Revisiting the Oil Factor: U.S. Military Interventions in Iran and Iraq

A Comparative Case Study with QCA. 1953-2003.

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Executive Summary

Wielding a theoretical framework based on a new conceptualization and calibrated operationalization of the "oil factor" — defined as unmitigated threats to the U.S. oil access and oil prices — and realist concepts, I ask the research question: "Under what conditions can oil threats explain U.S. military interventions decisions in Iran and Iraq?" For answering this research question, I conduct a theory-guided comparative case study forming eleven cases, of which five led to intervention, followed by qualitative comparative analysis. These cases span from the coup in Iran in 1953 to the 2003 Iraq War, and feature prominent threats to America's oil supply.

I find that oil threats are not a reliable or systematic factor for U.S. interventions against Iran and Iraq when viewed in isolation from escalation risk *and* other threats. While there are cases of high oil threats that lead to intervention, the presence of this value is not necessary for military intervention, while others factors are far more reliable and decisive for intervention decision-making. This finding contrasts what is commonly argued by resource war scholars (e.g. Klare 2001; 2004), and indicate that many inferences from the literature on the "war for oil argument" should be reconsidered. I conclude that risk of escalation with the Soviet Union and hostile threats are deciding factors for American intervention decision-making in the cases. There were no cases of intervention when there was high risk of provoking a Soviet response, or with low perceived hostile threats.

Abbreviations

9/11 — Terrorist attacks against the U.S. on September 9, 2001.

bbl — Oil barrel (approximately 159 liters, 42 US gallons, 35 imperial gallons)

BP — Oil company; formerly British Petroleum, Anglo-Iranian Petroleum Company, and others

bpd — Barrels per day

CIA — Central Intelligence Agency

CENTCOM — United States Central Command

EIA — Energy Information Administration

IEA — International Energy Agency

NATO — North Atlantic Treaty Organization

mbd — Million oil barrels per day

OAPEC — Organization of Arab Petroleum Exporting Countries

OPEC — Organization of Petroleum Exporting Countries

tbd — Thousand oil barrels per day

U.S. — The United States of America

UN — The United Nations

WTI — West Texas Intermediate; an oil price reference.

QCA — Qualitative Comparative Analysis

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This thesis is for now the zenith of my education, and marks the culmination of an arduous

endeavor. It has been an exciting experience from which I have learned more than I had ever

expected. The thesis process was characterized by continuous struggle, occasional exuberance

upon solving challenges presented to me in research design, theory, and empirical matter, and

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Any errors are fully my responsibility.

Oslo, May 18, 2015

Magnus Sparre

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1 Introduction and Methodology

Oil is arguably essential to understanding American foreign policy, and the role of oil in politics is much discussed by foreign policy scholars, energy policy experts, and society in general. This debate has grown particularly controversial with the United States' [U.S.] 2003 invasion of Iraq. Systematic and comparative research regarding the "oil factor" as a cause of U.S. interventions remains sparse. Consequently, I address the "oil factor" in U.S. foreign policy by analyzing and comparing cases of U.S. foreign policy toward Iran and Iraq — two major oil-exporters against whom the U.S. has deployed military means in the Cold War and post-Cold War eras. As a theoretical background for this thesis, I draw on inferences and assumptions from the "war for oil argument" — that the U.S. has used military intervention against oil-producers because of oil objectives — and essential realist concepts. Michael T. Klare (e.g. 2001; 2004) presents the most sophisticated version of the "war for oil argument", and is wielded extensively for this perspective (Gause 2010: 235). According to Klare (2001), the U.S. has wielded military power in the Gulf region in response to and because of oil threats. With this postulate, my research question is:

Under what conditions can oil threats explain U.S. military interventions and non-interventions in Iran and Iraq?

For answering the research question, I perform a comparative case study with a qualitative comparative analysis [QCA] on a wide sample of positive and negative cases. The cases are instances of U.S. intervention decision-making against Iran and Iraq, where an intervention occurred or could have occurred. The case sample for this study is shown in Table 1.1, and displays my use of many negative cases in addition to the positive cases.

Positive Cases	Negative Cases
Iran Coup 1953	Iraq in 1967 Oil Embargo
Hostage Crisis 1979-1980	Iraq Oil Nationalization 1968-1972
Iran in Tanker War	Iraq in 1973 Oil Embargo
Gulf War	Iranian Revolution 1978-1979
Iraq War	Iran-Iraq Land War

Table 1.1: Case Sample by Positive and Negative Cases

Many studies of the "oil factor" appear to unsatisfyingly control for the effect of other factors, but rather trace a fuzzy "oil factor" through a selection of cases. Rather than to follow this approach, I have used key concepts from the realist tradition to control for other factors and have a precise and explicit operationalization of oil threats that can be expected to lead to

intervention. The realist concepts are containment, alliance politics, and deterrence, which each have vast theoretical literature and discourse.

This thesis is relevant to a range of discourses in international relations and energy studies, such as causes for the use of military force, the "oil factor" in U.S. foreign policy, and the geopolitics of energy. It is a contribution to the study of U.S.-Gulf relations in general, with emphasis on American alliances, deterrence, containment, and Cold War geopolitics. The research topic and question are further relevant to society in general because of the importance of oil security in modern economies and societies, and because of the widely perceived notion that this is a leading cause for contemporary use of military force.

1.1 American Oil Security

Klare (2001: 51-53; 78; 2004: Ch. 1) argues that threats to American oil security are the primary reason for American interventions in the Gulf region, and further considers American dependence on imported oil the reason for oil threat vulnerability, which lead the U.S. to intervene. As further discussed in the next chapter, oil security generally means adequate physical access to oil at affordable prices. Klare's assumption regarding oil security is quite simplified as the current global oil market could damage the U.S. economy severely from a disruption in the Gulf even if the U.S. did not import a single barrel of oil. Secondly, oil shocks originating in Europe or Asia could have "deleterious consequences for production and employment in the United States" (Duffield 2012: 149). States have strategies for improving their oil security, primarily attaining long-term contracts with reliable, stable producers, diversifying supply, reducing demand, and promoting self-sufficiency. Regardless of these strategies, in the contemporary market context all states are vulnerable to some extent as the price formation system allows substantial and immediate price increases in crises. ²

[.]

¹ Many scholars refer to the concept as "energy security", I have opted for "oil security" in order to avoid any confusion regarding, or need for specification of, what energy source is in question.

² The mechanisms and developments of the oil market will not be discussed in-depth for this study. For further readings on this, Yergin (2009) and Evans and Brown (1991) offer substantial accounts.



Figure 1.1: U.S. Field Crude Oil Production in Annual Million Barrels. Source: U.S. EIA (2015a)

The U.S.' role in the oil market and its oil security has changed substantially over time. Figure 1.1 shows annual crude oil production in the U.S., and indicates a strong rise that peaked in 1970. However, that is not the full extent of the story; the U.S. only became a net oil importer in 1948, but has always been a major oil-producer. In the interwar period, the U.S. supplied nearly two-thirds of the world total oil output (Evans and Brown 1991: 22-24). Until the early 1970s, the U.S. maintained spare capacity that that was instrumental to oil security: "America's spare capacity had proved to be the single most important element in the energy security margin of the Western world" (Yergin 2009: 596). Without spare capacity, the U.S. was vulnerable to oil threats, but from the mid-1980s has had strategic oil stockpiles available to improve its supply in crises. This has become the most functionable policy tool available to the U.S. Federal Government for oil security (Beaubouef 2014: 180). This also means that U.S. dependence on oil imports has varied strongly in the post-World War II period as indicated in Figure 1.2. However, American oil supply has been well-diversified with a large share of its historical imports deriving from the Americas and quite little from the Gulf. Among Gulf producers, Saudi Arabia has generally been the largest source of U.S. imports as well as Iran until 1979. Recently, U.S. oil production has boomed with the tight oil revolution, leading to historically high output.

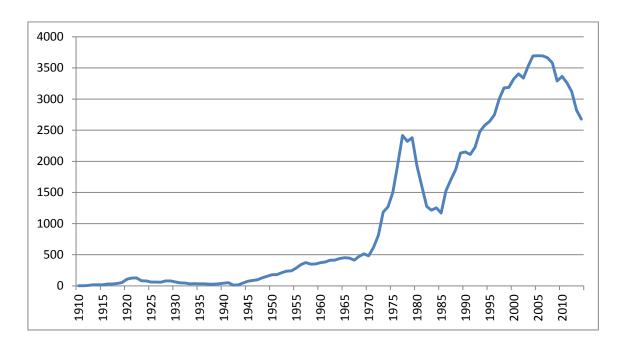


Figure 1.2: U.S. Imports of Crude Oil in Annual Million Barrels. Source: U.S. EIA (2015b)

There is a prominent discourse regarding the effects of American hegemony on oil markets and oil security. Particularly notable is the argument that the U.S. has extended its postwar dominance in world energy markets through its relative energy self-sufficiency, the dollar denomination of oil trade and its economic and military power (Bromley 1991: 6-7). Robert Keohane and Arild Underdal (2011: 54) dispute this, and argue that with the 1970s and particularly the 1973 Oil Embargo "the structural control exercised by the United States [over the global economy] was nonetheless diminished". Dag Harald Claes (2010: 25) supports their argument: "The United States has been a policy-taker in the international oil market since the beginning of the seventies, not a policy-maker". I have decided that this does not directly affect my analysis, as I do not compare U.S. oil security to that of other countries or particularly consider its ability to affect the oil market, but rather how the U.S. responds to oil threats.

1.2 Scope & Limitations

The scope of this thesis is limited to only examining U.S. military intervention decisions against Iran and Iraq in the postwar era. I intend to explore how the U.S. role in the global system as a superpower and its vast military capabilities affect how it acts against two bellicose regional powers that have imposed massive oil threats. Iran and Iraq are important to the global oil market as major oil-exporters, but particularly because their exports vary

strongly over time because of political unrest, war, and international sanctions. Iran was a U.S. ally until the 1979 Iranian Revolution, and rapidly became a top adversary of the U.S. Iraq has never been an American ally, but has cooperated with the U.S. at times, and been invaded by the U.S. twice. Iran and Iraq have been willing to use powerful political means to pursue their interests — whether nationalization of the oil industry, war, or embargoes. Iran-Iraq relations are complex and contentious; the Iran-Iraq War was one of the most violent and horrendous wars in the postwar era. Iran and Iraq are situated in the same geopolitical context, are significant oil-exporters with revolutionary regimes in many of the cases, and have been adversaries of the U.S. Both Iran and Iraq were involved with the Soviet Union in several of cases; Iraq was cooperating closely with the Soviet Union for many years, while the U.S. was concerned with Soviet invasion or coup in Iran in several instances. This means that the Soviet Union may have affected American intervention decisions. Due to these similarities between Iran and Iraq, and their relations with the U.S., we can expect some homogeneity in the causal factors between U.S. interventions in Iran and Iraq. The scope conditions of only considering Iran and Iraq contain an element of most likely case design: Iran and Iraq are probably the two states in the world that have posed the most and greatest oil threats to the U.S., and have both experienced several interventions. Thus, if any cases of oil threat leading to a U.S. intervention exist, they are with some likelihood present in the sample.

The analysis is limited to examining the oil threats as a factor in intervention decisions; Iran and Iraq are primarily known as oil-exporters in the energy sector and their economies do not feature other natural resources as prominently for the duration of this study's timeframe. Oil arguably also holds an exceptional role in the global economy and as an energy source with *both* a strategic dimension, and a global market. I have also opted to limit the scope of this thesis by year; the analysis begins with the Iranian Oil Nationalization in 1951, which led to a coup in 1953, and ends with the 2003 Iraq War. With the inclusion of earlier cases, the validity of my analysis would deteriorate as cases become increasingly heterogeneous; there are important contextual shifts that occur shortly before the earliest sampled case. With possible earlier cases, the U.S.' role in the region was different, while Britain had a greater role, and considering oil threats before the U.S. became an importer is arguably meaningless. I ended the analysis with the Iraq War because more recent cases are unclear (e.g. cyber warfare against Iran) or unfinished (e.g. U.S. intervention against the Islamic State). An additional scope condition is that I exclude ally state behavior, but not domestic threats to allies.

1.3 Comparative Case Study and Qualitative Comparative Analysis

I used comparative case study design to answer the research question. The cases are instances of U.S. intervention decision-making against Iran and Iraq in times of political, oil, and security crises in the Persian Gulf as shown in Table 1.1. The thesis is theory-guided in that I present and substantiate a strong theoretical framework upon which I base explanatory factors. This study's approach to comparative case studies draws on analytic narratives (Bates et al. 1998), in that the cases are presented with a narrative before shifting to a structured analysis of each case based on a theoretical framework. As argued by Robert H. Bates et al. (1998), this results in solid analytic depth for each case within a parsimonious and theoretically sound framework. The analytic narrative approach is augmented by QCA in order to find patterns in the data across cases, and thus better answer the research question. This research design was elected for its ability to generate solid explanations of the outcomes parsimoniously, while the comparative element adds a depth and external validity uncommon to regular case studies.

QCA is a modern social science research analytic technique invented by Charles Ragin (1989), which is commonly used to compare causal configurations to outcomes between cases. The technique arguably holds greatest advantages over other analytical techniques with an intermediate number of cases, but is also used in low-n and high-n research. Condition variables in QCA were originally dichotomized, but with recent developments of the technique this is no longer necessary. In the traditional crisp-set QCA, dichotomized factors are used to form an equation that expresses what causal configurations provide a given value on the outcome variable. An important characteristic of QCA is that cases' parts "are not viewed in isolation but in context of the whole they form. To change one or more elements often changes how the whole is perceived or understood, which, in turn, has an impact on the meaning of each individual part" (Ragin 1989: 24). As causality is considered complex and heterogeneous, there is focus on causal conditions, interaction effects, and conjunctural causal mechanisms; effects are expected to co-vary. With QCA research, there is an understanding of causality and inferences as non-final; new cases and factors may challenge and change findings (Berg-Schlosser et al. 2009: 8-10).

As noted by Olav Schram Stokke (2007: 501-502), case studies often include too much context of the cases and inhibit inference to other cases:

A frequent complaint about case-oriented research is that it often incorporates too much of the specific context of the case into the causal accounts to permit inferences to other cases: thus, case-oriented research tends to be weak on external validity. [...] Use of the QCA technique will increase the number of cases and causal conditions that the investigator is able to consider.

Thus, while my approach is very parsimonious, I regardless consider a large number of causal configurations over a larger sample of cases than what is common in case studies. With the use of QCA, conjunctural causality is considered better than would likely be manageable with a narrative comparative analysis, and there is adequate reason to expect this to occur in the cases. Through basing the study on a rigorous theoretical framework, I ensure that the explanations for each case are comparable; the framework enables me to inspect the characteristics of each case on factors that other scholars generally would not, given pursuit of case-specific explanations.

I chose to use crisp-set QCA because many of the factors offer substantive and theoretical dichotomies. Consequently, all factors and the outcome needed to be dichotomized, and subsequent chapters are greatly affected by this. With some factors, there was a gray zone between high and low values, but I found appropriate and substantiated cutoff points as discussed in Chapter 2. While the use of dichotomies has certainly caused some loss of nuance and detail, I find that, in sum, the thesis is better for these restraints, and causal configurations are less uncertain. For future research, replicating this study with a fuzzy set analysis could be of interest; it should strengthen and nuance the findings. The thesis could be augmented with the addition of more cases within the scope conditions.

Limited diversity is a central concern for researchers using QCA, and means that the possible configurations of condition variable values far exceed the number of configurations observed empirically. Given limited diversity problems, "the researcher cannot know how the non-existing cases influence the necessity or sufficiency tests of causal configurations sketched above it" and it "frequently renders the analysis less conclusive" (Stokke 2007: 503). Another danger of proceeding with QCA given a limited diversity problem is that explanations become case-specific, and in the extreme only a description of the cases (Berg-Schlosser and Du Meur 2009: 27). In order to avoid problems with limited diversity, the researcher must use

a low number of factors relative to the number of cases. As the sample consists of ten cases, I decided on four factors.

1.4 Cases and Case Selection Strategy

John Gerring (2007: 19) argues that a case is a unit of a type with identifiable boundaries that inferences attempt to explain. Cases for this study are generally units observed over some period of time, and comprise instances of U.S. intervention decision-making against Iran and Iraq. Cases are constituted by having consistent value configurations — no substantial within-case variation, and a clear outcome. Values need to be mutually exclusive with the QCA technique, and as factors are dichotomized this is not a great challenge, although if a more fine-grained scale were applied to the analysis this could become an issue as there is some within-case variation. In practice, the formation and constitution of the cases have not posed great challenges, although I opted to split up the Iran-Iraq War, which has been split between the Land War and the Tanker War, and between Iran and Iraq in the Land War. With the Iraqi Oil Nationalization, I only sample a limited timeframe within a larger historical case. This process has largely been executed inductively over concerns with keeping values mutually exclusive. Inherently, many of the positive cases are aggregated cases — U.S. interventions largely do not consist of a single military operation, and this is consequently reflected in the constitution of cases.

Within the scope conditions, the case selection strategy for this study draws on James Mahoney and Gary Goertz' (2004) Possibility Principle, which seeks to find a balanced sample between positive and negative cases with a strategy for excluding irrelevant cases in small-*n* research. The Possibility Principle is that the researcher chooses as negative cases those where the outcome of interest is possible. This means that the case must be within the study's scope conditions, while with the Rule of Inclusion cases are relevant if their value on at least one independent variable is positively, theoretically related to the outcome of interest. Positive cases are selected as a subset of the population of relevant cases. As shown in Table 1.1, I have included five positive and five negative cases based on the Possibility Principle. I have used scope conditions to consider some cases irrelevant and then chosen several cases with the Rule of Inclusion. In order to maintain a balance between positive and negative

³ I did not use Mahoney & Goertz' (2004) Rule of Exclusion to exclude cases from the sample due to my framework's absence of *reliable* eliminatory factors, which is necessary for using this rule.

cases, not all of the latter are sampled, and there are certain positive cases that are not sampled also — notably interventions against Iraq between the Gulf War and the Iraq War. I expect that the inclusion of these cases would not affect the analysis. In selecting negative cases, I emphasized oil threats to the U.S. as this is the elected focus of the study. Accordingly, all the negative cases appear to pose high oil threats, but for sampling, I did not if these were mitigated by the oil market context. Some major unsampled negative cases are the Iraqi Revolution in 1958, Iraqi threats of invading and border disputes with Kuwait during the Cold War, the Iraqi coup in 1963, riots in Iran in 1963, various internal conflicts in Iraq, particularly with genocide and campaigns against the Kurds, and U.S. response to Iran after September 11. In most of these cases I found accounts of U.S. perceptions, policy discourse and involvement absent or lacking. Finally, these cases to an extent were excluded in order to optimally manage my resources; it is unlikely that these cases would provide much additional value to the study given the six selected negative cases and I doubt that they would significantly alter my findings.

1.5 **Data**

I have used large amounts of qualitative and quantitative data for the analyses. The qualitative material is mostly historical accounts of events, of U.S. action in each case, and of U.S. decision-makers' perceptions, preferences, and actions in relation to the cases. I selected this form of data because of its relatively high quality, and general abundance compared to other forms of data. Elite interviews would be the obvious alternative to this, but it is not a satisfying option because of the timeframe of the cases — attaining good validity through interviews regarding cases that occurred more than 50 years ago is difficult. Additionally, relevant informants appeared inaccessible as they would generally be top-level U.S. decision-makers with the Executive branch, prominently at the White House, the State Department, Department of Defense, CIA, and possibly the Department of Energy. I considered this an undesirable option for attaining data given my resources.

To some extent, I have relied upon other scholars' inferences to assign factor values when this is appropriate because the study considers many cases over a large timeframe, and the emphasis is on the comparison of cases. The inferences used need to be valid, reliable, and established in the scholarly community, and I believe the inferences used meet these criteria. Data access was generally good in the more recent cases with an abundance of valid, reliable

accounts, and useful inferences. The multitudes of accounts and scholarly discourse reinforced my case studies' validity due to the high quality and availability of material in the more recent cases. Due to the salient discourse regarding these cases, weak accounts are generally noticed and criticized. In the older cases, data was sparser; however, the accounts used for the analyses are robust and valid. To an extent this was a reason for not including more early cases; accounts of these events generally focus on the historical events in Iran or Iraq, and perhaps on British involvement, but less so on U.S. perceptions and involvement. Each case study relied on several accounts, which further reduced the risk of using such data. I have occasionally used primary sources or statements from U.S. decision-makers, and with these data it is necessary to assume that the sources are truthful, and not misleading or incorrect.

I generally used quantitative data to analyze oil threats, although it has not been available in all cases. As I use these data to describe oil supply flows and historical oil prices and not for regression analysis etc., and have had good historical accounts of the oil market context available in all the cases, this has not been a significant obstacle to making inferences. I have largely relied on posted prices for price data, which are not necessarily precise or perfectly valid:

The posted price thus became institutionalized as a tax-reference value rather than an actual selling price for Middle Eastern crudes, although it did indirectly establish a minimum selling price below which the foreign exporting companies could not make a post-tax profit on arm's length sales. (Evans and Brown 1991: 8)

However, shifts in posted prices do serve as a valid indication of oil prices, and with the rise of OPEC, their role increased: "With the subsequent extension of host-government control over production operations, official government selling prices became the focal point of the OPEC pricing system after the mid-1970s" (Evans and Brown: 1991: 8). When relying upon oil prices to display price threats, there is a concern with the causal linkage between the cases considered for the analysis and other factors, which may influence the oil price. For this study, these linkages have been rather unambiguous and unproblematic; accordingly, I have not put emphasis on arguing that there are causal relationships between prices and cases.

