higher values in quartiles 2 and 3. These results replicate the findings by Tilly (1990) and Morgan and Palmer (forthcoming). Established states within institutionalized political systems tend to decrease their application of resources towards security issues over time. The results here reflect that trend.

The probabilities associated with the third dimension, capability, offer mild support for hypothesis 6.6. Major powers do consistently have higher probabilities of implementing higher cost policies than do their minor counterparts. However, the

differences are not substantially greater. Minor powers are 10% more likely to implement a policy in quartile 1. Major powers are 6% more likely to implement a policy in quartile 3. The differences in quartiles 2 and 4 are nominal. Power does seem to have an impact, but not an overwhelming effect. This result is interesting given the development of the theory. Other studies have shown that stronger or more capable states are more likely to initiate disputes, but that such behavior is tempered by domestic circumstances (Morgan and Palmer, 1997 and forthcoming). The results here are also in line with these findings. Furthermore, they reaffirm the intuition that regardless of capability levels, existing resource levels will never be enough to satisfy all preferences. Consequently the trade-off dynamic is prevalent in all states.

The interaction terms involving threat offer mixed support for the hypotheses. As suggested above, the institutional constraint-threat terms does have a positive coefficient. However, there are relatively small probability differences when substituting the maximum and minimum values. The minimum constraint-threat values are 9% greater for quartiles 1 and 2 while the maximum constraint values are 9% greater for quartiles 3 and 4. A similar patterns is observed for the democratic score-threat interaction term, albeit in the opposite direction. The maximum democratic score-threat values are 6.4% greater in quartiles 1 and 2 than are the minimum values. Neither of these variable reached a high level of statistical significance making interpretation of their impact difficult.

States appear to behave in consistent patterns. The results affirm the general expectations of the theory. Resources are allocated to prioritized goods. If conditions

stay static, the allocation hierarchy remains unchanged. However, as environmental conditions change, particularly with threat, the resource allocation dynamic moves resources across the particular issue areas. The results do suggest that at low levels of threat higher prioritization of domestic interests takes place. As threat rises, resources are applied to national security and are reflected in foreign policy behavior. The interaction between the domestic and external environments is an important determinant of policy.

The model does a respectable job in predicting the policy choice. In order to evaluate the model's performance, the policy options with the three highest probabilities are identified. For 3156 (36.5%) of the cases, the model correctly predicts the actual policy that had been employed. This is 1.5% better than the naive model or predicting the status quo policy which held 35.1% of the cases. For 1955 (22.5%) of the cases, the policy option with the second highest probability is selected. Again this is 2.5% greater than the naive model. Finally, for 1091 (12.6%) of the cases, the policy option with the third highest probability is selected. Aggregating these numbers reveals that in 71.65% of the cases, the model determines that actual policy outcome is one of the three most probable options. The naive model accounts for 66.1% using the three policy choices with the greatest frequencies. A comparison suggests that the three dimensions developed in the model do provide for better probabilistic expectations of policy choice.

The presentation of some typical cases offers a reinforcement of these observations. Table 6.5 displays six cases selected from the complete pool of

Table 6.5.
Examination of Typical Cases drawn from the Population of Cases

Policy	0	1	2	3	4	5	6	7	8	9	10	11
United States												
1822-Policy 7	0.029	0.008	0.2285	0.0273	0.246	0.0284	0.10	<u>0.141</u>	0.0742	0.1033	0.005	0.0097
1977-Policy 9	0.0015	0.0066	0.0430	0.008	0.113	0.0185	0.0781	0.1594	0.1251	<u>0.319</u>	.032	0.101
Sweden												
1850-Policy 2	0.061	0.0138	<u>0.315</u>	0.0315	0.250	0.0255	0.085	0.1064	0.0491	0.057	0.002	0.0036
Great Britain												
1900-Policy 9	0.0174	0.005	0.178	0.0235	0.230	0.0285	0.1042	0.1580	0.0901	<u>0.141</u>	0.008	0.0167
Kenya												
1980-Policy 2	0.0432	0.0106	<u>0.274</u>	0.0298	0.252	0.0272	0.0931	0.123	0.0606	0.077	0.003	0.0058
Soviet Union												
1965-Policy 7	0.0013	0.00056	0.040	0.00783	0.108	0.0179	0.0762	<u>0.1572</u>	0.1241	0.325	0.033	0.107