1.6 Ensuring Validity and Reliability

Validity is the concern with making inferences and conclusions effectively represent empirical reality, and assessing whether constructs devised by researchers represent or measure the categories of human experience that occur, while reliability is concerned with replicability and consistency of conceptualizations with other research (LeCompte and Goetz 1982: 32; Bryman 2012: 46). With Margaret LeCompte and Judith Goetz (1982: 35): "[Reliability] requires that a researcher using the same methods can obtain the same results as those of a prior study". This is the intrinsic feature of this concept, and I find that this is very possible for my study — my conceptualizations, operationalizations, hypotheses, theoretical model, and data are described in detail, and available to other researchers. In order for the research to be replicable, the researcher needs to be very explicit regarding their procedures (Bryman 2012: 47). I have taken efforts to ensure replicability by describing my operationalizations and analytical techniques, and citing other works or data whenever relevant. LeCompte and Goetz (1982: 32) consider reliability to consist of external and internal dimensions:

External reliability addresses the issue of whether independent researchers would discover the same phenomena or generate the same constructs in the same or similar settings. Internal reliability refers to the degree to which other researchers, given a set of previously generated constructs, would match them with data in the same way as did the original researcher.

I find that this study is acceptable in both regards, although other researchers in the context might not independently construct my operationalization of oil threats; however, they are certainly given the opportunity to replicate it. Given my constructs and operationalizations, I expect most researchers to assign the same values as I have, or in the very least not to assign values which would lead the theoretical model to expect a different outcome. By relying on secondary, written document sources I ensure acceptable reliability; researchers replicate the study based on the same or similar accounts.

Similarly, Gerring (2007: 43; italics in original) distinguishes internal and external dimensions of validity: "Questions of validity are often distinguished according to those that are *internal* to the sample under study and those that are *external*. The latter may be conceptualized as a problem of representativeness between sample and population".

Considering that the case population is cases of U.S. intervention decisions toward Iran and

Iraq in the postwar era, I have less issues with external validity than most case study research given the large sample within my scope conditions and a good sampling strategy. According to Gerring (2007: 43), there is generally some tradeoff between internal and external validity, arguably because of resource constraints in research designs and available data. Case studies generally have acceptable internal validity due to the focus on explaining cases. For this thesis, I have ensured internal validity through attaining good understanding of the cases and through having a well-developed theoretical foundation. Most of the cases have substantial academic literature to draw on as well. Thus, it is unlikely that I have omitted important factors. Regardless, the research design has traded off some internal validity for better external validity and for making cross-cases inferences.

1.7 Structure and Chapter Overview

A chapter developing and discussing the theoretical framework with conceptualizations and calibrated operationalizations, and hypotheses follows this chapter. After this, the thesis proceeds to a series of largely chronological case studies in a single chapter. For each case, I introduce the causal configurations and what outcome the theoretical model predicts for the configuration, and I summarize the values assigned with the end of each case, and note if the configuration led to my predicted outcome. By the end of the chapter, I summarize and draw some implications from the cases, and evaluate my explanations where relevant. After the case studies, follow a chapter of comparative analysis that elaborates on the QCA technique, and a concluding chapter.

2 Realism, Oil, and Interventions: A Theoretical Framework

As discussed and outlined in the previous chapter, the purpose of this study is to explore under what conditions oil threats explain the U.S.' use of military means against Iran and Iraq. A strong theoretical model is necessary for the use of the QCA technique to ensure that cases are comparable, while retaining satisfying explanatory power. This chapter begins by discussing military interventions as a form of political means and then outlining U.S. military grand strategy and Gulf objectives, before discussing realism and geopolitics as a basis for three of the study's explanatory factors. Then I delve into sections on each of these factors with conceptualizations and operationalizations. Following this is a discussion of resource war theory and the "oil factor" in U.S. foreign policy, and then a conceptualization of oil threats with operationalization and discussion. Finally, I summarize the operationalization, pose hypotheses, and discuss these.

As this chapter operationalizes all factors for the theoretical model, it is important to consider how the model should be conceptualized and operationalized for optimal validity, and how this relates to the QCA technique. A measurement is valid when "scores meaningfully capture the ideas contained in the corresponding concept" (Adcock and Collier 2001: 530). Consequently, factor values need to reflect their corresponding theoretically-defined concepts via the operationalized concept. In order to validly measure the study's factors and outcome, these need to be theoretically-defined, and then operationalized; the operationalized concepts then need cutoff points, which reflect the theoretically-defined concepts. This means that factor and outcome values must capture as much as possible of the theoretically-defined concepts and measure as little else as possible. Finally the values on these operationalized concepts must be appropriate and meaningful (Adcock and Collier 2001). In the QCA tradition, there is emphasis on calibrated measurements; calibration means considering the degree of membership of an observation in a dependable category. Arguably, social sciences generally rely on uncalibrated measurements as cases' positions are defined relative to each other and not to dependable standards (Ragin 2008: 71-83). As my study uses a crisp-set QCA technique, the factors and the outcome are dichotomized, but considering what values belong to each category and the cutoff point between values is necessary and important for validity. It is best to justify the threshold between different values on substantive and/or theoretical

grounds, and it is important to be transparent in justifying said thresholds (Rihoux and De Muir 2009: Box 3.3). From here, I will argue the importance and constitution of each theoretically-defined concept, operationalize the concepts with cutoff points, and discuss the operationalizations.

2.1 Military Interventions

In the postwar era, the U.S. has intervened by force in many countries and for many reasons. Military force and covert operations are generally used against perceived national security threats or in the pursuit of important national interests by great powers and strong regional states against weaker states. Force is also often used within the state itself to fight against non-state actors, however this topic is not relevant to this thesis. Unprovoked military intervention is illegal among states through the UN Treaty Article 2(7), but still occurs — also by the U.S. (Fermann 2007: 56). Joshua S. Goldstein (2001: 289; 243) argues that states use military force as a different means of leverage against other states for influence in international bargaining in accordance with their objectives and strategies, and that military capabilities vary between states as a product of earlier decisions and deliberate maintenance.

However, force is not only a different form of means, but comes with limits to what it is effective for achieving; with Gunnar Fermann (2007: 56) the intention with overt and covert operations vary from strengthening a political opposition, affecting elections, securing the supply of resources, securing individuals, forcing a regime change, and conquering territory. This means that military means are only effective for a limited range of purposes, which vary significantly. This poses a challenge to my framework — threats may arise against the U.S. that could warrant military intervention, but intervention is perceived as an inadequate means to achieve these ends, or too costly to be worthwhile. Using military force against an oil threat is unlikely always to be effective — rather military interventions against a production disruption could worsen the situation. These are valid concerns as there are clearly limitations on what military force is effective for achieving, and it comes with high costs, and possible contingencies. Regardless, there is likely a pattern in U.S. intervention decision-making and systematically considering the impact of oil threats on this is worthwhile.

Fermann (2007) does not differentiate between different forms of military intervention on an operational level, although differences between types of operations are considerable. For

instance, the 2003 invasion of Iraq inherently differed from the small-scale covert Operation Ajax, which staged a coup in Iran, for instance. In order to use a crisp-set QCA technique, what is arguably a continuum of military force usage must be simplified into a dichotomy. I assign a high value on the military intervention outcome factor if the U.S. used covert or overt direct military intervention against Iran or Iraq in the respective cases, and low values on other arguable uses of military force, such as intervention threats, displays of military power, mobilization, arms sales, and training or economic support for other actors. I do not emphasize the operational aspects of the force used, although I briefly describe interventions in the case studies.

2.2 U.S. Military Strategy and Realism

States generally possess strategies that detail their objectives. As I consider military interventions, it is important to comprehend American grand strategy and Gulf strategy, and particularly what objectives military force can attain or maintain. Based on the realist tradition, Robert J. Art (1991: 8-9) outlines five U.S. grand strategy objectives to be secured through military means in the post-Cold War era:

- 1. Protection of the U.S. homeland from destruction
- 2. Continued prosperity based in part on preservation of an open world economy
- 3. Assured access to Persian Gulf oil
- 4. Prevention of war among the great powers of Europe and the Far East, and preservation of the independence of Israel and South Korea
- 5. Where feasible, the promotion of democratic governments and the overthrow of governments engaged in the mass murder of their citizenry.

Art (1991: 47) notes that the U.S. has two essential objectives in the Gulf, "preservation of secure access to Persian Gulf oil, and protection of Israel". These objectives differ from those of the Cold War era in that containment of the Soviet Union is no longer an objective, and threats to the objectives have changed. Consequently, I consider containment of the Soviet Union an important objective for the duration of the Cold War. Art (1991) finds that the primary threat to the first objective is a nuclear attack, due to the U.S.' geography;

correspondingly, I emphasize nuclear threats in the operationalizations. While I generally find these objectives to provide a solid account of U.S. military grand strategy, I find that it underestimates the importance of the American alliance with Saudi Arabia, as an intrinsic U.S. objective in both its grand strategy and Gulf strategy is the survival of the Saudi regime (Klare 2001: 75-78).

My theoretical framework consists of two different traditions: Realism and resource war theory. Consequently, I have not used the idealist final objective outlined by Art (1991), or other idealist theory. Intrinsically, there is some overlap between arguable idealist factors with the realist factors in my model; support for allies, containment of the Soviet Union, and opposing the diffusion of nuclear weapons can all contain idealist components. Realism is perhaps the most prominent theoretical tradition in international politics, and emphasizes states as unitary, rational actors seeking security in an international system characterized by anarchy. It is in most regards similar to geopolitics, although the latter is marked by greater emphasis upon geography as a factor for states' survival and power, and for military operations. Gearóid Ó Tuathail (2003) argues that these traditions form a theoretical discourse consisting of socially constructed concepts that shape actors' behavior and preferences. In the postwar era, the realist discourse has emphasized three core concepts: Containment, alignments or alliances, and deterrence.

2.3 Containment: Communism and Hostile Power

Containment in the realist tradition arguably means policies intended to disrupt the increasing power of other states. Containment can occur through the use of military intervention, but also by a plethora of other means, such as arms sales, economic support or aid, economic sanctions, and alliance formation and politics. The concept of containment became explicit with the beginning of the Cold War, as American diplomat George Kennan sent his "Long Telegram" to Washington, urging the U.S. to initiate a policy of containing the Soviet sphere of influence and power, which led to the Truman Doctrine (Tuathail 2003: 47-50). With the Truman Doctrine, all places and conflicts are to be interpreted through a geopolitical monochrome of "good versus evil, capitalism versus communism, the West versus the East, America versus the Soviet Union" (Tuathail 2003: 48), with the perspective that the Soviet Union was intent on expanding its power and totalitarianism. Consequently, the U.S. was inclined to use military power to contain Soviet power and influence globally and there is

every reason to expect the U.S. willing to do so in the Gulf region. For instance, Melvin A. Conant (1982: 3-4) explicitly refers to containment of the Soviet Union as one of three U.S. objectives in the Gulf, and Thomas L. McNaugher (1985: 8-21) is similarly concerned with Soviet power in the Gulf and considers containment of the Soviet Union to be an essential U.S. objective in the Gulf. The Carter Doctrine (Carter 1980) is commonly interpreted as explicitly stating that the U.S. is willing to use military power to stop increased Soviet presence in the Gulf following Moscow's invasion of Afghanistan. It is therefore inferable that the U.S. is willing to use military force to curb Soviet power and influence in the Gulf for the duration of the Cold War.

The concept of containment usually refers to Cold War strategy, however it can and has been used in other contexts as well, sometimes with different conceptualizations, and I intend to wield a broader understanding of containment than what can be understood from the Truman Doctrine. This broader conceptualization is perhaps best exemplified by Martin Indyk's (2004: 8) "dual containment" strategy against Iran and Iraq in the 1990s:

The United States [was enabled] to adopt a strategy of containment and isolation of both the Iranian and Iraqi regimes. This strategy became known as "dual containment". For almost a decade, this policy enabled the United States to protect its security interests in the Gulf quite effectively. There was an occasional need to threaten or use military force to ensure the effective containment of Saddam.

Indyk "invented" the idea of "dual containment", which was arguably U.S. Gulf strategy following the Gulf War until the beginning of the Iraq War. As argued in the above quote, the strategy was containment and isolation of Iran *and* Iraq as dual threats through diverse means, and thereby reflect my conceptualization of containment well. After the end of the Cold War, the U.S. has increasingly referred to "rogue" states as a threat to its security, which pose particularly prominent threats when they attempt to attain weapons of mass destruction. Art (1991: 47-48) relates this to oil, the Gulf, and hegemony:

Aggressive, erratic, and otherwise ill-disposed states that threaten to grab a large measure of control over the world's most economically vital raw material must be stopped, with military force if necessary. The United States must continue to act to prevent any potential regional hegemon, be it Iraq, Iran, or a Saudi Arabia turned unfriendly, from dominating access to Gulf oil.

This refers to several different concepts; first that the U.S. must prevent a hostile regional hegemon in the Gulf, second that oil revenues can be pivotal to states' ability to become a

regional hegemon, and third that the final objective is to preserve access to Gulf oil. For this factor, it is crucial to note that the intrinsic threat to the U.S. is the rise of a hostile regional hegemon in the Gulf. From this, we can expect the U.S. willing to use military force against a perceived threat of an increasingly powerful hostile Iran or Iraq.

It is reasonable to expect the U.S. to wield military force in order to contain some perceived hostile threats whether from the Soviet Union or from other adversaries. However, I find that more precise criteria for measuring such threats are necessary for determining a valid cutoff point between high and low hostile threats. With the Truman Doctrine, Carter Doctrine, and McNaugher (1985), I assign a high hostile threat value if there is a perceived threat of the Soviet Union invading or performing a coup in a case-relevant Gulf state. With Art (1991: Table 1; 47-48), I assign a high value if the relevant state is at war with or invades a nonhostile Gulf regime. Finally, I assign a high value with a perceived imminent threat of a nonallied Iran or Iraq attaining nuclear weapons; this is for instance supported by Art (1991: 9) with: "The only serious threat to U.S. security, as I have defined the term, is the spread of nuclear weapons to crazy Third World statesmen or fanatical terrorists". Zbigniew Brzezinsky et al. (1997: 26) support this, and argue that nuclear weapons "directly threaten U.S. national interests". Unless one of these conditions is present in a case, I assign a low hostile threat low value. Domestic threats to allies is measured in the ally threat factor, and states becoming aligned with or increasing their cooperation with the Soviet Union falls below the cut-off point. With this operationalization and cutoff point, I have substantial theoretical support in realist and U.S. grand strategy thinking, and should have solid measurement validity.

2.4 Supporting Regional Allies

The U.S. has and has had important strategic allies in the Middle East, and can be expected to use military power to ensure their security in some contexts. The general purpose of alliances is to augment their members' power relative to other states: "By pooling their power capabilities, two or more states can exert greater leverage in their bargaining with other states" (Goldstein 2001: 96). Glenn H. Snyder (1997: 6) considers alliances a subset of alignments, with alignments being a broader and more fundamental term, "defined as expectations of states about whether they will be supported or opposed by other states in future interactions", and identifies potential opponents as well as friends. In contrast, Snyder (1997: 6) finds that: "Formal alliances are simply one of the behavioral means to create or

strengthen alignments. Thus alliances are a subset of alignments — those that arise from or are formalized by an explicit agreement, usually in the form of a treaty". I use "allies" and "alliances" in reference to states that are strongly aligned with the U.S. or the Soviet Union, regardless of whether there is a formalized alliance.

Jason W. Davidson (2011: 29) develops a neoclassical realist framework to indicate when a state is likely to support its allies against a threat, which argues "that states are highly likely to provide support when alliance value and threat are high (or prestige is implicated) and public opinion is irrelevant or supports intervention". Davidson (2011: 30; 175) emphasizes the effect of public opinion on intervention: "When relevant, public opinion can trump alliance value and national interest", and notes that freeriding is the optimal strategy when a state knows that whether an allied state will act and succeed is not contingent on their cooperation or participation. Consequently, the U.S. may be inclined to use military force to secure its allies' interests in the Gulf, given that the alliance value is high, that there is a perceived high strategic threat, and public opinion does not strongly oppose it. In my operationalization, I do not consider the impact of public opinion for intervention decisions, but only threats to important regional allies.

I have instituted a cutoff point between high and low ally threats by the former being existential or substantial security threats; these are either the perceived imminent threat of revolution, substantial unrest or civil war, or perceived imminent threat of, or in, substantial armed conflict with case-relevant state. Other threats to allies, such as terrorism, economic warfare, and adversaries arming their opposition are assigned low values, as these generally do not constitute urgent existential threats. This operationalization and the cutoff point meaningfully capture the theoretically-defined concept, and the cutoff between high and low values have substantial support in realist theory, given realism's focus on existential threats.

Iran was an essential U.S. Gulf ally following the fall of Mossadegh in 1953 until the Iranian revolution in 1979. Iran's role in the region was particularly prominent in the 1970s, after Britain had withdrawn its military presence from the Gulf, until the fall of the Shah regime (Gause 1994: 59). Consequently, I consider Iran an ally from 1953 until 1979. Iraq was not an American ally in any sampled cases as Iraq was aligned with Moscow for most of the Cold War (Fukuyama 1980; Smolansky and Smolansky 1991), and Saddam Hussein was not able to become a solid U.S. ally after the Iran-Iraq War either, regardless of cooperation with the U.S.

The most important U.S. ally in the Middle East is arguably Israel, which holds massive domestic political support in the U.S. and is arguably perceived as an outpost of democracy, and Western and American interests. I consequently consider Israel an important ally in all cases. Saudi Arabia has been an important U.S. ally since World War II as a major Gulf oilexporter. We can expect the U.S. to support the Saudi regime since 1945 until today (Klare 2001: 75-78). Kuwait has become a significant U.S. Gulf ally over time; in 2004 Kuwait was designated status as major non-NATO ally by the Bush administration, following their participation in and funding of Iraq containment policy and sanctions after the Gulf War (Katzman 2005). However, the U.S. did not act in the defense of Kuwait from threats of Iraqi invasions in the 1960s and 1970s or emphasize Kuwait under the Nixon Doctrine, when the U.S. supported Iran and Saudi Arabia in order for them to provide regional security (Pollack 2002: 14). Consequently, I have considered Kuwait an important strategic alliance after the end of the Gulf War, and not before then. Bahrain became a major non-NATO ally in 2002 and the U.S. Fifth Fleet is stationed there. It is an important contemporary U.S. ally in the region (Duus Rodin 2013: 82-83). The U.S. maintained a small naval task force based in Bahrain since the end of World War II (Pollack 2002: 13), but Bahrain did not become independent until 1971 and I consider it an ally from this time. Empirically, I have not found substantial threats to Bahrain in the cases and it is therefore not considered in-depth.

Britain had a significant military and economic presence in the Gulf until 1971 when it withdrew its military forces, and was an American ally in the postwar era. However, U.S.-Britain relations in the Gulf in this period were complex, as they were both cooperating and competing for influence and oil concessions. For instance, the U.S. went against British and French interests in the 1956 Suez Crisis to improve their relations with Egypt. Consequently, the U.S. cannot be reliably expected to support Britain in the Gulf region, and particularly not with military means. Table 2.1 summarizes the U.S. Gulf alliances and the years in which I expect the U.S. likely use military intervention against threats to these Gulf allies.

U.S. Gulf Ally	Years
Iran	1953-1979
Israel	1945-
Saudi Arabia	1945-
Kuwait	1991-
Bahrain	1971-

Table 2.1: Summary of U.S. Gulf Alliances

 4 This status enables recipients to purchase equivalent U.S. arms and weapons systems as NATO members.

2.5 Deterrence and Escalation Risk

I based the final realist factor on the concept of deterrence, but rather than considering American ability to deter its adversaries, I consider other actors' ability to deter the U.S. from intervening against Iran and Iraq. Deterrence can be understood as actors' deliberate attempts to manipulate the behavior of other actors through conditional threats, and in order to work it requires actor A to persuade B to act to serve the interests of both but according to the dictates of B's rationality (Freedman 2004: 6; 28). Lawrence Freedman (2004: 30) argues that actors may be deterred without direct threats from the potential "victim": "A would-be aggressor may thus be effectively deterred by an accurate assessment of the likely form of his potential victim's response without the victim having to do very much". Deterrence can be extended to a state's allies, as the U.S. has done for Western Europe through NATO. Actors can deter through denial and punishment, where the former refers to means that add credible and foreseeable costs to a military operation through defenses, while *punishment* threatens retaliation (Freedman 2004: 36-40). Punishment will often mean escalation through either intensifying or initiating a conflict elsewhere, or using greater military power, with the ultimate possibility of escalating to nuclear weapons. In my operationalization, I have conceptualized deterrence of the U.S. as escalation risk, and placed the cutoff point for high risk with the possibility that a conflict could escalate to the use of nuclear weapons. Contrary to the other operationalizations, a high value on this factor is likely to lead to a nonintervention outcome.

Art (1991) emphasizes nuclear weapons as a threat to American security, and consequently I assign a high escalation risk value to cases where the U.S. considers intervening against a nuclear-state, or the U.S. perceived a risk of escalation with a nuclear-state in the event of an intervention. However, neither Iran nor Iraq possessed nuclear weapons in any of the cases, and no other nuclear-states than the Soviet Union directly warned the U.S. not to intervene in the sampled cases, or was perceived as likely to consider involvement that could lead to escalation. The Soviet Union maintained nuclear weapons across the sampled Cold War cases, which posed a potential existential threat to the U.S. Both the Soviet Union and the U.S. involved themselves in numerous regional conflicts during the Cold War, which with Freedman (2004: 78) "was seen to carry risk of escalation to something much worse", although "in practice growing superpower caution meant that the risk declined". This indicates that the superpowers avoided involvement when they considered it to pose a risk of

escalation with the other. In regional conflicts involving both superpowers, there was arguably some perceived risk of escalation, which in the extreme could perceivably lead to nuclear war. Consequently, any American perception that intervention could lead to a direct Soviet response meant there was a risk of escalation. The likelihood of a regional conflict escalating to nuclear war was very low, but as noted by John J. Mearsheimer (1984: 22) "given the consequences of using these horrible weapons, it is not necessary for the likelihood of use to be very high". Thus, I assign high escalation risk values to cases where the U.S. perceived some likelihood of escalation with the Soviet Union.