Notes: The policy choices with the highest probabilities of being employed are those in bold text. The actual policy choice is underlined.

observations. These cases are selected generally, the only motivation behind these particular choices is to get a cross section of cases over the three dimensions of the theory. The model accurately selects the actual policy choice in 3 of the 6 cases, for the United States in 1977, Sweden in 1850 and Kenya in 1980. For Kenya and Sweden, the policy selected and employed is the status quo policy. In 1980, Kenya is minor power which is autocratic with moderate institutional constraints. It is not facing a high level of threat. In 1850, Sweden is a minor power which is also autocratic and moderately constrained. Threat is also moderate. The domestic and international environments are very similar for these states producing the same policy choice. The United States employs a policy initiating dispute while also forming an alliance or increasing expenditure. In 1977, the US is a superpower democracy with moderate constraints and high threat. A high resource policy choice is expected given the decision-making environment.

In the other cases, the model does fairly well in its prediction efforts with the actual policy choice having no worse than the third highest policy probability. The United States in 1822 employed policy 7, initiating a dispute, while being predicted to implement policy 4, an increase in expenditure. During this year, the US was a democracy with a high institution constraint score and a moderately high level of threat. Great Britain in 1900 employed policy 9, initiation of a dispute, while being predicted to implement policy 2, the status quo policy. In 1900, Great Britain was a major power democracy with a high level of institutional constraint and a moderate level of threat. The

final case, the Soviet Union in 1965, employed policy 7, initiation of a dispute, while being predicted to employ policy 9, initiation of a dispute with another policy choice.

During this year, the Soviet Union was a superpower highly autocratic state with low institutional constraint and a high level of threat. These cases reflect the variation of policy choice given the different domestic contexts, threat levels, and capability.

Although the empirical model does not accurately predict every case, the theory does receive support from this sample. The dimensions identified by the theory are central inputs in the policy formation process. These cases show that threat, political competition, and state capability enable us to narrow our expectations about state behavior. Consequently, we can offer more educated predictions about potential areas of conflict and other interactions in the international system.

Conclusions

This chapter has sought to provide a general theory of security policy selection predicated on the allocation and diversion of resources. A theoretical framework is developed focusing on decision-makers' abilities to provide general or public goods, particularly security, while at the same time satisfying individual preferences. Given the finite nature of resources, leaders are forced to act according to budgetary processes which reflect a prioritization of issue areas. This hierarchy is a reflection of the leader's desire to insure the stability of the state, the leader's desire to maintain political position, and the preferences of important actors whose support the leader needs to maintain position.

Two central motivations for security policy change arise, a change in the security of the state or the rise of an external threat, and the change or development of a preference for an important actor in the political system. The latter is a reflection of the centralization of political power and the political participation/competition found in the system. Each can constrain a leader's ability to funnel resources as a product of policy choice. In the security policy environment, high constraints restrict the flow of resources available for policy options. Security policy will reflect low cost policy under conditions of high constraint. As constraint lessens, higher cost security policies are implemented. As external threat increases, the resources allocated for security behavior increase.

The empirical results offer dramatic support for the theory. The ordered probit results emphasize the strong effects of threat and domestic factors. Threat is a key variable in the determination of policy choice. Specifically, it strongly influences how resources are allocated regardless of institutional structure. As threat diminishes, the influences of institutional constraint and democratic score assume a more dominant role in policy development.. As decision-making power becomes less centralized, resources appear to be directed towards the domestic environment and away from the external environment. As decision-making power becomes more centralized, the opposite is observed. These findings support the propositions developed by the model. The level of political participation in a state, reflected in the democratic score variable, also has a clear impact on policy choice. High levels of participation decrease resource use for security policy. The populace appears to limit the leader's ability to implement higher cost

policies. Low levels of participation allow leaders greater policy making latitude resulting in a wider array of security policy behavior.

The specific behaviors examined above reflect the interaction between the domestic and international environments. International issues take precedence when they arise, but during times of lower threat, status quo or lower cost policies are regularly implemented. The theory and empirical results both indicate little difference in foreign policy behavior in times of high threat across states. Particular emphasis should thus be placed on when behavior is expected to differ. The theory proposes that the impact of domestic institutions will be highest during periods of lower threat. The ordered probit results offer clear support for this expectation. States do implement different policies given the nature of their institutional frameworks. These conclusions further reinforce the need to integrate both domestic and systemic effects on foreign policy behavior. Leaders obviously do not make policy choices in a vacuum, but react to multiple stimuli simultaneously. In order to better model decision-making behavior, we need to synthesize these decision-making environments in more cohesive theoretical and empirical designs.

Chapter 7: Conclusion

This final chapter is differentiated into three interdependent parts. Part I provides an overview of the theoretical and empirical approach employed in the study. Part II articulates the principle generalizations arising out of this work. Part III discusses general problems inherent in the approach taken.

Building a Bridge

This study devoted a great deal of effort to linking two political arenas, one focused on the domestic political environment and one focused on the relationship between the state and other states. In the past, these environments have been held separate. Some have concluded that domestic politics is superseded by international politics. Consequently, domestic politics is only of secondary concern in the examination of international relations or high politics. Others have examined these environments from two levels of analysis. In the international context, the state is modeled as a unitary rational actor. In the domestic context, the state is differentiated into individual and group actors. A number of recent studies have attempted to integrate these perspectives into a more overarching framework to assess foreign policy behavior. This dissertation continued this approach.

The model developed here proposes that the domestic and international arenas are not independent, but are actually elements of a more inclusive political environment. As politics is a reflection of competition for resources, policy choices invariably reflect

decisions to allocate and distribute resources for a variety of goals. Leaders and decision-makers make policy choices over a multitude of individual and group preferences relating to both foreign and domestic policies. Given the finite nature of resources, policy choices simultaneously take both political arenas into account. The focus on either one or the other ignores part of the decision-making process.

This study emphasized the interaction of domestic and foreign political spheres given different motivations associated with resource trade-offs. The differentiation of policy into three issues areas allowed for the identification of resource trade-offs. Resources provide a central linkage point for all policy behaviors. Furthermore, the issue areas take into account individual leadership preferences, associated with the maintenance of position, important constituent preferences, and public goods. The decision-making environment is thus more fully defined. Instead of examining policy behavior from a static perspective, the model incorporated change within these environments. In this sense, the theoretical framework addressed changing conditions and how these conditions influence resource allocation and policy behavior.

The theoretical framework provided testable expectations about each state's security behavior. Threat was hypothesized to increase resource allocation for security policy. International tension creates cohesion within the state diminishing political competition for resources. A more unified populace allows decision-makers to increase military allocations, form alliances, and participate in international disputes. As threat decreases, domestic institutional factors return to prominence. In political systems with

highly institutionalized competition, decision-makers are forced to address domestic initiatives as well as individual and group preferences. Resources thus flow back towards the domestic environment and away from the security policy realm. In political systems with uninstitutionalized competition, decision-makers have greater policy latitude. Consequently, they have the ability to allocate more resources for security policies if they so desire.

The validity of this framework was assessed through the examination of military expenditure, the formation of military alliances and foreign policy substitution efforts. Using a number of statistical tests, the framework received a great deal of empirical support. States do react to external threat and allocate resources for the development of security policy. As threats dissipate, domestic political preferences arise. Resources are thus reprioritized across the issue areas. The underlying motivations and constraints associated with security behavior were thus more fully developed.

Recognizing Security Patterns

In taking this study as a whole, five broad generalizations emerge about state security behavior: (1) security policy behavior is rarely static as decision-making environments are often in a state of flux; (2) threat motivates security policy; (3) internal political structures influence security policy behavior through institutional and resource allocation constraints; (4) the domestic stability of the state affects its security behavior; and (5) time and the evolution of the international system affect security. I will elaborate

on each of these points more fully. The central proposition developed in this work posits that decision-making environments are rarely static. Consequently, leaders are constantly forced to balance their agendas between the domestic and external spheres. During periods of domestic change, leaders are attentive to domestic initiatives and the maintenance of political support. These activities may involve the transfer of resources away from security policy. During periods of international change, leaders address increasing or decreasing levels of threat and tension. Again, environmental flux can lead to the reallocation of resources towards or away from security orientations. Security policy behavior reflects these changing environments. Alliance portfolios change in reaction to international circumstances. Military expenditure patterns are influenced by the resource trade-offs between the issue areas. Taking these behaviors in aggregate context with dispute involvement, one can identify that decision-makers develop and redevelop of security strategies as political contexts change. Leaders have a variety of security options and employ multiple policies simultaneously. Resource constraints and the costs of the security policies thus lead to restructuring of policies through the emphasis of some policy choices over others. In this regard, the dynamic nature of the political environment is extended through each state's development of its security behavior.