Iran became aligned with China following the 1979 Revolution and Iraq purchased arms from China since its 1958 coup; China is a nuclear power, and under some conditions it might use direct military force against the U.S. However, Steve A. Yetiv and Chunlong Lu (2007: 215; 200-210) conclude that China's interest in the Gulf was insignificant in 1980, that the Middle East became a major area of importance by 2000, but that China has minimal military involvement in the Gulf region and rather freerides on U.S. military presence as a guarantee for oil security. Thus, there is very low perceived risk of escalation to nuclear war with China from American Gulf interventions in the sampled cases; consequently, I decided that these relations fall below the cutoff point for high escalation risk. China participated in the Gulf War, but condemned the Iraq War; however, there was no indication that the U.S. perceived any risk of escalation with China in the latter case. Iran aligned with North Korea after the 1979 Revolution, but North Korea did not claim to possess nuclear weapons until 2005. Thus, there was no risk of nuclear escalation with North Korea, and neither Iran nor Iraq had other alliances with nuclear-states that could with any likelihood lead to nuclear escalation, in the sampled cases. Consequently, I only consider perceived risks of direct Soviet involvement in the event of an intervention in order to assign escalation risk values.

This operationalized concept effectively captures the theoretically-defined concept, and places a high threshold for high values; given the Soviet Union's historical involvement with Iran and Iraq this is appropriate to ensure satisfying variation in factor values. There is an endogeneity problem in the escalation risk factor, namely that it will likely interact and have varying effect depending on the form of military action considered by the U.S. — for instance escalation risk is likely lower with small-scale or covert military operations than large-scale overt operations. Arguably, what form of operation is appropriate to address given threats is contingent on the historical context, and escalation risk is to an extent inherently contingent

on both of these. Thus, an endogeneity issue appears inevitable in any operationalization of escalation risk; consequently, this operationalization does not have completely satisfying internal validity, even though the factor is far from fully endogeneous. Considering the extent of the endogeneity problem, I decided to include escalation risk in the framework because I found the problem insignificant relative to the explanatory power it provided.

2.6 Resource War and the "Oil Factor"

Felix Ciută (2010: 129-130) identifies two strands of thought that converge in the logic of energy security: That energy is what states fight their current wars with, and what states fight for. The latter strand is resource war theory, which forms the basis for my oil threat factor. The resource war theory emphasizes societies' economic dependence on raw materials and the perceived benefits of having secure access or control over the production of the raw materials. Thomas F. Homer-Dixon (2003: 204) argues that: "Scarcities of critical environmental resources [...] are powerfully contributing to mass violence in key areas of the world". Klare (2001; 2004; 2012) particularly applies this to oil and finds it to be an important cause of interstate military conflict, which is in contrast to Homer-Dixon (2003: 204) who finds that: "While these "environmental scarcities" do not cause wars among countries, they do sometimes sharply aggravate stresses within countries, helping to stimulate ethnic clashes, urban unrest, and insurgencies". Conversely, Klare (2012: 141) argues that the U.S. is inclined to secure oil supply through military force, and concludes: "The use of military force to protect the flow of imported oil has been a clear pattern of American policy, however quietly pursued, and certainly explains U.S. continued interests in Iraq". According to Klare (2004: Ch. 1), this is due to American oil import dependence. With Ciută (2010: 129), these differences constitute important differences between scholars in the resource war literature where some consider competition over scarce energy resources a primary cause for conflict, while others argue that scarcity can generate socio-economic, political and environmental conditions, "which cause or accelerate both interstate and intrastate conflict".

Art (1991: 47) finds that that oil security does not fully cover the "oil factor" in U.S. foreign policy behavior in the Gulf: "It is not simply the price of oil that concerns the United States; it is also who controls access to the oil, and the ways in which that access could be manipulated". However, Art (1991: Table 1) still emphasizes uninterrupted access to Gulf oil as an important military policy objective, but considers the primary threat to this objective to

be a state attaining a near-monopoly, and that the U.S. should deter producer states from attacking or conquering each other. I measure such threats in the hostile threat factor with states invading each other. Meghan O'Sullivan (2013: 32) emphasizes energy security as an objective for importer states: "The energy imperative is so central to the prosperity and, as a result, the stability of countries that they will often use whatever instruments are at their disposal to ensure their energy security is met". Thus O'Sullivan considers energy security a principal driver of importer strategy, while other roles energy can play in states' grand strategies are restricted to major producers. Klare (2004: xi-xii) argues that oil security has generally been an important concern for the U.S., because American economic performance is contingent upon adequate, affordable access to oil. This is generally accepted among scholars in the field; however, Klare (2001: 6) finds this to be directly related to U.S. military policy: "Among [U.S. strategic] objectives, none has so profoundly influenced American military policy as the determination to ensure U.S. access to overseas supplies of vital resources", which means that the U.S. is willing to use military power in order to ensure its oil security. Klare (2001: 29; 53) is more explicit regarding this assumption: "turmoil in [oil producing] areas can easily disrupt the global flow of oil, any outbreak of conflict, however minor, will automatically generate a risk of outside intervention", and finds that the U.S. has "chosen to intervene in local disputes when they perceived a threat to the free flow of oil". With this, both O'Sullivan (2013) and Klare (2001) arguably place emphasis on energy security, and conclude that the U.S. is willing to use military force for their energy security objectives.

There is a plethora of definitions of energy security, which are largely transferable to oil security, and some characteristics are generally shared among the definitions. Christian Winzer (2012: Table A1) summarizes various conceptions of energy security and shows that they typically emphasize adequate, uninterrupted access to meet demand, affordable price, and occasionally other factors like sustainability, political objectives or values. A particularly common definition of energy security is oil analyst Daniel Yergin's (1988: 111): "The objective of energy security is to assure adequate, reliable supplies of energy at reasonable prices and in ways that do not jeopardize major national values and objectives", which works well for most analyses. O'Sullivan's (2013) definition of energy security is not meaningfully different from Yergin's, and Klare (2004: xi-xii) appears to share the conceptualization. This means that states pursuing security in oil need a reliable supply that meets demand at a price consumers can afford, without compromising their other policy objectives in order to do so. Melvin A. Conant (1982: 3-4) argues that the U.S.' oil security objectives apply to both itself

and its allies in securing physical supply and affordable prices. Because of the global oil market and oil market history there do not appear to be major implications for the analysis by only considering threats specifically to U.S. oil security compared to U.S. and ally or global oil security. Arguably, the oil shocks of 1973 and 1979 hit Western Europe and Japan the hardest; as these incidents posed similar threats to American oil security, I have opted not to consider this.

Oil Security Threats and Market Context

With Art (1991) and O'Sullivan (2013), the "oil factor" in U.S. foreign policy is complex and ties into other strategic objectives and perceivable threats to the U.S., which may in their own right spur military intervention. The realist factors should effectively measure such observations. For measuring the "oil factor" in this study, I have therefore opted to focus on oil security threats to the U.S. that are *ineffectively mitigated* by the oil market context; this is implicitly supported with Klare (2001; 2004) and O'Sullivan (2013) who both put emphasis on oil security as drivers for the use of military force. Deviating marginally from Yergin's (1988: 111) concept of energy security, I have defined oil security as *adequate*, *reliable oil supplies at affordable prices*. Thus, I separate oil security from the impact of attaining oil security on objectives and values, and in turn threats to U.S.' oil security comprise only threats to supply and prices.

With the emphasis on oil security, I do not consider threats to oil companies and oil companies' interests high oil threats. O'Sullivan (2013: 33; italic in original) argues that in the "oil factor" there are both commercial and strategic interests, indicates that the commercial factor was insubstantial in the Gulf War and Iraq War, and infers that few postwar international wars have "been fueled by the desire to gain *physical* control over energy resources". This inference appears supported by Yergin (2009; 2011: 141-158) in the case population. However, nationalization of the oil industry can be considered a high *commercial* oil threat, and some scholars would argue that this warrants high oil threat values. For instance, Iraq argued in the 1973 Oil Embargo negotiations that complete industry nationalization was a greater threat to Western interests that the oil embargo and production cutbacks (Terzian 1985: 175). Consequently, I assign high oil threat values to industry nationalizations in a robustness test in Chapter 4.

Table 2.2 shows a hierarchy of different oil security threats based on a general understanding of historical oil shocks, cases of various threats to oil security, the accounts of Klare (2001) and O'Sullivan (2013), and Charles Hermann's (1969) work on foreign policy crisis. With Hermann (1969), a foreign policy crisis is a situation of high threat, high uncertainty, and high urgency, and affects decision-making. The hierarchy of oil security threats consists of three different orders of threats extrapolated from these dimensions. As a higher threat in this hierarchy is therefore considered closer to a crisis, I expect greater likelihood that the U.S. will wield military force as a response to the threat, *ceteris paribus*, with Klare (2001) and O'Sullivan (2013). First order threats to American oil security are capable of causing physical shortages and/or damage to the global economy if they are unmitigated by the oil market context and will generally show greater threat, urgency, and uncertainty than the remaining threats. Empirically, most of these threats will occur in combination and I have emphasized the first and fourth threat as these can be measured more efficiently.

	First Order Threats	
1.	Disruption of physical supply to the U.S.	
2.	Threats of disruption of physical supply to the U.S.	
3.	Action creating uncertainty regarding the immediate physical supply to the U.S.	
4. Action creating a substantial and immediate price increase		
	Second Order Threats	
1.	Policy behavior creating uncertainty regarding future physical supply to the U.S.	
2.	Threats of action that would most likely create an immediate substantial price increase	
3.	Policy behavior creating political uncertainty that could create fear of future supply deficit	
	Third Order Threats	
1.	Policy behavior increasing the possibility that foreign oil-producers at a later stage will be in a better position to impose threats of first or second order.	

Table 2.2: Oil Security Threats Hierarchy

Second and third order threats to oil security have lower urgency and more focus on price threats and policy behavior than on physical disruptions. The first of these threats is similar to first order threats two and three, but the behavior does not constitute a direct threat of disruption, but can be interpreted as behavior that can lead to disruption at a later stage. The third order oil threat constitutes a specific form of oil-producer state behavior that most states will exhibit in that they desire to maximize their oil revenues. As these threats are not mutually exclusive, the highest unmitigated threat in a given case will be used for analysis and a high oil threat value can only be assigned to unmitigated first order threats. This means that I institute a cutoff point between first order oil security threats and the remainder threats with Hermann's (1969) conceptualization of crisis; however, oil security threats can be mitigated by the oil market context and thus, first order threats 1 to 3 are not necessarily

assigned high values. The fourth threat is measured directly in assessments of the impact on the oil price. In a modern oil market context, substantial and immediate price shifts are usually an expression of the supply-demand equation, and therefore price threats are not particularly different from threats to physical supply. However, effectively mitigating supply threats may be easier for the oil market as it can ensure that demand is met, but less so that the market does not drive prices due to anxiety and panic.

The global oil market context can affect the effectiveness of oil security threats to the U.S. Disrupted supply to the U.S. from Iraq could be made up for by additional supply from Venezuela, for instance. If U.S. decision-makers are aware of this, which is likely, their perception of and response to oil security threats can be contingent upon the market context. I therefore consider the oil market context to determine whether first order supply threats were, or could have been, effectively mitigated. This means that in order for a case to be assigned a high oil threat value, it must impose a first order threat that was not effectively mitigated by the oil market context, or a substantial and immediate price increase. Disruptions and disruption threats are likely perceived as less severe in a market context characterized by excess oil supply, spare production capacity, and high stockpiles. If any of these are present in a case and able to mitigate the threat, the oil threat factor is given a low value; I find that Yergin (2009) places much emphasis on the oil market's ability to mitigate threats and consequently there is substantial empirical support for this part of the operationalization.

The operationalization of unmitigated first order oil security threats as high oil threat, measures the theoretically-defined concept of oil threat well; oil security is overwhelmingly considered the top priority of governments' objectives in oil by scholars in the field, and Yergin (2009) substantiates my assumption that threats should not be assigned high values if the market effectively mitigates them. The cutoff point between first order and other oil security threats appears implicitly supported by most scholars, and I have found explicit basis for it with Hermann's (1969) work on foreign policy crisis. Commercial oil threats are excluded from the operationalized concept, but tested in a robustness test with nationalization of oil industry leading to high oil threat. The operationalization does evaluate shifts in American structural conditions for oil security, which may have had some effect on how vulnerable the U.S. has perceived itself to oil threats. I have found that instituting a clear cutoff point for this dimension is challenging, and I do not expect it to add much value to the

operationalization, given the market context component of the operationalization and the correlation between these.

2.7 Hypotheses

Table 2.3 summarizes the operationalizations of the outcome, and explanatory factors developed in this chapter. With four dichotomous factors, there are 16 possible causal configurations as expressed in Table 2.4, where I have noted expected outcomes for each configuration.

Factor	Factor Name	Operationalization				
I	Intervention	High value if the U.S. used overt or covert direct military intervention				
		against Iran or Iraq.				
О	Oil Threat	High value if Iran or Iraq posed first order oil security threat, which was not				
		effectively mitigated by the oil market context.				
Н	Hostile Threat	High value if perceived threat of Soviet Union invasion or coup, if a hostile				
		Gulf regime is at war with or invades non-hostile Gulf regime, or if				
		perceived imminent threat of hostile Gulf regime attaining nuclear weapons.				
A	Ally Threat	High if the U.S. perceived threat of revolution, substantial unrest or civil				
		war within a case-relevant allied state, significant threat of invasion by,				
		under invasion by, or in substantial armed conflict with equally or more				
		powerful state.				
Е	Escalation	High value if the U.S. perceived some likelihood of conflict escalation with				
	Risk	the Soviet Union.				

Table 2.3: Summary of Operationalizations

The hypotheses shown in Table 2.4 thus feature what I expect to be reliable paths to American interventions and non-interventions against Iran and Iraq. I hypothesize intervention with high oil threat, hostile threat, or ally threat if there is low risk of escalation; the existence of additional threats still lead to this outcome. Conversely, the absence of any threats regardless of escalation risk value leads to non-intervention, as shown in configurations 1 and 2. Given only one threat and high escalation risk, I have hypothesized non-intervention, as shown in configurations 3, 5, and 9. With the existence of multiple threats *and* escalation risk, I have not applied any hypotheses, as shown in configurations 7, 11, 12, and 16. This is due to uncertainty regarding how the factors interact theoretically and empirically; rather, I examine the data to find if multiple threats can make the U.S. intervene even with high escalation risk.

Configuration	Causal	Expected Outcome ⁶		
Number	configuration ⁵			
1.	ohaE	0		
2.	ohae	0		
3.	ohAE	0		
4.	ohAe	1		
5.	оНаЕ	0		
6.	оНае	1		
7.	oHAE	N/A		
8.	oHAe	1		
9.	OhaE	0		
10.	Ohae	1		
11.	OhAE	N/A		
12.	OHaE	N/A		
13.	OhAe	1		
14.	OHAe	1		
15.	OHae	1		
16.	OHAE	N/A		

Table 2.4: Causal configurations and Expected Outcomes

In general, these hypotheses expect escalation risk to be very significant for explaining intervention decisions as I expect a high value to lead to non-intervention against any single intervention driver. This is warranted given the cutoff point for this factor, and the concept's prominence in the literature. On the other hand, I have operationalized the remaining factors with high cutoff points, so that it is reasonable to expect a single high value on these in conjunction with low escalation risk to reliably lead to intervention. The work of scholars who have worked extensively on these factors, e.g. Art (1991), Indyk (2004) Snyder (1997), Freedman (2004), and Klare (2001) would indicate a general support for these hypotheses.

⁵ Capital letter on each factor means that the factor has been assigned a high value and vice versa. E.g. in Combination 2 all the factors have low values, while in Combination 16 all the factors have high values. The escalation risk factor has the opposite direction of the other factors; high value on this factor makes an intervention *less* likely.

⁶ In this table, 0 signifies a negative outcome - non-intervention, while 1 signifies a positive outcome - intervention. N/A means "not applicable", meaning that no hypothesis is applied to the configuration.

3 Case Studies

This chapter contains all ten case studies, beginning with the 1953 Coup in Iran and ending with the Iraq War. The list of cases is shown in Table 3.1.

Case	Case
Number	
1	Iran Coup 1953
2	Iraq Oil Nationalization 1968-1972
3	Iraq in 1967 Oil Embargo
4	Iraq in 1973 Oil Embargo
5	Iranian Revolution 1978-1979
6	Hostage Crisis 1979-1980
7	Iran-Iraq Land War
8	Iran in Tanker War
9	Gulf War
10	Iraq War

Table 3.1 Cases and Case Numbers

Over the first four cases, there is a tremendous shift in the oil market; from an era of spare capacity and international oil companies to a tight market with physical shortages and the gradual rise of national oil companies. Here, the structure is not chronological as I placed the 1972 Iraqi Oil Nationalization before 1967 Oil Embargo. I decided on this because with this structure, the first two cases comprise oil industry nationalization, while cases 3 and 4 are embargoes. Consequently, they share certain similarities and draw on each other to an extent. These first four cases pose oil threats that differ substantially from the other cases. Although Iran nationalized its oil industry (again) after the 1979 Revolution, such threats are generally absent in the remaining cases.

With cases 5, 6, 7, and 8 the cases span from the Iranian Revolution to the end of the Iran-Iraq War. These cases are arguably more similar than the first four cases, with Case 5 and 6 comprising threats to American interests from Iran, and 7 and 8 being different parts of the Iran-Iraq War. I considered the Land War and the Tanker War different components in the Iran-Iraq War as I found that they were possible to separate and posed different causal configurations. As they occurred in the same timeframe, Case 8 draws on sections from Case 7. Finally, cases 9 and 10 are in the post-Cold War era and consider the Gulf War and the Iraq War. Both cases are large-scale military interventions, but their causal configurations differ significantly. Following the Gulf War, there were massive international sanctions against Iraq, and the U.S. maintained a military presence in the region and occasionally used interventions

against Iraq; this is not sampled for this study as it was to an extent a contingency from the Gulf War, and defining clear-cut cases in this era could be difficult.

3.1 Case 1: Iranian Nationalization and Covert Intervention

In Case 1, a covert U.S. intervention against Iran in cooperation with Britain followed the nationalization of the Anglo-Iranian Oil Company. I find low oil threat, high hostile threat, low threat to allies, and low escalation risk in this case. This causal configuration was hypothesized to lead to an intervention. In the lead-up to the 1953 Coup, the Anglo-Iranian Oil Company and the British negotiated with the Iranian government over royalties from oil productions. The Iranian parliamentary oil committee, chaired by Mohammed Mossadegh, strongly opposed a proposed agreement, and called for nationalization of Anglo-Iranian. Unsuccessful negotiations followed until Mossadegh seized power on April 28, 1951, shortly after the assassination of Prime Minister Razmara, and nationalized Anglo-Iranian on May 1 (Yergin 2009: 432-437). The nationalization was well-received among the Iranian people and "sent Iran into patriotic ecstasy"; it conversely outraged the British, who subsequently sent warships to the Persian Gulf, imposed an embargo that devastated Iran's economy, and considered armed invasion to retake the oil fields and Abadan refinery (Kinzer 2003: 2-3; 110). Britain and Iran unsuccessfully negotiated, and Britain made claims that the nationalization was illegal with international law. The U.S. unsuccessfully mediated, partly concerned with the strategic dimension of the Iranian oil disruption (Evans and Brown 1991: 250-251).

As deadlock in negotiations lasted the U.S. supported a British initiative for a coup following the inauguration of President Eisenhower. CIA agent Kermit Roosevelt travelled to Iran for Operation Ajax, which envisioned a psychological campaign against Mossadegh, followed by an announcement that the Shah had dismissed him from office. Mobs and military units paid by the CIA would prevent any attempt by Mossadegh to resist. CIA-supported General Zahedi would become Iran's new prime minister. The CIA staged anti-Mossadegh protests by the beginning of August 1953. Foreign agents bribed members of parliament and anyone else who might be helpful in the forthcoming coup attempt. With an estimated four-fifths of Tehran newspapers under CIA influence, press attacks on Mossadegh reached new levels of virulence (Kinzer 2003: 6). The initial coup failed, and subsequently the Shah fled to

Baghdad. Roosevelt remained in Iran to attempt another coup (Kinzer 2003: 1-16). The second, successful coup occurred four days after the first and was similar to the first (Kinzer 2003: 167-192). This constitutes a covert intervention in Iran, and is therefore assigned a high outcome value.

The British-initiated boycott of Iranian oil caused a first order threat to U.S. oil security, as "no oil was flowing out of Iran, owing to the effectiveness of the British embargo"; by 1952 Iranian oil output plummeted to 20 000 bpd from 666 000 in 1950 (Yergin 2009: 446). With John Evans and Gavin Brown (1991: 250-251): "The total volume of oil which [Iran] was able to export during the nationalization dispute was negligible, since all the main international oil companies boycotted supplies from Iran to demonstrate their support for the legal position adopted by Anglo-Iranian". The U.S. Petroleum Administration for Defense found that global oil demand would exceed available supply by the end of 1951, thereby perceiving a possible threat to their oil access, but this did not manifest. It was also believed that the oil boycott could prove critical to the U.S. forces present in Korea at the time (Yergin 2009: 446). American oil companies attained government approval to ensure that the oil boycott did not lead to physical shortages, which indicates U.S. support for the boycott (Evans and Brown 1991: 251). Regardless, I consider the fallout of Iranian supply a first order threat as a disruption of physical supply as the boycott was not initiated by the U.S.; this does not impact the assigned value, otherwise it would be discussed in greater depth.

While the Iranian oil disruption was severe, the loss of oil available on the market was compensated for by other sources, and thus effectively mitigated. Yergin (2009: 446) finds over the duration of the Iranian oil boycott "total world production had risen from 10.9 million barrels per day in 1950 to 13.0 million in 1952 — an increase more than three times greater than Iran's total output in 1950!" Production was primarily increased in the U.S., Saudi Arabia, Kuwait, and Iraq.

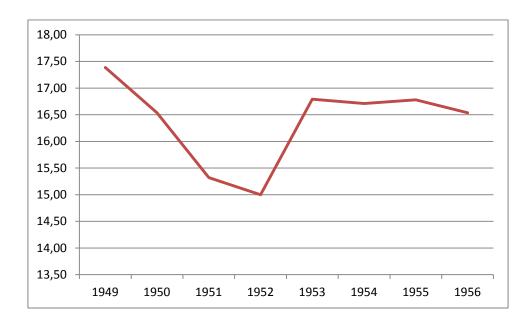


Figure 3.1: Oil Prices in 2013 \$/bbl 1949-1956. Source: BP World Statistical Review (2014)

BP Statistical Review (2014), finds that prices in 2013 \$ initially declined with the Iranian oil nationalization and rose again in 1953, as shown in Figure 3.1; in money of the day, the oil price was \$1.71 from 1950 and shifted to 1.93 in 1953. The shifts in oil prices are arguably insubstantial and do not present threats to the affordability of oil. Thus, the disruption of Iranian oil was effectively mitigated by increased oil production in other states and did not cause immediate or substantial price increases; accordingly, I assigned the case a low oil threat.