As has been stated throughout this study, international relations has long concluded that external threats and hostilities serve as motivations for the development of state security. The findings here support this proposition. Foreign policy behavior is clearly influenced by a state's relationship with external actors. This point is both

intuitive and unsurprising. Each of the foreign policy behaviors examined in this study reflect greater activity under higher conditions of threat. Furthermore, leaders and their constituents are more willing to allocate resources for these ends under conditions of tension. As these conditions heighten, more resources are applied. We can thus see that resource constraints diminish during threatening environments. Threat thus serves as a focal point for the development of security policy.

Domestic political environments and structures have a clear impact on security policy behavior. Domestic institutions frame how states build security. External threat does lead to internal cohesion for the development of policy and is a central motivation. However, domestic political institutions temper each leader's ability to implement policy and allocate resources. Periods of hostility will unify a state's citizenry, but after the threats pass, the citizens generally desire leaders to focus on domestic initiatives. Domestic structures thus constrain leaders from maximizing security. In each of the individual security policies examined and in the foreign policy substitution rubric, institutional structures do affect the development of policy. In particular, the levels of political competition and the centralization of decision-making power serve to check leaders. As the level of political competition rises and the centralization of power decreases, decision-makers hold less autonomy. In these instances, political resources appear to be allocated towards domestic political goals and the maintenance of political position and away from security motivations. Conversely, political environments with lower levels of participation and higher levels of power centralization, security initiatives

receive more resources. In interaction between the international and domestic environments, international issues take precedence when they arise, but during times of lower threat, domestic institutions have a significant influence over policy development.

The long term stability of the state has a direct effect on its resource allocation and security behavior. The empirical results indicate that domestic instability produces higher allocations for security concerns. This behavior could be a function of two interrelated conditions. Given the lack of an entrenched political order, leaders may choose to allocate resources to maintain political order through the application of force against their own populace. Although force may not be applied, its availability, through the military or police, is developed. Second, leaders may view their states as targets by external actors. As a consequence, the development of security will help to deter against intervention. The empirical results illustrate that as states become more stable and institutional mechanisms entrench, resources devoted to security issues decrease over time. The movement of resources away from security and towards other issues may reflect the expansion of the role of the state in the provision of other public goods.

A final broad finding reflects the influences of time and the international system on security policy behavior. Chapters 4, 5, and 6 each employ a variant of cross-sectional time series analysis. In these analyses, a temporal period, 1816-1985, is employed in an aggregate and divided periods. The international system has long been hypothesized to have different structural attributes related to the polarization of state capability and power. The nineteenth century generally reflects conditions of

multipolarity while the twentieth century, discounting the World Wars and interwar period, reflects conditions of bipolarity. The empirical findings presented here do identify behavioral differences between these periods. In the nineteenth century, states held fewer alliance partners than did those in the twentieth century. There are also identifiable differences of the effects of domestic factors on military expenditure across the periods. The international system does evolve through time. The number of states increasing dramatically from 27 in 1816 to over 180 during some periods of the twentieth century. Furthermore, the characteristics of states themselves evolve over time. Jagers and Gurr (1995) identify a general trend towards democratization during the aggregate time period used in this study. Invariably changes in the international system affect individual states' security policy behavior. These behavioral differences are recognizable. As has been developed throughout this study, changing political environments produce changing policy orientations.

Problems

Although efforts have been undertaken to minimize conceptual problems in this study, some do remain. First, the underlying proposition of this work emphasizes the dynamic nature of both the domestic and international system. The unit of analysis used in the empirical portions reflects state-year. State-year does in fact incorporate changing contexts. However, it is a much broader temporal breakdown than one which is addressed by the theory. This issue is the most troubling when assessing the relationship between

threat and policy behavior. A more refined temporal setting would provide for better causal specifications and permit more advanced methodological examinations of the theory. Given the extended longitudinal span of the study and data availability, state-year proved to be the best operational approach to empirically evaluate the theory.