Perceived Soviet Threat

Stephen Kinzer (2003: 3-4) finds that the Dulles brothers, who were important foreign policy decision-makers in the Eisenhower administration, perceived a severe and imminent Soviet threat to Iran: "Iran had immense oil wealth, a long border with the Soviet Union, an active communist party, and a nationalist prime minister. The Dulles brothers believed there was a serious danger that it would soon fall to communism". The perception of a Soviet coup threat to Iran is supported by Yergin (2009: 450), who argues that the Soviet threat to Iran increased with Mossadegh tilting towards Moscow and appearing to set the stage to eliminate the Shah; he further notes that:

Mossadegh's tilt toward Moscow became even more ominous when a new Soviet ambassador came to Tehran — the same man who had presided as Soviet ambassador in Prague in 1948, when the communists there staged a coup and took power. Only the naive

could believe that the Russians were not organizing to gain political control of Iran through their own agents and the Tudeh party.

Yergin (2009: 450) finds that "[...] Secretary of State Dulles predicted that Iran would soon be a dictatorship under Mossadegh, which would be followed by a communist takeover". From this, it is clear that the U.S. perceived an imminent Soviet coup threat to Iran in their decision to use covert military action. There are indications that the perception of a Soviet threat to Iran escalated over time, but Kinzer (2003: 129) shows that concern was also present in the Truman administration. Consequently, I only use the high value from the 1953 intervention decision from the Eisenhower administration, and exclude the 1951-1952 era of the case from comparative analysis due to uncertainty in this value.

The Soviet Union was not an aligned with Iran, and Kinzer (2003) does not appear to indicate American perception of Soviet escalation risk for the intervention; Iran was widely considered within the Western sphere of influence. Soviet escalation is not considered by Yergin (2009: 432-460), either. Consequently, escalation risk is given a low value for this case. Iran was not yet a strategic ally of the U.S. in the Gulf region by 1953 and the U.S. was able to cooperate with Mossadegh. U.S. relations with the Shah and General Zahedi were not particularly close or significant to the U.S. intervention, either; moreover it appears that the U.S. was inclined to depose Mossadegh and found a pro-American political alternative in these actors. Following the coup, the U.S. aligned closely with the Shah regime. Thus, Mossadegh is not considered a domestic threat to an American ally, and Iran did not pose significant threats to other American allies at that juncture.

In sum, I assigned Case 1 low oil threat, high hostile threat, low ally threat, and low escalation risk. The oil threat was mitigated with increased output elsewhere, there was a clear perceived threat of Soviet coup in Iran, but no threats posed to American allies or substantial risk of escalation with Moscow. The case yielded an intervention outcome, and therefore supported my hypotheses.

3.2 Case 2: Iraqi Nationalization; Non-Intervention

In Case 2, Iraq nationalized the Iraqi Petroleum Company in 1972. I assign the case low oil threat, low hostile threat, low threats to U.S. allies, and high escalation risk. For this configuration, I hypothesized non-intervention. Following 1958 coup, Abd al-Karim Qasim

seized power in Iraq and increased pressure against the Iraqi Petroleum Company for government control and increased oil output, which culminated with the company's nationalization in 1972 (Brown 1979; Saul 2010). Qasim's regime collapsed in a 1964 coup as Qasim was killed, and replaced by Ahmed Hassan al-Bakr and Abdul Salam Arif. After leading oustings within the Ba'ath Party, Arif died and was replaced first by acting president al-Bazzaz and then Abdul Rahman Arif. Abdul Rahman Arif was deposed in 1968, and the Ba'athists with al-Bakr dominated Iraqi politics. Saddam Hussein, who had returned from exile in 1963, had become a central figure within the party by 1968 (Tripp 2010: 143-187). Following an agreement of assistance and oil field development assistance with the Soviet Union in 1969, the Iraqi government became increasingly aggressive towards the Iraqi Petroleum Company (Brown 1979: 110). The company yielded to some demands and more demands followed; after a negotiation breakdown, Iraq nationalized the Iraqi Petroleum Company on June 1, 1972 with estimated assets of \$1 billion (Brown 1979: 109-112). Over the course of the nationalization, the oil company had virtually ceased to invest in its Iraqi fields, slowing down development and Iraqi revenue development (Evans and Brown 1991: 80). Iraq's nationalization process of the Iraqi Petroleum Company from 1968 to 1972 arguably posed no first order threats to U.S. oil security. There was a latent threat of the Iraqi Petroleum Company shutting down production at some point in the future, but this did not occur, and price increases were insubstantial.

Iraqi oil production increased strongly over the nationalization process, as indicated by its increased export value and contribution to Iraqi government oil revenue (Brown 1979: Table 1; Table 3). Increased production was a priority of the Iraqi government as it corresponded to greater revenue. Drawing on the experience from the Iranian oil nationalization, Brown (1979: 109) finds that Iraq was averse to immediate nationalization due to concern with international boycott, and thus when Iraq had reduced its economic dependence on the Iraqi Petroleum Company, the company could be nationalized with lower risk to regime's survival. In terms of the Iraqi Petroleum Company's strategy for the nationalization process, Saul (2010) finds that it was based on stalling the nationalization for as long as possible; this meant that the Iraqi Petroleum Company was averse to disrupting oil production because this risked immediate nationalization. Thus, both actors' strategies reduced the threat of the nationalization process disrupting U.S. oil supplies.

Following the 1968 Coup, the Ba'athists developed Iraqi capability to take over the industry and cooperated with the Soviet Union to attain these objectives; Soviet economic and political support was necessary in this effort (Fukuyama 1980: 35-36). In a 1969 agreement, Moscow was to provide Iraq with over \$140 million toward the development of expropriated fields through the Iraqi National Oil Company; this led to the increasingly aggressive stance towards the Iraqi Petroleum Company (Brown 1979: 110). Following a further agreement with Moscow in 1972, Iraq nationalized the Iraqi Petroleum Company after negotiation breakdowns. Rather than the nationalization causing disruptions, Iraqi oil production had greatly increased over time, despite minimal investments by the oil company. The Iraqi drive to push the Iraqi Petroleum Company did however constitute policy behavior that created uncertainty regarding the future physical supply. By increasing its production substantially Iraq also increased its ability to impose higher order oil security threats at a later stage.

I have not found any indications of Iraq causing immediate or substantial price increases over the nationalization process. Brown (1979: 110-111) mentions a demand to increase prices by 20 cents/bbl to keep prices in line with the higher prices of Libyan crude oil, but otherwise there is no indication of price increases. Rather, the government primarily pressed for increased production, which improved U.S. oil security. Table 3.2 indicates there was no substantial price increase over the course of the entire nationalization process. After the Iraqi nationalization, prices increased substantially with the 1973 Oil Embargo, as is also shown.

	Oil Price in Oil Price in		
Year	\$/bbl	2013 \$/bbl	
1959	2,08	16,61	
1960	1,90	14,93	
1961	1,80	14,01	
1962	1,80	13,85	
1963	1,80	13,69	
1964	1,80	13,50	
1965	1,80	13,28	
1966	1,80	12,92	
1967	1,80	12,55	
1968	1,80	12,05	
1969	1,80	11,43	
1970	1,80	10,79	
1971	2,24	12,87	
1972	2,48	13,81	
1973	3,29	17,25	
1974	11,58	54,74	
1975	11,53	49,93	

Table 3.2: Oil Prices 1959-1972. Source: BP Statistical Review (2014).

In sum, the Iraqi Oil Nationalization did not pose a major threat to U.S. oil security, as there were no significant disruptions or uncertainty regarding immediate supply to the U.S., and oil prices did not increase substantially until after the nationalization; thus, the case is assigned low oil threat. The nationalization process caused some uncertainty regarding the future of Iraqi oil production and strengthened Iraq's ability to impose higher order oil security threats, which constitute lower order threats in the operationalization. The nationalization threat is below the cut-off point for high oil threat.

Low Threats; Escalation Risk

Over the course of the Iraqi nationalization process, Iraq had begun cooperating with the Soviet Union. Iraq "became a Soviet client state shortly after the Hashemite monarchy was overthrown" in 1958, with the establishment of a nationalist government intent upon reducing British and American influence in Iraq (Fukuyama 1980: 23). However, Iraqi-Soviet cooperation did not intensify until 1968, and their relations were contentious and cooperation highly limited until 1972 (Fukuyama 1980). Qasim increased his repression of Iraqi communists from 1960 until his regime collapsed in February 1963. With the new regime, repression of the Iraqi Communist Party escalated further with estimates of approximately 3000 party members killed. Following a coup in November 1963, repression of the Iraqi Communist Party declined to its pre-1960 level and relations with Moscow improved moderately. Francis Fukuyama (1980: v-vi) finds that while the Soviet Union and Iraq were cooperating from 1968 to 1971, they had numerous "areas of disagreement and conflict". The cooperation was based on the Iraqi need for arms to meet all its foreign policy objectives and Irag's need for support in with the development of its national oil company — both of which were provided by Moscow (Fukuyama 1980: 27-34). Iraq and the Soviet Union were cooperating on a wide range of issues from 1972 to 1975. A treaty of friendship and cooperation between Iraq and the Soviet Union marked the shift between these two contexts:

The Iraqi-Soviet Treaty of Friendship and Cooperation was signed on April 9, 1972, in ceremonies that jointly commemorated the opening of the North Rumaila field. The timing and context strongly suggested that the treaty was sought as a political guarantee to protect Iraq from covert or overt Western military retaliation for nationalization of the Iraq Petroleum Company. (Fukuyama 1980: 36).

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⁷ The U.S. and Britain may have been involved in this coup. It is not a sampled case for this study.

This meant that the Soviet Union had expanded its sphere of influence to Iraq, and the U.S. would have perceived some risk of superpower escalation in the event of an intervention; consequently, I assigned a high escalation risk value to the case.

While the Soviet Union had increased its power and influence in Iraq, there was minimal risk of a Soviet coup or invasion of Iraq. Iraq was not at war with any states not considered adversaries by the U.S., although it posed a general security threat to Kuwait and its relations with Iran were contentious. The Iraqi regime struggled with wars and conflicts with the Kurds throughout this era. Iraq was likely not perceived as close to attaining nuclear weapons in this context. Accordingly, a low value is assigned to hostile threat. In all likelihood, the U.S. increasingly perceived Iraq and their relations with Moscow as a threat, but with my operationalization this falls below the cutoff point for high hostile threat.

Iraq did not constitute a substantial military threat to U.S. allies in the Gulf region in this context. A long series of coups, domestic political chaos, and purges characterized Iraq at this time; the Ba'athist regime continued this trend over the course of 1968-1972 years with concern for consolidating its power and ousting possible dissenters within the party. Charles Tripp (2010: 193-194) finds that Iraqi relations with Iran had deteriorated since the rise of the Ba'athist regime, but that Iraq did not pose any significant security threat to Iran. Iraq did not pose substantial military threats to Israel or Saudi Arabia in this context. Consequently, threats to U.S. allies are designated a low value in this case.

I assigned Case 2 low oil threat, low hostile threat, low ally threat, and high escalation risk. Iraq posed insubstantial threats to oil security, to other states, and to American allies, which consistently fell below the cutoff points. Iraq's alignment with Moscow led to high escalation risk. This causal configuration led to a non-intervention outcome, and thus supported my hypotheses.

3.3 **Case 3: 1967 Oil Embargo**

In the third case, Iraq participated in the 1967 Oil Embargo. I find that the case comprised low oil threat, low hostile threat, low threat to allies, and low escalation risk, which the model expected to result in non-intervention. On June 5 1967, the Six-Day War erupted with Israel launching a preemptive attack against Egyptian, Syrian, and Jordanian airfields after these states had declared a military alliance and mobilized forces close to Israeli borders. After

quickly obliterating the other belligerent states' air forces, Israel wielded its air power advantage in combination with infantry forces to turn back the Arab armies. The outcome of the war appeared decided within three days as Israel quickly seized the Sinai Peninsula, and the war ended on June 10, 1967 (Yergin 2009: 536-537). In response to the conflict, the Arab states with Iraq launched a selective oil embargo against states that supported Israel. Yergin (2009: 537) finds that the Arab states had long been anxious to wield the "oil weapon", and with the Six-Day War, they finally got an opportunity to do so. M.S. Daoudi and M.S. Dajani (1984: 88) note that the 1967 Oil Embargo had positive effects on domestic politics within the Arab states, and find this a principal cause of some states' participation.

The 1967 Oil Embargo comprised several threats to U.S. oil security: The Arab states closed the Suez Canal, embargoed oil shipments to the United States, Britain and West Germany, there were brief interruptions in oil production as a result of strikes, disruptions, and threats of sabotage, and a five-day total halt of all oil production and exportation. The embargo first applied to the U.S. and Britain for 19 days and was subsequently extended by a number of Arab states, with most embargoing West Germany, until September 2, 1967 (Daoudi and Dajani 1984: 80). In addition to these oil threats, there was a disruption in Nigeria in late June and early July. This came from the eruption of civil war, which removed an additional 500,000 bpd from the world market at a critical moment (Yergin 2009: 537-538). Thus, from Iraq against the U.S., there was both a physical oil disruption and an embargo, which constitute first order threats to U.S. oil security. Iraq did not close the Suez Canal, and this threat is therefore not prominent in my analysis. J. Cordell Moore, Assistant Secretary of the Interior, stated on June 10, 1967: "If the present shutdown continues for more than a few weeks a critical transportation and supply problem will develop which cannot be solved by individual efforts of oil companies" (quoted in Daoudi and Dajani 1984: 82). However, the shutdown of production did not continue longer than five days.

The reduced production in Arab states and oil embargo was compensated for; American output surged by almost a million bpd. Venezuela's output increased by over 400,000 bpd, and Iran's by 200,000. Indonesia also stepped up its production (Yergin 2009: 539). In addition to this, oil companies and consumer countries held large stockpiles; consumer country stockpiles were sufficient for approximately four months' normal consumption (Daoudi and Dajani 1984: 83). Thus, the disruptions to the U.S., and indeed the oil market were unable to cause physical shortages due to stockpiles and spare capacity. Oil companies

were managed shifting supplies around the globe to meet demand; the oil threat did not even warrant formal joint operations between oil companies, and was arguably a failure (Yergin 2009: 538-539). Thus, the oil market context effectively mitigated Iraqi, and indeed Arab, disruption of physical supply.

I have not had access to detailed oil price data for 1967 and addressing any substantial and immediate oil price increase is therefore difficult. However, oil prices do not appear to have increased or threatened; it is not mentioned by Yergin (2009: 536-540) in relation to the embargo or by Daoudi and Dajani (1984). In the market context of the 1967 embargo, prices were set differently from today; governments posted prices in cooperation with oil companies for each country and then the oil companies sold and marketed the oil, while the spot market was marginal. In the contemporary oil market structure, the embargo and Nigerian civil war would have caused immediate and substantial price increases in all likelihood; however, it seems very unlikely that this occurred in the 1967 market context. BP Statistical Review's (2014) annual oil price average does not indicate any change in the oil price from 1966 to 1967 or from 1967 to 1968. As I have now shown that the physical supply disruption was effectively mitigated and there is no indication of a substantial and immediate oil price increase, the oil threat posed by Iraq in this case is assigned a low value.

Low Threats; Unclear Escalation Risk

As the previous case discussed Iraq-Soviet relations with some depth, this is not repeated here. With Fukuyama (1980), in the context of the 1967 embargo, Iraq had not closely aligned with the Soviet Union, and it does not appear that the U.S. perceived significant risk of Soviet invasion or coup. Fukuyama (1980: 26) finds that the Six-Day War was important for making Iraqi-Soviet relations grow closer as Iraq established a military presence in Syria and Jordan after the conflict, which increased their need for Soviet weapons and in turn increased Soviet influence with Iraq. Prominently, Fukuyama (1980: 28) concludes that: "Soviet influence in Iraq during the first three years of Ba'thist rule was not particularly great, whether measured in terms of the volumes of arms transfers or the degree to which Iraqi foreign policy coincided with the full range of Soviet goals". Additionally, Iraq did not have nuclear weapons, or was likely to attain them in the immediate future, or in substantial military conflict with U.S. non-hostile states. Due to this and the low risk of Soviet invasion or coup, hostile threat is given a low value for this case.

As Iraq had not strongly aligned with the Soviet Union, it was unlikely that the U.S. perceived high escalation risk with Moscow in the event of an intervention in this case. Oles Smolansky and Bettie Smolansky (1991: 16-54) write little regarding Iraq-Soviet relations in the historical context of this case, but similarly to Fukuyama (1980) they note that relations improved from 1968. Thus, it is very unlikely that the U.S. would have perceived significant risk of escalation with Moscow over an intervention in Iraq. Consequently, I assigned a low escalation risk value for this case. Given the consistent low threat values on this case, this value is inconsequential to my model's prediction.

The Six-Day War initially posed grave threat to Israel, but it rapidly became clear that Israel was winning the war with relatively low losses, and Iraq posed no substantial threat to Israel at the juncture. This is supported by Tripp (2010: 181-182):

The speed and scale of the Israeli victory allowed for very little Iraqi participation, despite the bellicose rhetoric of the regime and the official media. Instead, a token Iraqi force was sent to Jordan, but arrived too late to have an impact on the outcome of the fighting.

I also considered this in assigning a low hostile threat value. Iraq did not significantly threaten other American allies for the duration of the 1967 Oil Embargo. As previously argued, Iraq did not pose a significant threat to Iran in this historical context, and this was the case with Saudi Arabia as well; thereby, I assigned the case low ally threat value.

I assigned Case 3 a low oil threat, low hostile threat, low, and low escalation risk. Intrinsically, the embargo failed and Iraq did not pose other substantial threats and the juncture, while its alignment with Moscow had not yet solidified. As hypothesized, this causal configuration did not lead to an intervention in the case.

3.4 Case 4: The 1973 Iraqi Oil Weapon

In the Case 4, Iraq participated in the 1973 Oil Embargo, and I find the case to pose high oil threat, high hostile threat, high threat to American allies, and high escalation risk. For this configuration, I did not have a hypothesis.

The October War⁸ erupted with attacks from Egypt and Syria against Israel on October 6, 1973. It was an intense war with far-reaching consequences fought over Israel's territorial

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⁸ The October War is also commonly known as the Yom Kippur War.

expansion from the Six-Day War with involvement from both superpowers. In the October War, Israel was supported by the U.S. by arms sales, while the Soviet Union supported the Egypt and Syria. After intense fighting, the October War ended on October 25 with some territorial changes among the belligerents. As with the Six-Day War, the October War triggered an oil embargo against supporters of Israel after the U.S. resupplied Israel with military materiel (Yergin 2009: 587). On October 17 the Conference of Arab Oil Ministers decided to wield the "oil weapon" in the Arab-Israeli conflict after Iraq had withdrawn from OAPEC negotiations intended to institute the "oil weapon". The conference agreed to cutbacks of an immediate 5 % production reduction in October relative to September and an additional 5 % for each month "until such time as 'total evacuation of Israeli forces from all Arab territory occupied during the June 1967 war is completed and the legitimate rights of the Palestinian people are restored" (Gause 2010: 29; Skeet 1991: 99-100). The Arab states had learned from their experience with using the "oil weapon" in 1967, and now wielded the oil weapon in a different oil market context and with greater emphasis on lasting production cutbacks. Unlike the previous oil embargo, oil companies could not effectively manage the 1973 Embargo by shifting supplies, drawing on stockpiles, and increasing production elsewhere; there were massive shortages and oil prices skyrocketed and stayed high. The embargo targeted the U.S. and several other countries. Iraq partook in the embargo, although not in concert with the other OAPEC members, and did not reduce its oil production. With the end of the October War, the oil embargo continued until March 18, 1974; however, the peak of the campaign was in December 1973 with the largest cutbacks in production (Yergin 2009: 613; Evans and Brown 1991: 90).

In the OAPEC negotiations, Iraq dissented from the Saudi Arabian and Egyptian proposed oil embargo plan, and proposed their own plan. As the other members did not support the Iraqi plan Iraq withdrew from the negotiations, and the others members "re-baptized the meeting the 'Conference of Arab Oil Ministers'" (Terzian 1985: 174). Iraq had urged a more radical course of complete economic warfare against the U.S., and refused support the other embargo plan as it only contained an embargo and small cuts in production (Gause 2010: 29; Terzian 1985: 175). On October 21, in retaliation to Dutch oil exports to Israel, Iraq nationalized Dutch and American interests in the Basra Petroleum Company and instituted an oil embargo against the United States and the Netherlands (Terzian 1985: 175; Skeet 1988: 100). However, Iraq was not participating in production cutbacks, and subsequently *increased* oil production over the course of the embargo and benefited from skyrocketing prices (Gause

2010: 29). Thus, U.S. oil security experienced first order threats in the context of the Oil Embargo from Iraq with disruption of physical supply to the U.S. and uncertainty regarding immediate physical supply to the U.S. These threats were not effectively mitigated by the oil market context and led to physical shortages in the U.S.

Yergin (2009: 596) finds that production among non-Arab producers increased their total output 600 000 bpd. This was not remotely enough replace the shortfall in Arab states' output; Ian Skeet (1991: 100) estimates that the Arab cutbacks removed 4.5 mbd in November relative to September. Iraq's embargo of the U.S. therefore meant that their oil not going to the U.S. was not effectively replaced by oil from other producers, and led to physical shortages. OPEC members increased prices substantially and immediately in the context of the embargo. On October 16 1973, the Gulf states including Iraq, raised the posted price of oil by 70 percent to \$5.11/bbl (Yergin 2009: 587). In addition to the tremendous increases in posted oil prices, the market prices were even higher, as argued by Yergin (2009: 597):

The posted price for Iranian oil, in accord with the October 16 agreement, was \$5.40 per barrel. In November, some Nigerian oil was sold for over \$16. In mid-December, Iran decided to hold a major auction to test the market. The bids were dramatic — over \$17 per barrel, 600 percent greater than the pre-October 16 price.

Yergin notes that there were reports of oil bids exceeding \$22.60/bbl. Oil prices increases are indicated in Figure 3.2, and shows that the price increases were very substantial and occurred particularly from December 1973 to January 1974, which is an immediate increase. From here, prices largely stabilized at a new and far higher level than anything previously known. Skeet (1991: 101-102) finds that Iraq contributed to these price increases, by (with Algeria) proposing a government take of \$10/bbl in the OPEC Economic Commission in December 1973, which was higher than the proposals of Saudi Arabia and Iran at the time. While this proposal was not successful, it might have helped convince the OPEC members to agree on the higher of the remaining proposals. It is also unequivocal that Iraq's embargo helped fuel the market panic, and thus indirectly raised prices on the open market.

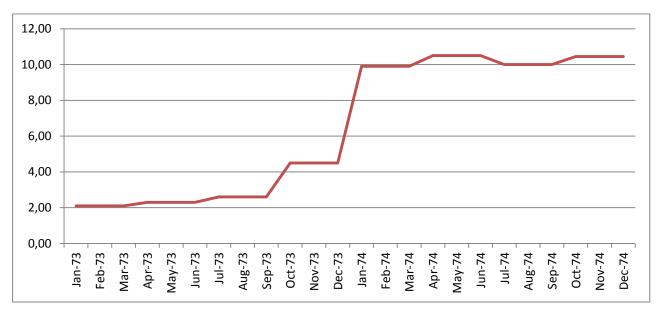


Figure 3.2: Oil Prices in \$/bbl 1973-1974. Source: Petroleum Economist.

Thus, the oil security threat posed by Iraq was its contribution to substantial and immediate price increases, and the embargo, which disrupted physical supply to the U.S. and was not effectively compensated for. Consequently, the Iraqi oil threat is given a high value.

Soviet Alignment, Ally Threat

As discussed in previous cases, Iraq cooperated significantly with the Soviet Union from 1968 to 1980, and had a close relationship from 1972 to 1975 (Fukuyama 1980). Saddam Hussein had visited Moscow in January 1972 in to discuss Soviet assistance to Iraq, which had resulted in the 1972 Iraqi-Soviet Treaty of Friendship and Cooperation (Tripp 2010: 200). In addition to being friendly with Moscow, Iraq had rapidly expanded its power and military capabilities with vastly increased oil production and influx of Soviet weapons. While Iraq was in all likelihood perceived as a powerful hostile regime in the Gulf by U.S. decision-makers, it was not close to attaining nuclear arms, or at risk of Soviet coup or invasion. As argued by Fukuyama (1980) the relationship between Iraq and the Soviet Union was at its historical peak in the 1972 to 1975 period, and part of the intention with this relationship was to deter the U.S. from intervening against Iraq. Thus, the U.S. would have perceived some likelihood of escalation with Soviet if the U.S. intervened against Iraq at this juncture, and therefore a high value is assigned to the escalation risk factor.

Iraq sent significant military forces to help Syria on the Golan against Israel during the October War. The division was effective and suffered heavy casualties. Arguably, Iraqi forces

arrived "late in the day, after the tide of battle had turned and it seemed as if the Israeli forces were heading for Damascus" (Tripp 2010: 202), but it still means that Iraq was at war with an American ally. The October War presented a massive security threat to Israel, and Iraq was a significant part of this threat. With the operationalizations of hostile and ally threat, both factors are assigned high values with Iraq's role in the October War.

I found that in Case 4, Iraq posed high oil, hostile and ally threats. The oil threat was due to Iraq's participation in the embargo, while the other high threats derived from Iraq's direct and substantial participation in the October War. I assigned high escalation risk through alignment with Moscow. This causal configuration did not lead to intervention in Case 4, and I had not hypothesized an outcome for the configuration.

3.5 Case 5: The Iranian Revolution

I find high oil threat, high hostile threat, high threat to an American ally, and high escalation risk in Case 5. I did not hypothesize an outcome for this causal configuration. A new stage in the struggle between the Shah regime and the Shiite Clergy began in January 1978. The exiled religious leader Ayatollah Khomeini was a prominent political opponent of the Shah, and became the opposition leader. The conflict between these two factions dated back to the 1920s and 1930s, when Reza Shah struggled to gain power in Iran. Behind this debate was a frame of popular discontent and disillusion as the tremendous Iranian economic growth in the 1970s had generated economic chaos with massive infrastructure problems and strong inflation (Yergin 2009: 656-657). Following a newspaper article attacking Khomeini, there were demonstrations in Qom, and these were struck down brutally by troops; more and larger demonstrations followed (Yergin 2009: 658; Sick 1985: 34-38). Over the duration of the revolution, there were strikes in the Iranian oil industry, which disrupted Iranian oil production significantly and caused substantial and immediate price increases. However, substantial military force was arguably not used to strike down the riots and demonstrations.

On January 19, 1979, the Shah left Iran, still unwilling to use military force in response to the growing demonstrations and in hope of leaving to "weather the storm". The Shah appointed prime minister Bakhtiar and charged his constitutional duties to a Regency Council. In response, Khomeini established the Council of Islamic Revolution. This Council immediately declared the Regency Council and Bakhtiar's government illegal because the Shah had

instituted them (Ashraf and Banuazizi 1985: 17; Sick 1985: 150). The Iranian military was increasingly divided in their loyalties and important factions openly supported Khomeini (Sick 1985: 147). Khomeini returned to Iran on February 1, 1979 after an agreement with the military; Bakhtiar was "doubtful that the military could prevail against the masses, and he was very concerned that the Soviet Union might intervene if public order broke down entirely" (Sick 1985: 148). Fighting broke out between military Khomeini-supporters and the Imperial Guard on February 9, when Khomeini supporters broke into a base armory and seized as many as 2000 rifles. As fighting intensified, the military high command shifted their support from Bakhtiar to Khomeini (Sick 1985: 154-156). With the support of the military, Khomeini appointed a government and the final remnants of imperial order collapsed on February 11 (Gause 2010: 46). The U.S. did not intervene in the Iranian Revolution, leading to a non-intervention outcome, and some accounts argue that U.S. policy contributed to the fall of the Shah (e.g. Ashraf and Banuazizi 1985).

Iranian oil exports ceased during the Revolution, and were low in its aftermath. This posed first order threats to U.S. oil security with physical supply disruption to the U.S., and immediate and substantial price increases. The disruption was not effectively mitigated by the oil market context and led to physical shortages in the U.S. Figure 3.3 shows the disruption in Iranian oil production over the course of the revolution from producing more than 6 mbd in September 1978 to producing less than 445 000 bpd in January 1979. Evans and Brown (1991: 258-256) finds that by the end of 1978, production was 225 000 bpd — less than half of Iran's domestic oil consumption, which led to exports being halted on December 26 and not resumed until March 5, 1979. The oil market context did not effectively neuter the oil security threats from the production disruption. This can simply be indicated by the existence of physical shortages in the U.S. in this period, but rather the oil market context arguably exacerbated the oil security threat (Yergin 2009: 667-672).

⁹ There are discrepancies in the Iranian production numbers between sources, but these are inconsequential to oil threat value.

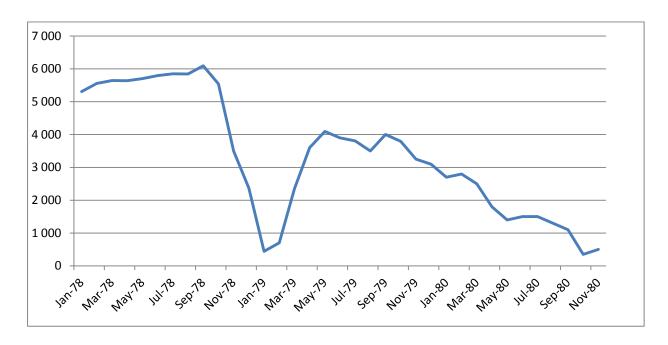


Figure 3.3: Iranian Oil Production in tbd 1978-November 1980. Source: Petroleum Economist.

Over the course of the Iranian Revolution until the beginning of the Hostage Crisis, oil prices surged by approximately 150 %, and reached nearly \$40/bbl as is shown in Figure 3.4. However, the price increase over the Revolution was more moderate — in the chaos of the Shah's departure and Khomeini seizing power, prices only increased from \$12.70 in January, 1978 to \$19.65 in January 1979 (Petroleum Economist). This means that the price shock primarily occurred after the Revolution, although the increase over the Revolution is arguably also substantial with approximately 65 percent increase. As the price increase primarily occurred from November 1978 to May 1979, this is a substantial and immediate price increase. Consequently, there was a high oil threat in this case.

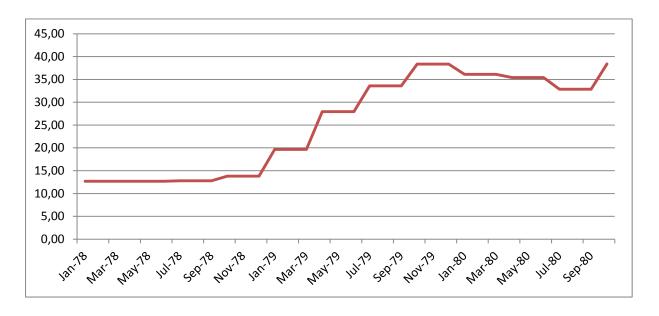


Figure 3.4: Oil Prices in \$/bbl 1978-November 1980. Source: Petroleum Economist.

Sick (1985) does not indicate that military intervention against Iran to ensure oil security was considered. This means that while there clearly was a severe oil shock with physical shortages and salient price increases, it likely did not make the Carter administration more inclined to use military force in Iran.

Perceived Soviet Threat; Escalation Risk

In Case 5, Iran was not in substantial armed conflict with states considered non-hostile by the U.S. or was close to attaining nuclear weapons. ¹⁰ However, the U.S. perceived an increased threat of Soviet invasion or coup in Iran as indicated by the administration's messages to Moscow not to intervene in the revolution. The Secretary of State declared that the U.S. would not intervene in Iran, and then stated: "We expect other nations to conduct themselves in similar fashion" (quoted in Sick 1985: 95). This implies a warning to the Soviet Union not to intervene in Iran, which in turn indicates that the U.S. perceived a threat in the first place. Sick (1985: 95) further finds that National Security Advisor Brzezinski found the State Department draft "unduly apologetic, and he argued strenuously in favor of a stiff warning to the Soviets not to interfere in Iran". This further substantiates the American perception of a Soviet threat to Iran; consequently, I assigned a high value on the hostile threat factor.

Sick (1985: 95) finds evidence for Moscow attempting to deter the U.S. from intervention in the Iranian Revolution, by publishing a "warning" in *Pravda*, and concludes that: "[...] the

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¹⁰ The U.S. did sell Iran nuclear power plants, but not arms (Sick 1985: 13; 25; 29).

Soviet Union was beginning to position itself as the "protector" of the revolutionary forces against U.S. intervention". He further notes that the White House received a message from the Soviet leader in November 1978 warning against any U.S. interference in Iran's internal affairs, and that the Shah perceived an alliance between communists and clerics as responsible for the demonstrations (Sick 1985: 93-95). Based on Sick's account, a high escalation risk is assigned to this case.

A Domestic Ally Threat

The Iranian Revolution marked the collapse of a pro-American regime and major strategic U.S. ally, and the beginning of a major anti-American power in the Gulf region. The Shah was the "big pillar" in the American "twin pillars strategy" for the Gulf, in which Iran was entrusted to preserve the stability of the region and to prevent the spread of Communism. The Nixon administration launched this strategy after Britain had withdrawn its military presence from the Gulf, in Sick's words (1985: 21): "By the time President Carter arrived in the White House, U.S. security policy in [the Gulf] region was in many respects hostage to the social and economic experiment that the shah was conducting in Iran". On the other hand, Ayatollah Khomeini was clearly both anti-Western and anti-American, although this was to some extent incorrectly perceived as many Americans. Yergin (2009: 662) argues:

The Shah was an object of dislike and criticism in the media in the United States and elsewhere, which resulted in a familiar pattern — moralistic criticism of U.S. policy combined with the projection of by some of a romantic and unrealistic view of the Ayatollah Khomeini and his objectives. [...] The American ambassador to the United Nations, Andrew Young, went even further; Khomeini, he said, would eventually be hailed as "a saint".

Regardless of these misperceptions, there is no doubt regarding the Carter administration's preference for the Shah regime in Iran, which is documented extensively by Sick (1985: 51-53; 59; 62; 67-68; 72-73; 110). The U.S. was with no doubt perceptive of the Khomeini threat to the Shah regime's survival following the "Thinking the Unthinkable" telegram in November 1978, which considered U.S. policy options given the regime's collapse (Sick 1985: 81-87). With the U.S. preference for the Shah regime and the perceived threat to its survival, Case 5 is assigned a high ally threat value.

In sum, Case 5 posed high oil, hostile, and ally threats. The oil threat led to physical shortages, there was a perceived Soviet threat, and a threat to the survival of an allied regime.

However, these threats occurred in conjunction with high escalation risk as Moscow warned the U.S. against inferring with the Revolution, and the case led to a non-intervention outcome. The causal configuration did not have a corresponding hypothesis in my framework.

3.6 Case 6: Hostage Crisis

In Case 6, the Iranian Hostage Crisis, I find low oil threat, high hostile threat, low threat to allies and low escalation risk value. For this causal configuration, I expect intervention. As the Iran-Iraq War erupted during the Hostage Crisis, I opted to end the analysis of this case at this time as it presents a clear contextual shift in the international relations of the Gulf and could with some likelihood shift factor values for the case.

Following the Iranian Revolution, the Shah went to the U.S. for medical treatment on October 23, 1979. The U.S. embassy in Tehran was attacked on November 4, 1979, and 63 Americans were taken hostage by "a large, rowdy, violent band of zealots who were thereafter known to the world as "students".", and were avid supporters of Khomeini, who in turn endorsed the hostage takers (Yergin 2009: 681; Gause 2010: 55). The hostages were held until President Reagan was sworn into office in January 1981, and this had tremendous effect on U.S.-Iran relations. Gause (2010: 55) argues that: "The effects of the Iranian hostage crisis on the United States cannot be overestimated. The hostage crisis took what was a very important geopolitical challenge for the United States and turned it into a national obsession". In addition to the Hostage Crisis, six American diplomats had escaped the embassy and where in hiding at the Canadian Ambassador to Iran's residence in Tehran (Daughterty 2014). In response to these events, the U.S. staged two interventions, Operation Eagle Claw and Operation Argo. In the former, the U.S. military ventured into Iran in eight helicopters from the carrier U.S.S. Nimitz. After series of technical errors with the helicopters, too few arrived at the destination to complete the operation successfully, which led to the mission being aborted. During refueling, a helicopter hit the refueling aircraft, causing the death of eight crew members and five others being wounded (Sick 1985: 296-297). After the failure of Operation Eagle Claw the hostages were moved to unknown and separate locations, making military intervention to secure the hostage difficult. In Operation Argo a single CIA agent went to Iran and escaped with the six American diplomats who had escaped the American embassy (Daugherty 2014). Thus, Case 6 comprises two interventions against Iran.

In the context of the Hostage Crisis, Figure 3.4 shows that oil prices were stable from October through December 1979 at \$38.35/bbl and then declined in January 1980 to \$36.10/bbl. From here oil prices kept falling until the eruption of the Iran-Iraq War. As shown in Figure 3.3, Iranian production remained low — and declined after a rapid increase following Khomeini's consolidation of power. With Evans and Brown (1991: 256), this occurred because Iranian export prices were very high and because of trade sanctions by the U.S., and other leading importers countries, and not because of an actual disruption. In addition to this, prices were indeed very high, however they did not become substantially more elevated by the beginning of the Hostage Crisis (Figure 3.3). It is important to note that the U.S. and many other states boycotted Iranian oil because of the Hostage Crisis, which means that a disruption in Iranian production would not threaten American physical supply, but only prices. From this, it appears that Iran did not present first order oil security threats to the U.S. with the pre-Iran-Iraq War Hostage Crisis, and accordingly this factor is assigned a low value.

Soviet in Afghanistan: A Perceived Threat

With the Hostage Crisis, there was a clear shift in U.S.-Iranian relations and in the geopolitical context of their conflict. The crisis led to greatly increased U.S. hostility against Iran and arguably made military intervention more permissible. More importantly, there was a clear U.S. perception of increased Soviet threat in the Gulf with the Soviet invasion of Afghanistan in late 1979. The "Carter Doctrine", a speech by President Carter (1980) to Congress, expressed this perception:

The Soviet effort to dominate Afghanistan has brought Soviet military forces to within 300 miles of the Indian Ocean and close to the Straits of Hormuz, a waterway through which most of the world's oil must flow. [...] An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force.

This implies that Carter perceived the Soviet invasion of Afghanistan also as a threat to Iran and their naval territory, and correspondingly an increased Communist threat to Iran. This is further supported with McNaugher (1985) and Conant (1982). While the Soviet invasion presents a shift in this factor, I have opted to simplify this aspect of the case by assigning a single high value for this factor.

The protection of U.S. allies is not relevant in this case, although the success of the Iranian Revolution was generally perceived as a domestic threat to regime survival in Gulf states with large Shiite populations. Iran did not pose any direct threats to Saudi Arabia or severe threats to Israel during the Hostage Crisis. The Shah regime no longer existed and the Shah himself was undertaking medical treatment until his death in July 1980. This means that Khomeini can no longer be considered a domestic threat to a U.S. ally as that ally had already lost, and it appears that Iran was not imposing substantial and direct threats against other American allies; the regime needed to consolidate its power and was then invaded by Iraq. Consequently, the threat to U.S. allies factor is designated a low value.

Following the Iranian regime change, they became an ally of China over time, which primarily took the form of arms trade, at first through North Korea, and it was highly unlikely that any American intervention would risk escalation with China (Mackenzie 2010: i-ii; 2; Simpson 2010). Sick (1985: 280-302) finds that the U.S. was very anxious of Iran discovering the U.S. interventions, but this was likely over concern with the hostages' safety, which explains why the military operations were to rescue hostages and covert. As Iran armed the Afghan opposition to the Soviet Union and was generally hostile to Moscow, it does not appear that the two were strictly aligned at this juncture (Gause 2010: 54; Jalali 2001; Katz 2010). Yet as established, Moscow warned the U.S. during the Revolution not to intervene in Iran, which was perceived by the U.S., and may have applied to this case as well. However, given the specific interventions the U.S. used — covert operations for rescue missions there was great likelihood that Moscow would not under any circumstance allow such an operation to escalate their conflict with the U.S., rather with Sick (1985: 280-302) the U.S. was concerned with Iran discovering the operations. This case displays the endogeneity problem in the operationalization of escalation risk as discussed in Chapter 2; the specifics of the operations meant that there was lower risk of escalation than if different operations were considered. However, the situation — a Hostage Crisis with no diplomatic solution arguably dictated both the form of operation considered and the escalation risk.

I have thus found that Case 6 comprised low oil threat, high hostile threat, low ally threat, and low escalation risk. Iran did not threaten oil security in this context and the U.S. embargoed Iranian oil, while the Soviet presence in Afghanistan led to high hostile threat. Iran did not threaten American allies, and I found no perception of escalation risk in the case. In correspondence with the Chapter 2 hypotheses, this led to an intervention.

3.7 Case 7: The Land War

I find Case 7, the Iran-Iraq Land War, to contain low oil threat, low hostile threat, low threat to allies, and high escalation risk for Iraq, and the equivalent with high hostile threat for Iran. Non-intervention outcomes are expected for both configurations from the hypotheses. Case 7 is consequently split into two cases in the comparative analysis.

Following the chaos of the Iranian Revolution with its strong effects on Shiites in other parts of the Middle East, Iraq invaded Iran on September 22, 1980. This became the longest and most devastating war in modern Middle Eastern history. The war contained three phases: An initial phase from the outbreak in September 1980 until the summer of 1982, a second phase from the summer of 1982 until the end of 1986, and a final phase from then until the summer of 1988. In the initial phase, Iraq occupied Iranian territory, in the second phase Iranian forces were on the offensive and occupied Iraqi territory, and in the final phase Iraqi forces regained the initiative, which led to Iran accepting the ceasefire in July 1988 (Gause 2010: 57-58). Stalemate between the belligerents characterized the war. Iraq was economically supported with loans by many of the Gulf states, including Saudi Arabia and Kuwait. The U.S. did not directly intervene in the Land War, but sold arms to both parties — openly to Iraq and covertly to Iran in the Contras-Iran Affair.

The Land War posed first order threats to U.S. oil security with vast disruptions of physical supply and uncertainty regarding immediate physical supply. The oil market context of the war effectively mitigated the oil security threat and price increases were insubstantial. With the beginning of the Iran-Iraq War almost 4 mbd were removed from the global market (Yergin 2009: 693). Both Iran and Iraq struggled to minimize the other's oil exports during the war, Iran most successfully by having Syria agree to shutting down Iraq's pipeline through its territory, while Iraq nearly destroyed the Abadan refinery (Gause 2010: 71; Yergin 2009:693; 747). The strategic motive for this was to reduce the other state's oil revenue, and thereby reduce its ability to purchase arms and damage its economy. The oil production disruptions in Iran and Iraq are displayed in Figure 3.5, which shows a severe disruption following the eruption of the conflict, particularly in Iraq — Iranian oil production was already very low from the Iranian Revolution. After approximately the first six months of the war, both Iranian and Iraqi oil production began to recover. The recovery of Iranian oil production was far

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¹¹ I do not discuss causes of the Iran-Iraq War. For a solid account and discussion, see Gause (2002).

greater than the comeback of Iraqi production until the very end of the war. This means that there was a major production disruption in the beginning of the Iran-Iraq Land War.