A second problem revolves around the development of some of the indicators employed in this study. A recurring criticism of quantitative work in international relations points to the gap between our theoretical concepts and our quantitative indicators of these concepts. This study undoubtedly faces this same commentary. The threat indicator used here does in fact ignore individual perceptions of tension and hostility. Leadership perceptions may be a better representation of the concept being discussed. The Polity II and III data has also been criticized for its broad categorizations of political structures. These critiques are valid. In defense of the approaches taken here, the selection and development of the indicators focused on extending the temporal nature of the study to the largest possible time span. A broad temporal span provides for a greater ability to generalize about security policy behavior. Furthermore, the indicators themselves are created to have the greatest level of internal and external validity possible. However, this point does not alleviate this problem. We are indeed limited by our abilities to quantify political concepts. This will be an ongoing issue for the field of political science as a whole.

A final problem to be highlighted reflects the use of individual models in the empirical portions of the study. Theoretically, this study examines complex processes

reflecting the internal political workings of the state and its relationships with other actors. The empirical models employ simplifications of these processes, as suggested by the preceding problem. This evaluation of the political processes and their interactions rely on the development of single models. Such an application obviously distorts the theoretical issues we are seeking to evaluate. With these notions in mind, assessment of the resource framework should be undertaken carefully.

A Final Word

In his seminal work on theories and pre-theories of foreign policy, Rosenau states: "To recognize that foreign policy is shaped by internal as well as external factors is not to comprehend how the two intermix or to indicate the conditions under which one predominates the other," (Rosenau, 1966:30) This work has sought to address this particular problem. The findings presented here do more fully explain the interaction between the international and domestic environments. We can identify the environmental conditions making security policy the preeminent interest as well as those conditions making domestic policies the preeminent interest. However, as with any ongoing endeavor, there is a great deal left to be done.

Appendix A.
Pearson Correlation Coefficients for Threat, Hostility, Dispute and Capability Indicators

States with Capability Rankings 20 or Lower

	Threat	Hostility	Disputes	Capability Concentration	Capability Rank
Threat	1.00 0.0 3846	0.73 0.0001 3846	0.60 0.0001 3846	0.43 0.0001 3520	-0.46 0.0001 3520
Hostility		1.00 0.0 3846	0.69 0.0001 3846	0.37 0.0001 3520	-0.39 0.0001 3520
Disputes			1.00 0.0 3846	0.31 0.0001 3520	-0.31 0.0001 3520
Capability Concentration				1.00 0.0 3520	-0.80 0.0001 3520
Capability Rank					1.00 0.0 3520

States with Capability Rankings 21 or Higher

	Threat	Hostility	Disputes	Capability Concentration	Capability Rank
Threat	1.00 0.0 7466	0.85 0.0001 7466	0.66 0.0001 7466	0.23 0.0001 7466	-0.18 0.0001 7466
Hostility		1.00 0.0 7466	0.62 0.0001 7466	0.22 0.0001 7466	-0.13 0.0001 7466
Disputes			1.00 0.0 7466	0.16 0.0001 7466	-0.10 0.0001 7466
Capability Concentration				1.00 0.0 7466	-0.61 0.0001 7466
Capability Rank					1.00 0.0 7466

The figures represent: the Pearson correlation coefficient, the significance level and the number of observations

**Appendix B.
Statistical Formulas**

Negative Binomial Regression Model discussed by Cameron and Trivedi (1986)

$$\ln \lambda_i = \beta' x_i + \varepsilon$$

$$\text{Prob}[Y = y_i \geq \varepsilon] = e^{-\lambda_i \exp(\varepsilon)} \lambda_i^{y_i} / y_i!, y = 0, 1, \dots,$$

$$\text{Prob}[Y = y_i] = \Gamma(\Theta + y_i) / [\Gamma(\Theta) y_i!] u_i^\Theta (1 - u_i)^{y_i}$$

$$u_i = \Theta / (\Theta + \lambda_i)$$

$$\Theta = 1 / \alpha$$

Test for Overdispersion developed by Cameron and Trivedi (1990)

$$H_0: \text{Var}[y_i] = E[y_i]$$

$$H_1: \text{Var}[y_i] = E[y_i] + \alpha g(E[y_i])$$

Is tested by regressing

$$z_i = (y_i - \lambda_i)^2 - \lambda_i / \lambda_i \sqrt{2}$$

King's Formula (1989) for developing Predicted Values for Poisson and Negative Binomial Regressions

$$\lambda = \exp(\beta_0 \pm \beta_1 \text{Avg Threat} \pm \beta_2 \text{Avg Institutional Constraint} \pm \beta_3 \text{Avg Democratic Score} \pm \beta_4 \text{Avg Power Status} \pm \beta_5 \text{Avg Lagged Dependent})$$