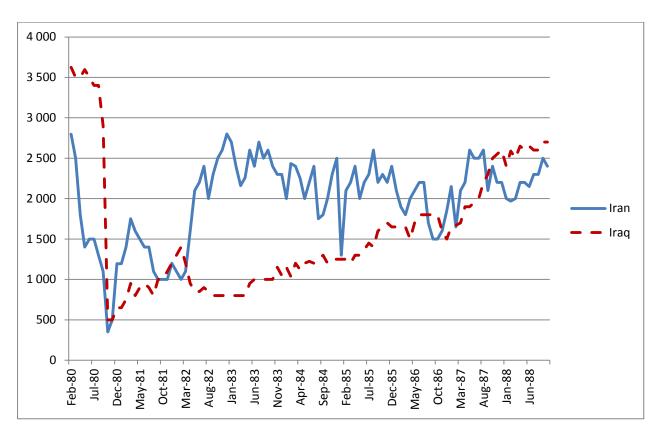


Figure 3.5: Iranian and Iraqi Oil Production 1980-1988 tbd. Source: Petroleum Economist.

While the Iran-Iraq War initially strained the global oil markets, it caused no genuine threat of shortages for the U.S. or its allies because of oil companies' massive inventories from the previous oil shock. Yergin (2009: 694) refers to this as the "Great Inventory Build", and argues that: "When the [Iran-Iraq War] broke out, storage tanks all around the world were brimming over, and oil companies were chartering supertankers to use as additional floating storage". This meant that if production did not meet demand, inventories could simply be reduced. This was correctly perceived by U.S. decision-makers, who responded to the outbreak of the war through the IEA by urging companies to draw down their inventories and for importers not to be unnecessarily concerned and begin another bidding war (Yergin 2009: 693-696). Oil stockpiles dwindled over the course of the Iran-Iraq War, making disruptions a greater threat to oil security. However, the market also "softened" over this time and the U.S. government activated its strategic oil stockpiles. Saudi Arabia abandoned its role as swing producer over the course of the Iran-Iraq War and increased its production drastically, in addition to increased output globally that outpaced demand. In the event of a disruption, the U.S. government stockpiles could be used, but this proved unnecessary. Over the course of

the conflict, both Iraqi and Iranian oil production rebounded to a large extent, and a threat of future disruption would be as readily mitigated. The oil security threat in the later part of the Iran-Iraq War primarily manifest in the Tanker War.



Figure 3.6: Oil Prices in \$/bbl 1978-1988. Source: Petroleum Economist.

The initial oil disruption caused price increases, although prices were already high from the Iranian Revolution and the disruptions caused by it. Oil prices had begun declining from this event, but rose again as Iraq invaded Iran, as shown in Figure 3.6. However, oil prices did not increase by more than \$0.05 from the price peak of the Iranian Revolution in 1979 to the price peak triggered by the Iran-Iraq War one year later (Petroleum Economist). There was a price decline between these two peaks, however, but it was arguably not substantial. This means that prices did not experience a substantial increase, but rather remained very high. However, following this price peak that reached nearly \$40/bbl, there was a gradual decline in oil prices. The decline culminated in the 1986 price crash with prices below \$10/bbl (Figure 3.6). This means that the oil market effectively mitigated the physical disruption, and that that the price increases of the Iran-Iraq War were insubstantial. Therefore, this case's oil threat is given a low value.

Variation in Soviet Threat

For the duration of the Iran-Iraq War the Soviet Union maintained military forces in Afghanistan, which was perceived as a Soviet threat to Iran. The U.S. increased its military presence in the Gulf with the establishment of the U.S. Rapid Deployment Joint Task Force, which was bolstered and later changed into the U.S. Central Command (CENTCOM) (McNaugher 1985: 12-15). The fundamental purpose of this military presence was to deter Moscow from invading Iran, which in turn implies that the U.S. perceived such a threat. The Soviet threat is strongly implied with the Carter Doctrine (Carter 1980), and McNaugher (1985: 9) finds that a scenario of a Soviet drive into Iran's oil region around Abadan figured prominently in U.S. military planning for Gulf contingencies. Consequently, there was a perceived high hostile threat to Iran in this case.

With Iraq, there was no threat of Soviet invasion or coup as they were aligned, albeit contentiously so at this point. Relations had deteriorated with the eruption of the Iran-Iraq War, but improved markedly with new arms shipments to Iraq beginning in the summer of 1982; Moscow remained Iraq's major military supplier throughout the war. Over the course of the Land War in general, Baghdad-Moscow relations improved markedly with Saddam Hussein visiting Moscow in 1985 and great increases in Soviet arms sales to Iraq (Smolansky and Smolansky 1991: 230-279). Iraq's nuclear program acquired a research reactor in 1980, but Israel damaged it severely in 1981. The reactor was widely not considered as constituting an imminent threat of a nuclear Iraq, consequently Israel was criticized for their operations, and to an extent also by the U.S. (Neff 1995). This indicates that the U.S. did not perceive an imminent threat of a nuclear Iraq at this juncture. Iraq used other weapons of mass-destruction against Iran and Iraqi Kurds, and was at war with a hostile regime. There was a "gradual thaw" in relations between the U.S. and Iraq with Donald Rumsfeld as President Reagan's personal envoy meeting Saddam Hussein in Baghdad in 1982 (Smolansky and Smolansky 1991: 242). Iraqi threats to Kuwait and other Gulf states were arguably insubstantial except in the Tanker War, and therefore they are not measured in this case. As Iraq was not in substantial conflict with a non-hostile regime, perceived as close to attaining nuclear weapons, or at risk of Soviet coup or invasion, I have assigned it a low value; accordingly, this case is split between Iran and Iraq on this factor value and will appear as two cases in the QCA.

The U.S. was averse to intervening in the Land War, although it principally did not have adequate reason for intervention; however, the U.S. found opportunity to drastically increase its Gulf military presence (Smolansky and Smolansky 1991: 276). The American Gulf presence intended to ensure oil security and deter Soviet aggression into Iran; other large-scale operations involving these forces would likely have compromised their ability to maintain these objectives, although more forces could be brought to the region to compensate for this. However, any U.S. intervention into the conflict was likely to provoke the Soviets: "Moscow [...] "resolutely" warned "others", that is, the U.S., not to intervene in the war" (Smolansky and Smolansky 1991: 276). This means that any U.S. intervention contained some risk of escalation, consequently I assign a high escalation risk values for both Iran and Iraq in the Land War.

The U.S. had minor concerns with the conflict spreading into Saudi Arabia, but as this state did not share borders with Iran and lent money to Iraq, the perceived threat of this was not high and did not manifest. The substantial threats to Saudi Arabia were arguably in the Tanker War, and therefore considered part of that case. It appears there were no significant threats to other regional U.S. allies in this context. Consequently, this factor is assigned a low value for both Iran and Iraq.

In sum, I found that there was variation between Iran and Iraq in this case, and therefore I divided it into two cases for the QCA. Iran had high hostile threat, but otherwise posed low oil threat, low ally threat, and high escalation risk. I assigned Iraq the same configuration, except for a low hostile threat value. The severe oil threat was mitigated by the oil market, and price increases barely surpassed the price peak of the Iranian Revolution. There was a perceived Soviet threat to Iran, but not to Iraq, the Soviet Union warned the U.S. against intervention, and neither Iran nor Iraq threatened American allies. Both causal configurations and outcomes support my hypotheses.

3.8 Case 8: Tanker War — American Naval Intervention

I find Case 8, the Tanker War, to show a high oil threat, high hostile threat, high threat to allies, and low escalation risk. The expected outcome from this causal configuration is intervention. With the Tanker War, I only analyze U.S. military intervention against Iran. Iraq

was not considered an adversary to the U.S. in this context, and posed little threat to the U.S., except for an Iraqi attack on U.S.S. *Stark*, which killed 37 mariners. The Reagan administration accepted the Iraqi explanation of the incident as pilot error. Due to the U.S.' tilt towards Iraq in this context, I considered intervention against Iraq improbable, and therefore did not sample this case (Gause 2010: 81-82).

The Tanker War was a strategically significant part of the Iran-Iraq War, in which Iran and Iraq attacked oil infrastructure and transportation. This led to the U.S. intervening to secure oil shipments from Kuwait and Saudi Arabia and engaging Iranian forces in the Gulf. The Tanker War arguably began with the outbreak of the Iran-Iraq War as both parties struggled to minimize the other's oil exports: "Iran trapped or destroyed many Iraqi ships in port in the early stages of the war. But Iraq started the tanker war in the Gulf proper in 1981 by initiating attacks on ships steaming to or from Iranian ports at the extreme northern end of the Gulf" (O'Rourke 1988). Iraq continued its attacks on ships to and from Iranian ports from 1981 throughout the Iran-Iraq War, and over the duration of the conflict the Tanker War slowly escalated, but with far more attacks by Iraq than Iran. Ronald O'Rourke (1988) finds that Iran did not re-enter the Tanker War until after Iraq began expanding the geographic scope for its naval efforts:

Iraq continued these attacks into 1984 without a parallel Iranian response at sea. In March of that year, however, Iraq increased the rate of its attacks and expanded their geographic scope by attacking ships serving more southerly Iranian points, particularly the oil-loading complex at Kharg Island. Two months later, Iran initiated its own attacks, and the tanker war became a two-way affair.

Iran's entry to the Tanker War and the escalation in attacks is shown in Table 3.3. From this point Iran rapidly increased its efforts in the Tanker War and targeted Kuwaiti and Saudi Arabian tankers. The U.S. agreed to flag Kuwaiti tankers and provide these with naval escort, and assembled a major naval military presence in the Persian Gulf and Arabian Sea to this end. The U.S. did the same for Saudi Arabian oil tankers (Gause 2010: 81).

Attacker	1981	1982	1983	1984	1985	1986	1987	Total
Iraq	5	22	16	53	33	66	88	283
Iran	0	0	0	18	14	45	91	168
Total	5	22	16	71	47	111	179	451

Table 3.3: Oil Tanker Attacks by Belligerent and Total. 1981-1987. Source: O'Rourke (1988).

The U.S. sent minesweepers when Iran placed mines that reached Kuwaiti ports, and the U.S. established a joint operation with Saudi Arabia (Claes 2001: 103). After Iran successfully mined the U.S.S. *Samuel B Roberts* on April 13 1988, the U.S. retaliated by destroying two Iranian ships, damaging another ship, destroying two oil platforms, and attacking a number of speedboats. The U.S.S. *Vincennes* engaged with several small Iranian gunboats on July 3, 1988, and shot down an Iran Air passenger plane. There is no evidence that the commander knew that his target was a civilian airliner (Gause 2010: 84-85).

As argued in the previous case, the oil market context during the Tanker War was very "soft" with and following a price crash in 1986, and while company and consumer stockpiles dwindled, government stockpiles became increasingly prominent as a tool for oil security. However, the perceivable oil security threat in the Tanker War was that Iran would block the Strait of Hormuz and thereby disrupt all Gulf oil shipments (Claes 2001: 102). With the escalation of the Tanker War, there were increasing attacks on Kuwaiti and Saudi Arabian ships. This directly threatened immediate disruption of oil transportation to the U.S. However, as argued such threats were arguably mitigated by the oil market context and the existence of U.S. oil stockpiles. As indicated by the U.S. attacks on Iranian oil platforms following the mining of U.S.S. Samuel B Roberts, limited oil production disruptions were not a major U.S. concern in this context. However, the U.S. perceived a clear threat that Iran could attempt to block the entire Strait of Hormuz and thereby disrupt all Gulf oil shipments, which the oil market context could with some likelihood have been unable to mitigate effectively. The U.S. government oil stockpiles have a limited drawdown capacity and therefore such a severe shipment disruption could cause shortages in the U.S. that would warrant military intervention. This means that Iranian behavior in the Tanker War constituted "threats of disruption of physical supply to the U.S. mainland" — a first order threat in the theoretical framework — which could perceivably not be effectively mitigated by the oil market context, and therefore I assigned a high oil threat.

Attacking Kuwait

Following the Iranian capture of Faw, an Iraqi port city in the Gulf, Iran was within striking distance of Kuwait. Iran fired at least five missiles on Kuwait itself and numerous attacks on shipping (Yergin 2009: 746; Smolansky and Smolansky 1991: 248-249). Claes (2001: 103) finds that Iranian attacks on sea traffic to Kuwait and Saudi Arabia escalated; Iran's military

ability to sink supertankers was limited until China supplied them with heavier rockets, which led to the attacks becoming more severe. From this, I infer that the perceived security threat to Kuwait, a non-hostile regime, was substantial and therefore, I have assigned a high value to this case.

In response to the increased Iranian attacks, Kuwait responded in November 1986 by asking both the United States and the Soviet Union for assistance in protecting shipping to and from its ports. As Moscow agreed to assist Kuwait, "the Soviet navy would be deployed [in the Gulf] for an indefinite period of time, serving both political and, potentially, military purposes". Washington was alarmed and "attempted to outdo Moscow by offering to "reflag one half of Kuwait's tanker fleet and to place it under U.S. naval protection" (Smolansky and Smolansky 1991: 251). This means that Kuwait invited increased Soviet military presence in the Gulf, which seems to have had major impact on the U.S. intervention decision. As greatly increased Soviet military presence in the Gulf should arguably constitute a high hostile threat in its own right, and is not measured in my operationalization of this factor, there appears to be some weakness in this operationalization. For this case, it is inconsequential to the value assigned due to other observations leading to high hostile threat.

Escalation Risk and Ally Threat

The U.S. was seemingly not averse to intervening against Iran in the Tanker War over concern with Soviet escalation; the Soviet Union warned against U.S. intervention in the Land War, but not in the Tanker War. Moscow was opposed to increased American naval presence, but blamed it on Iran and Iraq for not ending the war and for escalating the naval conflict — thereby giving the U.S. opportunities to increase its military presence in the Gulf (Smolansky and Smolansky 1991: 250; 259). Prominently, the Soviets were also willing to use military force to protect Kuwaiti tankers in this case. Consequently, this case showed low risk of escalation. One could argue this was due to the limited scope of the operations, but this is not actually true — the operations brought an unprecedented level of American presence in the Gulf, and their attacks against Iran were substantial.

As I have opted not to consider Kuwait an important U.S. ally until 1991, the Iranian threat to Kuwait is not measured as a threat to a U.S. ally. However, as Iran was also attacking Saudi Arabian oil shipments, there is still a threat to an ally in this case. Saudi Arabia did not formally request American protection, but U.S. forces provided protection for Saudi tankers

as well (Gause 2010: 81). The U.S. had increasingly supplied Saudi Arabia with weapons systems over the war to enable Riyadh to defend against Iranian attacks (Claes 2001: 103). This indicates that the U.S. considered Iranian attacks against Saudi Arabia a substantial threat, and accordingly the factor is given a high value.

In Case 8, I found high oil threat, hostile threat, and ally threat, in conjunction with low escalation risk. The U.S. perceived a threat of Iran closing the Strait of Hormuz and thus jeopardizing oil security, there was a perceived threat to Iran from the Soviet Union's presence in Afghanistan, Iranian attacks on Saudi Arabia, and Moscow appeared to condone U.S. intervention. As predicted in the hypotheses, this led to intervention.

3.9 Case 9: The Gulf War; A Geopolitical Oil Crisis

In Case 9, Iraq invaded and annexed Kuwait on August 2, 1990. I assign this case high oil threat, hostile threat, and ally threat, with low escalation risk. I have hypothesized intervention for this configuration. According to Øystein Nordeng (2002: 187) the Gulf War "was essentially over oil, not only for the West, but also for Iraq", which means that this case should be important for shedding light on how oil threats can lead to intervention.

The Iraqi motive for the invasion was primarily to seize Kuwait's oil production and its revenues to finance Iraq's reconstruction following the Iran-Iraq War. Saddam Hussein perceived his domestic political and economic position as deteriorating in 1989, with increasing coup attempts, low oil prices, and the decline of the Soviet Union as an important ally (Gause 2010: 93-94). U.S. relations with Iraq had been generally good following the Iran-Iraq War until the invasion of Kuwait, although Iraq was building weapons of mass-destruction and diverted American loans for agricultural purchases into its weapons programs (Gause 2010: 89-90). In 1990, tensions between Iraq and Kuwait escalated over border and debt disputes with Iraq wanting to increase their territory, and their debt to Kuwait from the Iran-Iraq War forgiven; these tensions turned into a crisis, and subsequent invasion. Iraq met little resistance from Kuwait, which was occupied in eleven hours. The attack involved approximately 140,000 men and 1,800 tanks. The Kuwaiti army had not fully mobilized to prevent provoking Iraq further in the lead-up to the invasion. The Kuwaiti Emir and most of the royal family escaped to Saudi Arabia, and fighting was sporadic (Claes 2001: 107-109; 128 footnote 11).

President George H. W. Bush quickly decided that he would oppose Saddam Hussein's invasion of Kuwait. Bush launched Operation Desert Shield on August 7, 1990, only five days after the Iraqi invasion. Desert Shield placed U.S. forces in Saudi Arabia to prevent Iraq from invading Saudi Arabia, and prepared to drive back Iraqi forces. On January 17, 1991, Desert Shield turned into the coalition effort Desert Storm, which removed Iraq's presence from Kuwait and drove back Iraqi forces. Between August 7 and January 17, a powerful alliance against Iraq was created with many countries providing assistance to the U.S.-led initiative. Several UN Security Council resolutions passed sanctioning Iraq. Among the international sanctions were a boycott against Iraqi and Kuwaiti exports, prominently an oil boycott coupled with an arms embargo and financial sanctions, and the authorization for use of force to eject Iraq from Kuwait from January 15 (Gause 2010: 88-135).

The Gulf War caused first order oil threats to the U.S. through physical disruption, uncertainty regarding immediate physical supply to the U.S., and substantial and immediate prices increases. Figure 3.7 shows that with the eruption of the Gulf War, Kuwaiti and Iraqi oil output declined dramatically; in Kuwait oil production practically ceased over night and Iraqi oil production was largely stopped through the international boycott. Yergin (2009: 755) finds that this disruption amounted to approximately 4 mbd, and some of this was probably intended for the U.S. As the oil boycott was passed by the UN Security Council it needed the support of the U.S., which means that they deliberately exacerbated the oil threats otherwise posed by the case. This shows that concerns with oil security were less significant than American inclination to constrain Iraq's oil revenue, likely for both strategic and normative reasons.

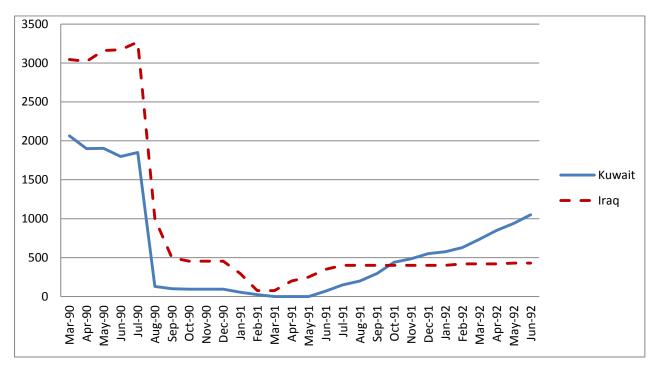


Figure 3.7: Kuwaiti and Iraqi Oil Production in tbd 1990-1992. Source: Petroleum Economist.

Without considering the impact of the oil boycott, the fallout of Kuwaiti production poses a first order oil threat. However, the disruption did not result in physical shortages due to its neutering by the oil market context. Other oil-producers significantly bolstered their output to compensate for the shortfall in Iraq and Kuwait, particularly by the use of spare capacity in Saudi Arabia (Figure 3.8) and stockpiles were drawn on. From Figure 3.8 it is clear that Saudi Arabia responded to the disruption by strongly increasing their output, with an increase from August 1990 to September of almost 2 mbd and a further increase from there by an additional estimated 900 000 bpd to the peak in December 1990. In a speech to Congress on September 11, 1990, President Bush (1990a) stated that:

Oil-producing nations are already replacing lost Iraqi and Kuwaiti output. More than half of what was lost has been made up. And we're getting superb cooperation. If producers, including the United States, continue steps to expand oil and gas production, we can stabilize prices and guarantee against hardship.

This indicates that much of the shortfall in production was replaced with increased production elsewhere, like in Saudi Arabia, very rapidly with the eruption of the conflict — but that not all of the disruption was replaced. Regardless, it seems that enough oil production was shifted to avoid physical shortages. Yergin (2009: 755) finds that an increasing share of the reduced output was compensated for, and that by December there was no longer shortage in production:

The global supply system responded both to higher prices and to urgent appeals for increased production. By December 1990, the lost production had been completely compensated for with "relief" oil produced from other sources. Saudi Arabia alone brought three million barrels per day of shut-in oil back into production, making up for three-quarters of the lost supply.

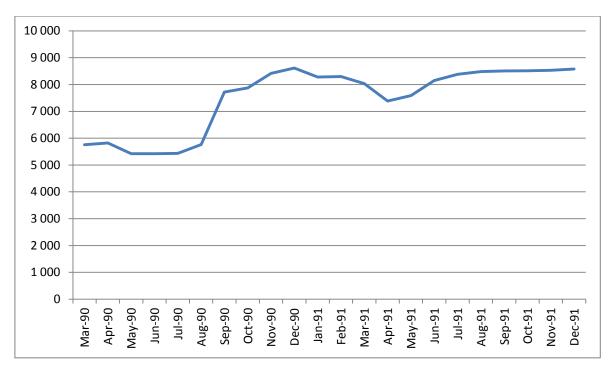


Figure 3.8: Saudi Arabian Oil Production in tbd, March 1990-December 1991. Source: Petroleum Economist.

By the time of the Gulf War, the U.S. Strategic Petroleum Reserve was effective, and for the first time used for a strategic purpose. President Bush (1990a) stated that in addition encouraging increased oil production and conservation, using strategic stockpiles was an option: "Additionally, we and several of our allies always have the option to extract oil from our strategic petroleum reserves if conditions warrant". This shows that the President was willing to use strategic oil stockpiles "if conditions warrant", although what these conditions were, was not clear. The U.S. first used their stockpiles in August 1990 to sell 4 million barrels and again in January 1991, selling an additional 17 million barrels (U.S. Office of Fossil Energy). The former of these sales appears to have been made to ensure adequate physical supply in the U.S. Yergin (2009: 758) argues that the January sales decision eradicated any doubt that stockpiles would be used to ensure supply, and reduced prices with the shift from Operation Desert Shield to Operation Desert Storm.