The particular impact of each variable can be identified by altering its value while holding the other variables constant. A range of impact for each variable was calculated by substituting four values in the place of the mean: the maximum value of the variable, one standard deviation above its mean, one standard deviation below its mean, and the minimum value.

Formula for developing Conditional Probabilities for a Probit Regression

$$\text{Prob}(\text{Honoring Alliance} = 1) = \Phi(\beta_0 \pm \beta_1 \text{Avg Democratic Score} \pm \beta_2 \text{Avg Institutional Constraint} \pm \beta_3 \text{Avg Power Status} \pm \beta_4 \text{Avg Threat})$$

Appendix C.
Variable Discussion

Dependent Variables:

Military Expenditure:

A variable reflecting the gross level of military expenditure measured in current British pounds for 1816-1913 and United States dollars for 1920-1985.

This variable is taken from the Correlates of War Capability data set (version 1994).

Number of Allies:

A count variable reflecting the number of allies resulting from any of three types of formal commitment

Defense Pact -- commitment to intervene on behalf of an ally

Neutrality Pact -- commitment to refrain from intervention against another signee in conflict

Entente -- commitment to consult with other members before taking action

Honoring Commitment:

A three value variable reflecting a state's action when its ally becomes involved in a war.

Given the type of alliance, a state can:

Honor -- join the partner in war

No action -- remain outside of the conflict

Defect -- join against the partner

Neutrality Pacts and Ententes are coded as honoring if the state remains outside of the conflict and defecting if joining against the partner

Both variables are produced from the Correlates of War Formal Alliance data set with updates by Bennett and Oren.

Policy:

An ordered variable predicated on the use of resources involved in the policy ends. As resources are increasingly applied, the cost of the policy moves upward along the resource dimension. I identify 12 categories for Policy given the application of different security choices. Four individual behaviors are employed: the formation of alliances, the development of arms via military expenditure, the participation in a dispute as a target, and the initiation of a dispute. The categories are developed by employing or not employing a series of these behaviors. The categories as used in the analysis are:

0: Decreasing military expenditure greater than 10%

1: Dropping an alliance

- 2: Status quo reflecting the continuation of the alliance portfolio AND the application of military expenditure as called for in a budgetary context not increasing or decreasing greater than 10%
- 3: Forming an alliance
- 4: Increasing military expenditure greater than 10%
- 5: Forming an alliance WHILE increasing military expenditure greater than 10%
- 6: Participating in a dispute as a target
- 7: Initiating a dispute
- 8: Participating in a dispute as a target while also forming an alliance OR increasing expenditure greater than 10%
- 9: Initiating a dispute while also forming an alliance OR increasing expenditure greater than 10%
- 10: Participating in a dispute as a target while also forming an alliance AND increasing expenditure greater than 10%
- 11: Initiating a dispute while also forming an alliance AND increasing expenditure greater than 10%

Independent Variables

Power:

A dichotomous variable reflecting status as a major power (Singer and Small, 1982)

Institutional Constraint:

A 20 point indexed scale, measured 4-24, focusing on centralization and regulation of political power. Highly constrained states are those with scores of 16 or greater. The index involves the following variables:

- (1) Monocratism: a five point ordinal scale addressing one-man rule
 - (2) Degree of Executive constraint: seven point ordinal scale addressing policy making rules
 - (3) Centralization: three point ordinal scale distinguishing between unitary and federal systems
 - (4) Scope of Governmental Action: seven point ordinal scale addressing extent to which the levels of government attempt to regulate lives of its citizens
- (Gurr, Jagers, and Moore 1989).