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¹² Previous stockpile sales had been test sales

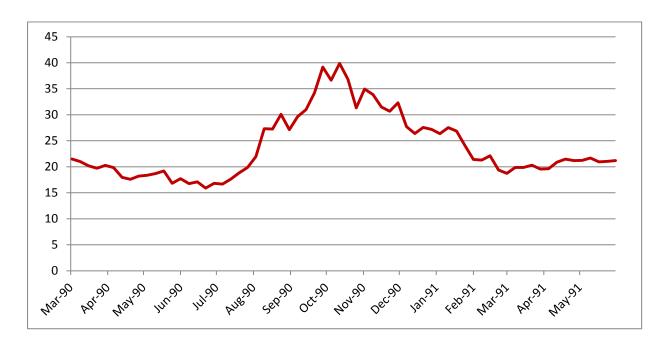


Figure 3.9: Oil Prices in \$/bbl 1990-1991. Source: U.S. EIA (2015c)¹³

While the oil market context effectively mitigated the oil disruption from causing physical shortages, there was regardless an immediate and substantial oil price increase. Prices nearly doubled from before the Iraqi invasion of Kuwait through the course of the Gulf War, going from USD 22.98 on August 3, 1990 to as much as 39.88 on October 12 as shown in Figure 3.9. The reasons for the price increases were partly the physical disruption and boycott, while the market context of anxiety also drove up prices (Yergin 2009: 755). As noted, prices rapidly fell during Operation Desert Storm, but regardless the case imposed immediate and substantial price increases, and thus a high oil threat with the operationalization. The physical disruption appears to have been effectively mitigated by the market with stockpiles and spare capacity.

Annexation and Weakened Deterrence

As Iraq invaded a non-hostile Gulf state in this case and successfully annexed it, a high value is given to the hostile threat factor in accordance with the operationalization of this factor. By annexing Kuwait, Iraq had become a major power in the Gulf region with even vaster oil reserves, territory and population. Iraq already had powerful military capabilities — both conventional and weapons of mass-destruction, and was now perceived by American decision

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 $^{^{\}rm 13}$ Weekly Cushing, OK WTI Spot Price FOB.U.S. Dollars per Barrel.

makers as posed to becoming a hostile regional hegemon and therefore a severe threat to U.S. interests. President Bush (1990a) for instance stated

An Iraq permitted to swallow Kuwait would have the economic and military power, as well as the arrogance, to intimidate and coerce its neighbors -- neighbors who control the lion's share of the world's remaining oil reserves. We cannot permit a resource so vital to be dominated by one so ruthless.

As I can assign high hostile threat with the annexation of Kuwait, I have not considered the threat of Iraq obtaining nuclear weapons for this case; Iraq was correctly perceived as not having nuclear weapons at this juncture, but their program had come farther than the U.S. expected (Gause 2010: 205).

With the gradual collapse of the Soviet Union in this context, the Gulf War spurred a reformulation of its foreign policy. The Soviet Union strongly condemned Iraq's annexation of Kuwait in joint statements with the U.S., and supported the early UN Security Council resolutions, thus indicating that there was no risk of U.S.-Soviet escalation in the event of an intervention (Fuller 1991). Freedman and Efraim Karsh (1991: 39) conclude that: "So long as U.S. objectives did not extend to a change of regime in Iraq, the Soviet Union and China were generally supportive", further indicating low escalation risk. Additionally, China did not veto UN Security Council Resolution 678, which authorized UN members to use force to eject Iraq from Kuwait. Iraq did not have nuclear weapons or other substantial nuclear-state alignments that posed escalation risk. With Tripp (2010: 269), Iraqi military power peaked in 1990 and Iraq had non-nuclear weapons of mass-destructions. However, given the cutoff point for this factor, escalation risk is assigned a low value for this case.

A Threat to Saudi Arabia

With the Iraqi annexation of Kuwait, the U.S. perceived an imminent threat of Iraq invading an important ally, Saudi Arabia. Gause (2010: 103) finds that: "With Saddam's military power now on the Saudi border, the United States' closest Gulf ally was threatened, if not with immediate attack then with a long-term security problem". Iraq's military forces were mobilized, experienced and had strong capabilities at this time. Claes (2001: 108-109) concludes that the U.S. perceived this as a threat to the security of Saudi Arabia: "The United States, the world's largest oil consumer, felt indirectly threatened by the prospect of Iraq, having taken the Kuwaiti oil reserves, being able to put political or military pressure on Saudi

Arabia". If the scope of the Gulf War expanded into Saudi Arabia, it would not only present a strategic and military threat to an essential U.S. ally — it could also cause oil disruptions that further threatened oil security.

President Bush expresses the importance of the threat to Riyadh for the American decision to use military intervention in two speeches. On August 8, 1990 President Bush (1990b) stated:

At my direction, elements of the 82d Airborne Division as well as key units of the United States Air Force are arriving today to take up defensive positions in Saudi Arabia. I took this action to assist the Saudi Arabian Government in the defense of its homeland.

In an additional speech to the U.S. Congress on September 11, Bush (1990a) said: "Armed forces from countries spanning four continents are [in Saudi Arabia] at the request of King Fahd of Saudi Arabia to deter and, if need be, to defend against attack". These speeches do not indicate any special concern for Kuwait as an ally or for Iraq as a threat to other allies. Gause (2010: 105) finds that there was no evidence Iraq intended to invade Saudi Arabia, as Iraqi forces did not enter Saudi territory, but argues that "the ease with which [Iraqi] forces had consolidated their control over Kuwait clearly unnerved the Saudis". Thus, the threat to Riyadh may not have been "real"; however, the U.S. nevertheless perceived a substantial threat, and consequently the case comprises a high ally threat. In addition to the threat to Saudi Arabia, Iraq attacked Israel with ballistic missiles after the annexation of Kuwait, arguably in order to split the coalition effort between Western and Arab states. As a high value can be assigned exclusively from the threat to Saudi Arabia, this threat is not considered.

In sum, I found that Case 9 contained high oil threat from the price increase, high hostile threat from the annexation of Kuwait, and high threat to Saudi Arabia, but low escalation risk as the Soviet Union supported the intervention. Corresponding to my hypotheses, this led to intervention.

3.10 Case 10: The Iraq War

In the Case 10, the U.S. invaded Iraq on March 20, 2003 after having threatened to do so over concerns regarding Iraqi weapons of mass-destruction. I find this case to display low oil security threat, high hostile threat, low threat to allies, and low escalation risk. The theoretical model predicted this causal configuration to cause intervention.

After the Gulf War, the U.S. instituted the "dual containment" strategy, based on the idea of containing both Iran and Iraq through diverse means, but prominently through economic sanctions. Iraq's aggression in the Gulf War had led to widespread international support for severe sanctions against Iraq throughout the 1990s, which contained Iraqi power and enabled UN arms inspections. The arms inspections found evidence of unaccounted for chemical weapons and found it likely that Iraq possessed biological weapons in 2003 (Blix 2003). In addition to sanctions, the U.S. and other actors launched multitudes of military operations against Iraq in this period, for instance with a bombing raid in the 1998 Operation Desert Fox as a response to Iraq failing to comply with the sanctions regime (Gause 2010: 126). Over time, international support for sanctions against Iraq wavered and Iraq's ability to circumvent sanctions improved (Pollack 2002: 211-242).

Before the invasion occurred, terrorists attacked the U.S. World Trade Center and the Pentagon on September 9, 2001 [9/11], and the UN investigated the existence of weapons of mass-destruction in Iraq. The investigation did not show that weapons of mass-destruction existed in Iraq at the time. President George W. Bush posed an ultimatum to the Iraqi regime, that Hussein would abdicate or the U.S. would remove him from power by force. Congress approved use of military power against Iraq, however the President considered appropriate to ensure the national security of the U.S. in October 2002. The American-led invasion of Iraq did not last longer than from March 20 until April 30, 2003, and removed the Saddam Hussein regime. A democratic Shiite government was subsequently installed, and the coalition transitioned its military presence towards counter-insurgency operations. Saddam Hussein was put on trial and executed. The U.S. began withdrawing its troops from Iraq in 2010, and completed its withdrawal by December 2011.

There was no first order oil security threat to the U.S. from Iraq in the years before the invasion. Iraq's oil production had not managed to return to its level from before the Iran-Iraq War at any point before the U.S. invasion, and the Iraqi oil industry needed great investments (BP Statistical Review 2014; Yergin 2011: 151-153). Under the UN sanctions following the Gulf War, Iraq was selling limited amounts of oil in the oil-for-food deal (Pollack 2002: 148). Oil output was increasing in Iraq in the lead-up to the Iraq War, as is shown in Figure 3.10, although with some decline from year 2000 as the industry required reinvestment. This means that there was no disruption in Iraqi production that can explain U.S. intervention — rather Iraq was contributing to oil security by increasing its output. Iraq did not pose specific threats

to disrupt its or other states' oil production or otherwise create other uncertainty regarding immediate physical supply. Claes (2003: 48) argues that it is difficult to find any recent concerns with American oil security of supply that should indicate the necessity of drastic measures, such as a war with Iraq.

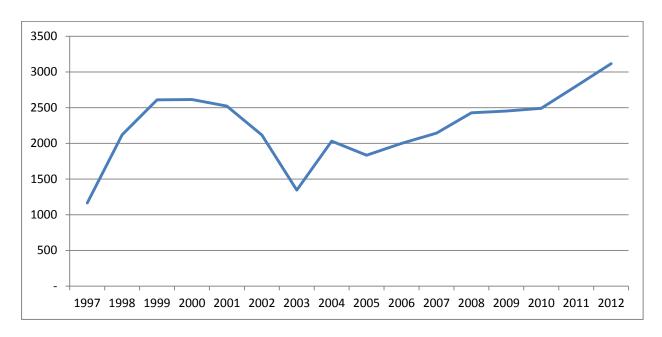


Figure 3.10: Iraq's Oil Production 1997-2012 in tbd. Source: BP Statistical World Review (2014).

Oil prices had risen with the beginning of the 21st Century after a decade of mostly low prices, but can hardly be considered unaffordable during the lead up to the Iraq War, as is indicated in Figure 3.11. Additionally, oil prices were declining from 2000 until 2002. As Figure 3.11 shows, prices kept rising following the Iraq War until the collapse in late 2008 and early 2009. This means that there was a price increase during the pre-Iraq War period, but this was in all likelihood not caused by changes in Iraqi behavior or exports; it appears that Iraq's increased production counteracted the price increases at the time. Most likely, price growth was caused primarily by increased Asian demand, as the region was recovering from financial crisis in the late 1990s. With the beginning of the Iraq War, Iraqi oil production was roughly halved relative to the 2001 level, and from then showed slow increases in production. Iraq did not surpass its year 2000 production until year 2011, although production did recover to more than 2 mbd as early as in year 2004 as shown in Figure 3.10.

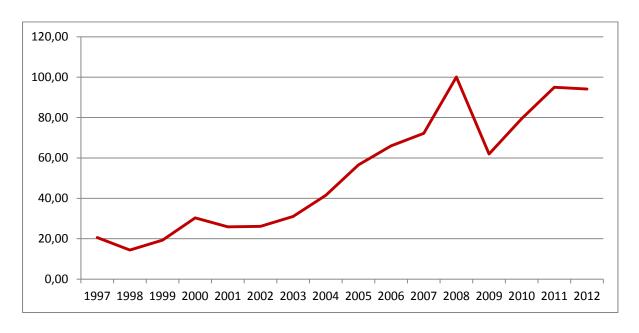


Figure 3.11: Oil Prices in \$/bbl 1997-2012. Source: BP Statistical World Review (2014). 14

As Iraq did not pose any first order oil threats to the U.S. in the lead-up to the Iraq War, I assigned the case a low oil threat value; there was no physical disruption, threat of disruption, or immediate uncertainty regarding Iraqi oil production, and Iraq did not cause substantial and immediate oil price increases. Additionally, Iraq did not appear to impose second order oil threats to the U.S., either. Iraq it was not exhibiting policy behavior that created uncertainty regarding the future physical supply to the U.S., or policy behavior that could have led to increased oil prices — rather it was struggling to increase its production and thus depressing prices.

Kenneth Pollack (2002) does not appear to consider Iraq a threat to oil security in the lead-up to the Iraq War, and oil is absent from his plethora of reasons for why the U.S. should invade Iraq. Gause (2010: 238) concludes that there is no evidence to suggest that oil threats were a prominent factor that drove the policy-making process in the lead-up to the war: "There is no evidence on the public record that energy security issues specifically drove the policy-making process in the lead-up to the war". John Duffield (2012: 145) supports this: "Certainly, no compelling evidence, either in the form of declassified documents or participants' memoirs, has yet emerged indicating that oil was a prominent factor or constant consideration in the thinking of decision-makers within the Bush administration". This means that Iraq did not only not pose a major oil threat, but also that there is no substantial evidence that oil security drove the U.S.' decision to invade Iraq.

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¹⁴ WTI Spot market prices

Post-9/11: A Nuclear Threat

There was a clear shift in the U.S. perception of Iraq as a threat before and after the terrorist attacks on September 9, 2001. While Iraq was most likely not involved in 9/11 (Gause 2010: 210), the event shifted the intelligence community's perception of the threat of a nuclear Iraq, and a threat of Iraq selling weapons of mass-destruction to terrorists was constructed and perceived. Gause (2010: 204) finds that before 9/11, the U.S. did not consider a nuclear Iraq an urgent threat:

The intelligence consensus before 9/11 was that Iraq did not pose a serious nuclear threat. The intelligence community, in a number of reports prepared in the late 1990s, concluded that Iraq had not reconstituted its nuclear program. Saddam Hussein had the ultimate desire to rebuild his nuclear capabilities, the reports asserted, and Iraq retained the human and technological capital to operate a nuclear weapons program, but there were no indications that it was pursuing that path at that time.

Following the event, Gause (2010: 184-233; 238-240) argues and finds substantial evidence that the intelligence community shifted their perceptions of Iraq in what can be considered a securitization process (Buzan, Wæver, and de Wilde 1998: 21-45). The impact of 9/11 on U.S. perceptions of Iraq as a security threat is for instance expressed by then-Secretary of Defense Rumsfeld (quoted in Jervis 2012: 31) who stated that the U.S. "did not act in Iraq because we had discovered dramatic new evidence of Iraq's pursuit of weapons of mass murder. We acted because we saw the existing evidence in a new light, through the prism of our experience of September 11". Gause (2010: 205) finds that following 9/11, the intelligence community significantly upgraded their perception of an Iraqi nuclear threat and that the U.S. was already increasingly sensitive to an Iraqi nuclear threat after discovering their underestimation of the progress Iraq had made toward a nuclear weapon in 1991. The intelligence reports relied on by the Department of Energy on the Iraqi nuclear threat were later discredited (Gause 2010: 205). Due to the false U.S. perception of an imminent nuclear Iraq, I have assigned a high value to this case. The other threats that can lead to a high value on this factor were not present. Arguably, the perceived threats posed by Iraq were more diverse and the nuclear threat was one among several perceived threats. Prominently, the threat of Iraq having retained chemical or biological weapons crucial to the intervention decision, and possibly more important than the nuclear threat.

Latent Ally Threat; Weakened Deterrent

Iraq was perceived as a latent threat to U.S. allies in the Gulf. During the time from the Gulf War to the Iraq War, the U.S. had become a closer ally with Kuwait and Bahrain, and remained close allies with Saudi Arabia and Israel. CENTCOM general Zinni testified in 2002 that "Iraq remains the most significant near-term threat to U.S. interests in the Gulf region" and that "Iraq's conventional military force continues to pose a threat to our regional partners who do not possess the capability to deter or stop an Iraqi invasion without U.S. assistance" (quoted in Klare 2004: 81). Pollack (2002: 160) finds that Iraqi military forces had a major advantage over all the Gulf states:

Despite the devastation of the Gulf War and the sanctions, Iraqi forces remain large enough to give them an edge over any single Gulf state or any combination of them [...] Moreover Iraqi forces possess a qualitative edge over the Gulf states that magnifies their quantitative advantage.

In addition to this, Pollack (2002: 150) finds that the Iraqi regime was expansive and held ambitions to dominate the Gulf region and make Saddam Hussein a leader of the Arab world. However, Iraq did not pose any immediate threats to American allies, likely considering that this would with some likelihood lead to U.S. intervention. Pollack (2002), Duffield (2012), and Gause (2010) appear to agree that the threat was latent and not imminent, and consequently, I assigned the case low ally threat.

As previously argued in the Gulf War case, the end of the Cold War dramatically weakened Iraq's deterrent against the U.S., and Iraq had not managed to replace effectively its previous Soviet alignment with a close nuclear-state ally. While nuclear powers condemned the intervention, there was no risk of escalation to nuclear war, or even direct confrontation with any of them. Pollack (2002: 206) finds that: "Russia is not willing to threaten to go to war on behalf of a client state as the Soviet Union did over Cuba and Egypt during the Cold War", and speculates that the Russians might be helpful in an intervention. He also finds that China would probably oppose intervention, but does not even consider any of escalation risk. The U.S. was aware that Iraq did not *have* nuclear weapons (Pollack 2002: 173-178). Consequently, I have assigned this case a low escalation risk value. The Gulf War and sanctions had weakened Iraq's conventional military forces, so that Iraq was far from its pre-Gulf War capabilities, although the oil-for-food deal enabled some revitalization of Iraq's conventional military (Pollack 2002: 148). The U.S. arguably perceived Iraq as possessing non-nuclear weapons of mass-destruction (Pollack 2002: 148; 347; Gause 2010: 200-204). Similarly to with the Gulf War, given my operationalization of the escalation risk factor as

requiring a risk of escalation with a nuclear-state actor for a high value, this case is assigned a low value.

Thus, I have assigned Case 10 a low oil threat, high hostile threat, low ally threat, and low escalation risk. Iraq's oil production was recovering from the Gulf War, and did not pose oil security threats, the U.S. perceived Iraq as a future nuclear threat, but Iraq posed no imminent threat to allies or risk of nuclear escalation. This causal configuration led to intervention, as hypothesized in the theoretical chapter.

3.11 Summary and Implications

Table 3.4 shows the causal configurations and outcomes for all cases. High values are coded 1, while low values are coded 0, and the cases are listed in the same order as in the case studies. In this section, I consider some implications of the cases, and where relevant I point to other explanations in the literature. The qualitative data generally do not explicitly infer causes of intervention decisions, but the accounts generally note observations they consider important. However, the data do not really explain non-interventions, so with these cases different explanations are less available.

Case	Caseid	Oil	Hostile	Ally Threat	Escalation Risk	Intervention
		Threat	Threat			
1	Iran _1953	0	1	0	1	1
2	Iraq_1972	0	0	0	0	0
3	Iraq_1967	0	0	0	1	0
4	Iraq_1973	1	1	1	0	0
5	Iran_1979	1	1	1	0	0
6	Hostage_Crisis	0	1	0	1	1
7	Iran_Land_War	0	1	0	0	0
7	Iraq_Land_War	0	0	0	0	0
8	Tanker_War	1	1	1	1	1
9	Gulf_War	1	1	1	1	1
10	Iraq_War	0	1	0	1	1

Table 3.4: Summary of Causal Configurations and Outcomes

The implication Case 1 is that high hostile threat and low escalation risk can lead to intervention in the absence of additional threats, thus strengthening that hypothesis. There was a mitigated oil security threat, but this was a U.S.-supported boycott. Thus, the case displayed that the U.S. may support measures that threaten its oil supply. As established in the Chapter 2, the threat to British interests is not considered a reliable driver for U.S. military intervention, and this was substantiated in Case 1 with Kinzer (2003: 3-4) finding that Britain

shifted its rhetoric to emphasizing the Soviet threat to Iran, rather than the threat to a British company, which may have affected the intervention decision. My explanation's emphasis on the Soviet coup threat is well-supported by Kinzer (2003) and Yergin (2009: 432-460), although these do not consider the absence of Soviet escalation risk. Similarly to my analysis, these accounts do not emphasize the oil nationalization as a significant driver for American intervention. In Case 2, Iraq posed marginal oil, hostile, and ally threats but not enough so to warrant high values. An implication from cases 1 and 2 is that it is possible to nationalize the oil industry without it leading to high oil threat from disruptions or price increases.

Case 3 with the 1967 Oil Embargo posed a mitigated oil threat and no other threats. The embargo in this case failed, unlike in Case 4, where I assigned high oil threat. These two cases show the effect of the market context for mitigating oil threats, but they both contained high escalation risk and led to non-intervention. As Case 4 posed three high threats and high escalation risk, and led to non-intervention. This implies that escalation risk is a powerful barrier to intervention. As threats in Case 3 were all lower than similar threats other states posed in the same context, and Iraqi war efforts against Israel was the reason for both high hostile and ally threat, this may have impacted the model's ability to accurately consider the case.

Case 5's causal configuration and outcome is identical to the 1973 Oil Embargo case, yet they are substantially different. Threats in Case 5 were not lower than those posed by other states in a case-related context; Khomeini and the Soviet Union posed all three threats to the Shah regime. This case strengthens the implication that high escalation risk can prevent intervention even with multiple high threat values. Interestingly, Yergin (2009: 661-662) does not point to escalation risk, but emphasizes the internal debate within the U.S. administration regarding how to handle the situation and concludes that the U.S. did not have any policy. While Sick (1985) considers Soviet response and threats, his account does not address why the U.S. did not intervene, or argue that avoiding escalation was important for the non-intervention. This may signify that my analysis is not well-supported in this case, although it is empirically substantiated.

With Case 6, the U.S. boycotted Iranian oil; this further substantiates that the U.S. can deliberately damage its oil security in some contexts. Given the causal configuration, the theoretical model correctly predicted intervention against Iran, however its explanation is not satisfying or well-supported by the literature. The U.S. was averse to military action in Iran

over concerns with the hostages, and only used covert rescue operations in this case. Thus, any high threat values in this case would probably not have affected the intervention decision — rather the Hostage Crisis, the failed diplomatic efforts, and low escalation risk offer the best explanation of this case. This case study displayed and discussed the endogeneity challenge with the escalation risk factor as previously noted in Chapter 2.