Democratic Score:

A variable created by subtracting the autocratic scale from the democratic scale with democracies being considered those states with scores of 6 or higher (Jagers and Gurr, 1995). The index involves the following variables:

- (1) Competitiveness of Political Participation: 3 point ordinal scale
- (2) Regulation of Political Participation: 3 point ordinal scale
- (3) Competitiveness of Executive Recruitment: 2 point ordinal scale

(4) Openness of Executive Recruitment: 1 point ordinal scale

(5) Constraints of Chief Executive: 2 point ordinal scale

Produces two 11 point scales, one for the level of democracy and one for level of autocracy. (Gurr, Jagers, and Moore 1989)

Persistence:

A measure of the current age of the polity as a number of years since the last fundamental, abrupt polity change (Gurr, Jagers, and Moore 1989)

Threat:

This variable is developed in Chapter 2 of this study

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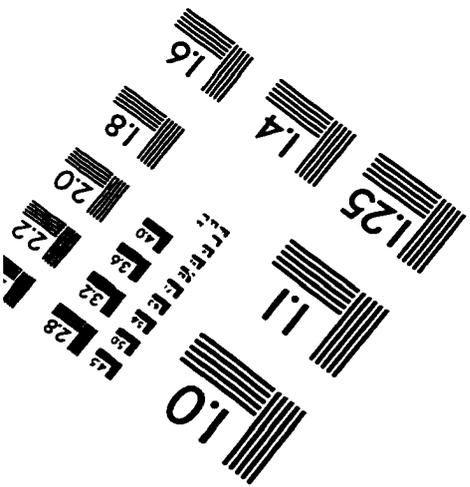
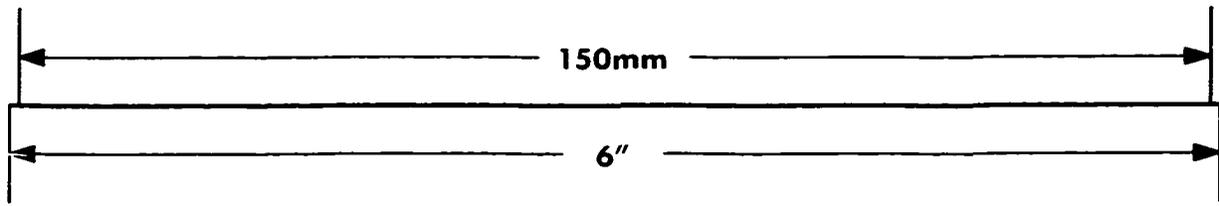
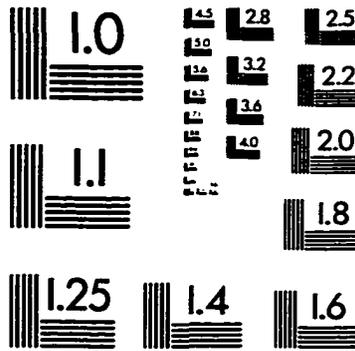
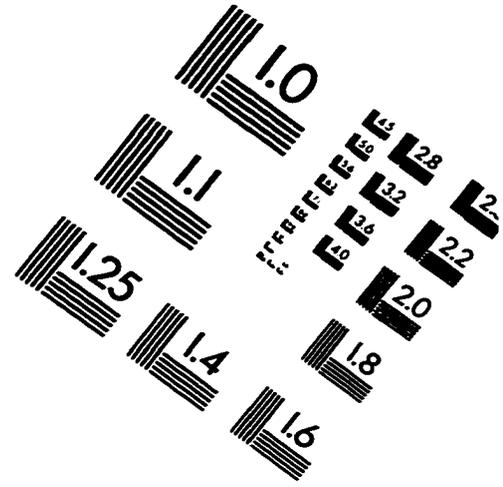
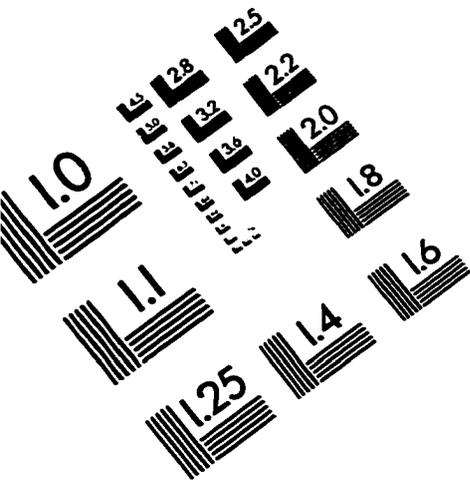
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IMAGE EVALUATION TEST TARGET (QA-3)



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