Case 7 implies that the oil market's ability to mitigate supply threats is tremendous in some contexts, considering the disruption of Iraqi and Iranian oil output. Case 7 further substantiates the impact of escalation risk with Soviet, who warned the U.S. against involvement, and which again led to non-intervention. In Case 8, I found a causal configuration similar to cases 4 and 5, but with low escalation risk and consequent intervention as hypothesized. If this configuration had led to non-intervention, it would have indicated omitted variable bias or problems with the operationalization. The data drawn on for cases 7 and 8 do not significantly draw on other explanations than those presented.

Case 9 matched the causal configuration and outcome of Case 8. With Case 9, the impact of high ally threat is very clear, while it was more ambiguous in Case 8; the Gulf War led the U.S. to perceive a major security threat against its strategic and important Gulf ally, Saudi Arabia, and this was arguably the most important explanatory factor for Operation Desert Shield. I argued that Iraq's ability to deter the U.S. was strongly weakened by the decline of Soviet support, and Gause (2010: 103) explicitly supports this: "Had this been a Cold War crisis, the U.S. might have been reluctant to confront a Soviet ally directly, for fear of escalation to a superpower confrontation". This implicitly supports my argument for the non-interventions against Iraq in the Cold War era as well. The accounts used for data on this case seem to support the case study's focus on the threat to Saudi Arabia (e.g. Claes 2001: 108-109; Gause 2010: 103). As the U.S. boycotted Iraqi oil in Case 9, and there was high oil threat, this case further substantiates the U.S.' willingness to damage its oil security.

Case 10 matched the causal configurations and outcomes of Case 1 and Case 6. There was a U.S. perception of Iraq attaining nuclear capabilities after 9/11, which led me to assign a high hostile threat. However, this was only one of many threats perceived as posed by Iraq at that juncture; thus, the operationalization of this factor falls somewhat short — it assigns the correct value for one of the right reasons. Gause (2010: 238-20) and Yergin (2011: 142-146) for instance emphasize 9/11 and other Iraqi weapons of mass-destruction, but are not directly unsupportive of my explanation. Similarly to Case 9, there was low escalation risk as Iraq was

unable to effectively replace Soviet deterrence. This case's major-most implication is the apparent effect of shifting perceptions of an arguably near-identical threat. As documented by Gause (2010: 184-240), 9/11 drastically and immediately caused a reorientation of U.S. policy toward Iraq, and the U.S. became far more concerned with threats that they had previously considered non-urgent. Critically, the intelligence community's reports shifted their assessments of largely equivalent threats and the Administration favored reports that indicated high Iraqi threats.

4 Comparative Analysis

Through the previous case studies, I assigned all factor and outcome values. I perform a crisp-set QCA and discuss the results of this analytical technique in this chapter. This chapter identifies and discusses patterns in the data pertaining to under what conditions oil threats lead to military interventions, and is thus instrumental to answering the research question. The ten sampled cases turned into eleven, as the Iran-Iraq Land War attained different values with Iran and Iraq. Five of these cases led to U.S. military intervention, while the remaining six did not.

When using QCA, the researcher first builds a dataset, and then uses Boolean algebra to build an equation that expresses the different "paths" to a positive value on the outcome variable in a truth table. Contradictions in the data (identical configurations that lead to different outcomes) must be resolved prior to this, generally through inclusion of additional explanatory factors. As the Boolean approach is holistic toward cases by viewing them in terms of value configurations and compares case configurations holistically, it is an "ideal instrument for identifying patterns of multiple conjunctural causation" (Ragin 1989: 101). After constructing such an equation, it is minimized through three available procedures. The most fundamental procedure for reduction is pairwise minimization:

If two Boolean expressions differ in only one causal condition yet produce the same outcome, then the causal condition that distinguishes the two expressions can be considered irrelevant and can be removed to create a simpler, combined expression. (Ragin 1989: 93).

After using this procedure, Boolean expressions can be further reduced through the *containment rule*, and simplifying assumptions. With the *containment rule*, some groupings can be contained within more general groupings as logically redundant subsets. For instance, a case with I=OHAe¹⁵ is in this logic a subset of I=OHe, as the claim that OHe reliably yields intervention contains the more restrictive claim that OHAe reliably yields intervention. With the *containment rule*, the first expression could thus be simplified to I=OHe (Ragin 2000: 136). Finally, simplifying assumptions can be introduced to the analysis to minimize Boolean expressions further. This means to code present non-existent configurations that allow further reduction through pairwise minimization, and if introducing assumptions, "the researcher can

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¹⁵ In the Boolean expressions, capital letters indicate high values; lower case indicates low values. See Table 4.1 for acronyms.

specify in substantive terms and thus evaluate their plausibility"; an assumption is plausible if it is not contradicted by observations, and is supported by the theoretical model (Stokke 2007: 508-509). I use some simplifying assumptions as I have a low number of cases, and many possible configurations are absent in the data; all assumptions are evaluated for plausibility.

Factor	Acronym	Low Value	High Value
Intervention	I	6	5
Oil Threat	О	7	4
Hostile Threat	Н	3	8
Ally Threat	A	7	4
Escalation Risk	Е	7	4

Table 4.1: Case Studies' Factor and Outcome Value Distributions

After minimizing the truth table, it is often useful to apply De Morgan's Law in order to find causal configurations associated with a negative outcome. De Morgan's Law can be applied to the "solution already derived for positive outcomes to obtain the solution for negative outcomes"; this is done by recoding elements that are present in the reduced expression to absent, elements that are coded absent to present, changing logical AND to logical OR and logical OR is recoded to logical AND (Ragin 1989: 98-99). However, this means that all minimization procedures used with the original expression are expected to be valid for the negative expression; with the use of simplifying assumptions, this becomes problematic. Consequently, I perform additional analyses of negative cases, rather than use De Morgan's Law.

The quality of a truth table can be assessed by checking that there is a mix of positive and negative cases, that there are no counterintuitive configurations, that no conditions are too "proximate" to one another, and that there is satisfying variation for each factor — generally at least 1/3 of each value. Counterintuitive configurations for this analysis would be I=ohaE or i=OHAe for this thesis; configurations that should reliably lead to the converse outcomes, and thus indicate problems with the model or operationalization. The other criteria can also indicate problems with sampling, low cross-condition diversity, and low variation in a factor (Rihoux and De Meur 2009: Box 3.5). Table 4.1 displays the value distributions on factors and the outcome and with Table 4.2, indicate that the truth table has satisfying quality in these regards, although variation in hostile threat could be greater; marginally below 1/3 of its

values are low. I do not think that the operationalization or cutoff point for this factor should be shifted, as it would lose measurement validity; it is substantially and theoretically unpalatable to consider threats of Soviet invasion or coup, imminent nuclear weapons acquisition by Iran or Iraq, or their invasion or substantial conflict with a non-hostile regime low values. The cases are overwhelmingly foreign policy crises in a geopolitically important and unstable region, which makes it natural that this factor will show many high values. During the research process, I elevated the cutoff point for this factor in order to discriminate better between very high and other hostile threats, and it still resulted in a substantial majority of high values. In the robustness test, I further elevate this cut-off point by not assigning high values to invasions or military conflicts with non-hostile regimes as a high threat.

Truth Table and Positive Cases

Based on the values assigned in the case studies, I built the truth table shown in Table 4.2. The truth table shows that there are cases available on six of 16 possible configurations, with no contradictions or cases contradicting the hypotheses.

Configurati	Configuration	# of	# with	Underlying Cases
on #		Cases	Intervention	, ,
1.	ohaE	2	0	Iraq_1972, Iraq_Land_War
2.	ohae	1	0	Iraq_1967
3.	ohAE	0	0	
4.	ohAe	0	0	
5.	оНаЕ	1	0	Iran_Land_War
6.	оНае	3	3	Iran_1953, Hostage_Crisis,
				Iraq_War
7.	oHAE	0	0	
8.	oHAe	0	0	
9.	OhaE	0	0	
10.	Ohae	0	0	
11.	OhAE	0	0	
12.	ОНаЕ	0	0	
13.	OhAe	0	0	
14.	OHAe	2	2	Tanker_War, Gulf_War
15.	OHae	0	0	
16.	OHAE	2	0	Iraq_1973, Iran_1979

Table 4.2: Complete crisp-set QCA Truth Table

The data only exhibit two causal configurations leading to intervention, configurations 6 and 14, consequently these form the initial Boolean expression¹⁶ leading to U.S. military intervention:

INTERVENTION = oHae + OHAe

The former means that low oil threat, high hostile threat, low ally threat, and low escalation risk lead to intervention, which occurred in three cases — the Iranian Coup, the Hostage Crisis, and the Iraq War. Interestingly, two of these led to covert and small-scale interventions, while the Iraq War was a massive invasion. As noted in the case studies, the model did not perform well with the Hostage Crisis, as it was a very specific threat and context, which resulted in a specific intervention to address the situation, and this led to challenges with causality and endogeneity. The Iraq War unequivocally did not impose high oil threat. The three cases show good variation chronologically, with interventions occurring in 1953, 1979-1980, and 2003, and spatially with two interventions against Iran and one against Iraq. With the remaining cases, there were no significant issues, although I assigned the oil nationalizations low oil threat in my framework, and the Hostage Crisis fell short of the cutoff point on this factor as well.

The second configuration leading to intervention has high oil threat, high hostile threat, high ally threat, and low escalation risk values. The underlying cases for this configuration are the Tanker War and the Gulf War. The causal configuration on the latter case is unequivocal with the operationalization, but with the former there is a question of whether the threats posed by Iran to Kuwait and Saudi Arabia were substantial, and arguably as well as if a closing of the Strait of Hormuz could have been effectively mitigated. These cases are quite similar chronologically, with the former intervention occurring in 1987-1988 and the latter in 1990-1991, but the former was against Iran while the second was against Iraq. This initial Boolean expression shows that all cases leading to intervention share low escalation risk and high hostile threat, while the latter configuration has high values on oil threat and ally threat as well. This could indicate that for an intervention to occur, high values on hostile threat and low escalation risk are both necessary, but neither is sufficient, but as these claims cannot be made independently from theories that propose such, they cannot be considered necessary at this juncture (Ragin 1989: 99).

¹⁶In the Boolean expressions "+" denotes logical OR, while "*" denotes logical AND.

As the intervention configurations differ on two values, they cannot be reduced through pairwise comparison. However, the expression can be reduced further by a simplifying assumption; either I=oHAe or I=OHae can be introduced as reasonable simplifying assumptions. Both of these assumptions are plausible as they do not contradict any observations, and are supported by my hypotheses and theoretical framework; the presence of high oil threat or ally threat in I=oHae should only enhance the likelihood of intervention. As three cases with only high hostile threat and low escalation risk, the 1953 Iran Coup, the Hostage Crisis, and the Iraq War, there is every reason to expect the addition of a threat to this causal configuration to lead to the same outcome. By counterfactually adding one of these to the truth table as a simplifying assumption, the Boolean expression can be reduced further (Stokke 2007: 508-509). Thus, with adding the I= oHAe configuration, the new reduced expression becomes:

INTERVENTION = oHe + OHAe

With the introduction of I=OHae it would be I= Hae + OHAe. Both of these then enable pairwise minimization and result in the same Boolean expressions:

INTERVENTION= *He*

This final expression shows that I= OHAe is overdetermined through the existence of more threats than what was in I=oHae shown to be necessary for an intervention, and with a simplifying assumption this was solved. Thus, with the Tanker War and Gulf War, ally and oil threats may have been superfluous for the intervention decisions, given low escalation risk and high hostile threat. High hostile threats AND low escalation risk yield consistent military interventions, even in the absence of other threats and indicate that the existence of additional threats may be unnecessary for intervention outcomes. This inference is based on observations from three of eleven cases, which indicates that it is not a coincidence but a significant pattern in the data. With regard to the research question of when oil threats lead to interventions, these Boolean expressions indicate high oil threats are present in some intervention cases, but that the outcomes in these cases are satisfyingly explained by other factors.

Negative Cases Analysis

Conversely, the initial negative Boolean expression is found in configurations 1, 2, 5, and 16:

intervention = ohaE + ohae + oHaE + OHAE

The six underlying cases are shown in Table 4.2, but notably the underlying cases for i=OHAE are the 1973 Oil Embargo and the Iranian Revolution. With a simplifying assumption, i=OHaE or i=oHAE, the expression can be further minimized through the *containment rule* and pairwise minimization. These simplifying assumptions yield the same result and are both plausible as they do not contradict any observations and the theoretical model did not predict an outcome for these causal configurations. Additionally, i=OHAE shows that with three high threats *and* high escalation risk leads to non-intervention, and from the existence of fewer threats in combination with high escalation risk we find the same outcome with i=oHaE; therefore, there is good reason to expect these counterfactual causal configurations to result in non-intervention as well. By adding the simplifying i=OHaE, the expressions becomes:

$$intervention = ohaE + ohae + oHaE + OHAE + OHaE$$

With two rounds of pairwise minimization, first with the latter two causal configurations leading to i=OHE, and subsequent minimization with i=oHaE, the Boolean expression is:

$$intervention = ohaE + ohae + HE$$

From this, I use pairwise minimization on the first two configurations, and use of the *containment rule* on the latter configuration to find the final negative expression. Intrinsically, i=E is a more general path to non-intervention than i= HE and as HE only differs from E on containing one additional specific value. As i=E is not contradicted by any observations, i=HE is logically redundant and can be reduced through the *containment rule* to i=E. Consequently, the final expression is:

$$intervention = oha + E$$

The minimized Boolean expression signifies that non-interventions occur either in the absence of threats regardless of escalation risk, or in the presence of any combination of threats given high escalation risk. The former of these is supported by three cases; the Iraqi Oil Nationalization, Iraq in the Land War, and Iraq in the 1967 Oil Embargo. This means that spatial variation is not present, but the number of cases is good. The latter is supported by three underlying cases: Iran in the Land War, Iraq in the 1973 Oil Embargo, and the Iranian Revolution. This is a solid number of cases to support the inference, and they have adequate variation in time and relate to both Iran and Iraq.

In sum, the analyses show that high hostile threat AND low escalation risk reliably lead to military interventions, while the absence of high threats OR high escalation risk lead to non-interventions. I found that high oil and ally threats only led to intervention in cases that contained high hostile threat and low escalation risk, and consequently these threats were not needed to cause interventions.

4.1 Robustness Test

In order to check that the previous findings are robust, I have recoded precarious case values to see if this has significant impact on inferences. The Tanker War was assigned values immediately above the cutoff point on all factors; I have recoded its high hostile threat value to a low value for this test. This provides the strongest test of my findings and the value was not unambiguous, given that some scholars might not consider the Iranian aggression against Kuwait and Saudi Arabia substantial, or the Soviet military presence a major threat. I have coded in a high oil threat on the Iranian Hostage Crisis, and Iran and Iraq in the Land War cases. These cases fell short of the cutoff points, but there was general uncertainty regarding oil security in these cases. I have coded low hostile threat for Iraq in the 1973 Oil Embargo in order to elevate further the cutoff point on this factor. This value was precarious due to the threat Iraq posed to Israel was arguably insubstantial as war with a non-hostile regime, but I kept a high ally threat value to signify Israel's special status as an American ally and that consequently threats to Israel are likely considered more severe. Finally, as the operationalization of oil threat did not assign high values to nationalization, or threats thereof, and as this was not an obvious decisions I have recoded the oil threat values of the Iranian and Iraqi oil nationalization cases to high, and for the 1967 case as well due to the uncertainty imposed by the embargo. Table 4.3 shows the truth table based on these recodings.

Configuration #	Configuration	# of	# with	Underlying Cases
		Cases	Intervention	
1.	ohaE	0	0	
2.	ohae	0	0	
3.	ohAE	0	0	
4.	ohAe	0	0	
5.	oHau	0	0	
6.	oHae	1	1	Iraq_War
7.	oHAE	0	0	
8.	oHAe	0	0	
9.	Ohau	2	0	Iraq_1972, Iraq_Land_War
10.	Ohae	1	0	Iraq_1967

11.	OhAE	0	0	Iraq_1973
12.	OHau	1	0	Iran_Land_War
13.	OhAe	2	2	Tanker_War, Gulf_ War
14.	OHAe	0	0	
15.	OHae	2	2	Iran_1953, Hostage_Crisis
16.	OHAE	1	0	Iran_1979

Table 4.3: Robustness Testing crisp-set QCA Truth Table

In this truth table, there are configurations available on eight of the 16 possible configurations, still with five cases on three configurations leading to intervention and no contradictions. The unreduced Boolean expression for this truth table is:

$$INTERVENTION = oHae + OhAe + OHae$$

In this robustness test, the I= oHae configuration is less firm, with a shift from three cases to one, but it is still present in the data with the Iraq War. The values assigned to this case are very solid. The other two configurations were not previously present, and display shifts from high to low hostile threat with the Tanker War and Gulf War, and conversely shifts from low to high oil threat with the Iranian Coup and Hostage Crisis. Through pairwise comparison, this expression is then reduced to:

$$INTERVENTION = Hae + OhAe$$

As these configurations differ on two values, O and H, they cannot be further reduced without simplifying assumptions, I= HAe and I= OHAe. These causal configurations are expected to lead to the same outcome in the theoretical framework, and do not contradict any observations, thus making them plausible. With these simplifying assumptions, and subsequent pairwise comparison, the final Boolean expression is:

INTERVENTION = He + OAe

It would be possible to add a further simplifying assumption I= Oae to minimize I= OAe to I= Oe, but recoding a threat present in the data to an absent constitutes a substantially important shift in configurations. As the U.S. may not consider the different threats equivalent, doing so seems speculative; that He can lead to intervention does not necessitate that Oe can also. As a present causal configuration in this truth table is i=Ohae, this simplifying assumption would contradict an observation, and is therefore not plausible, although my theoretical framework predicts the converse.

Robustness Test, Negative Cases

The non-intervention expression for this truth table is:

$$intervention = OhaE + Ohae + OhAE + OHaE + OHAE$$

With the *containment rule* and a simplifying assumption i=oHAE, all these causal configurations can be considered subsets of i=E, except Ohae. Thus, the final non-intervention expression is:

$$intervention = Ohae + E$$

The simplifying assumption does not contradict any observations or the theoretical model, and is therefore plausible. This indicates that high oil threat can be inadequate to cause military intervention even with low escalation risk, although this is only supported by Iraq in the 1967 Oil Embargo. Further, high escalation risk in combination with any threat configuration reliably leads to non-intervention. This is indicated by five cases, which display four threat configurations in conjunction with high escalation risk, and all led to non-intervention. From this, we can infer that high oil threat with low escalation risk might not warrant American intervention, although this inference is precarious.

In sum, this robustness test indicates that I= He is solid and not contingent on the exact case values I assigned in Chapter 3, but OAe might be a reliable causal configuration for intervention outcomes. In terms of the research question, this indicates that high oil threat can lead to military interventions against Iran or Iraq when in conjunction with high threat to an American ally, and low escalation risk. The negative robustness test showed that high escalation risk in conjunction with any combination of threats is a reliable path to non-intervention as previously found. This analysis indicated that high oil threat and low escalation risk might *not* lead to intervention.

4.2 Escalation Risk: Deterring the Western Superpower

The comparative analysis indicates the high importance of deterrence for the outcomes; Table 4.4 shows an unequivocal pattern between escalation risk and intervention, with five of six cases with low escalation risk leading to intervention and no cases with high risk leading to intervention. The operationalization of this factor featured an intentionally high cutoff point,

as there were substantive and theoretical reasons to expect escalation risk with nuclear-states to differ from escalation with non-nuclear states. This led me to assign low values on the Gulf War and Iraq War cases, as Iraq was not a nuclear state and did not have allies with whom the U.S. perceived substantial risk of escalation. These cases arguably fell right below the cutoff point as Iraq had was perceived as having chemical weapons and substantial military force. If these escalation risk values were shifted to high, the Iraq War would lead to a contradiction in the oHaE configuration, while the Gulf War would become a contradiction in the OHAE configuration. In the former of these configurations, the Iraq War would contradict Iran in the Land War, while in the second configuration the Gulf War would contradict the 1973 Oil Embargo, and the Iranian Revolution. In these cases, there were substantial escalation risks with Moscow in the event of an intervention, and therefore the assignment of low escalation risk in the modern cases is substantially and theoretically appropriate. Iraq in the 1967 Oil Embargo deviates from the pattern; I assigned a low escalation risk due to its alignment with Moscow not yet being strong, but this was not a clear-cut decision.

	Escalation Risk Low	Escalation Risk High
Intervention	5	0
Non-Intervention	1	5

Table 4.4: Escalation Risk and Intervention Outcome

In the hypotheses, I was uncertain regarding the effectiveness of escalation risk relative to multiple threats (Table 2.4). In the data, I found two cases with three high threats combined with high escalation risk leading to non-intervention, indicating that high escalation risk leads to non-intervention in any causal configuration. There were two underlying cases for this, Iraq in the 1973 Oil Embargo and the Iranian Revolution. The implication of these cases is that they would have led to intervention without the high escalation risk, thus a counter-factual evaluation of this is appropriate. No accounts argued that the U.S. would have intervened if the Soviet Union had not threatened retaliation, but the accounts generally did not consider counter-factual scenarios. I find that the model struggled with the former of these cases as Iraq merely contributed to a greater threat posed by other actors, but American intervention in the October War given no threat of Soviet escalation is arguably plausible. With the Iranian Revolution, I think an American intervention is plausible if Moscow had not warned the U.S. of it, for instance with attempted assassination of Khomeini or other leaders of the revolutionary movement. From the analysis, I have thus inferred that high escalation risk reliably leads to non-intervention regardless of all other factor values, and this inference was supported by the robustness test.

4.3 Reconsidering Resource War

There is no uncertainty regarding the importance and prominence of oil to the U.S.' relations in the Persian Gulf region; oil is a strategic asset upon which economic performance and military capability are contingent in the postwar era. Oil security appears to be a fundamental driver for American strategy and alliance formation in the Gulf. However, the analysis showed that oil threats are not a conclusive, and certainly not reliable, driver for interventions, even in conjunction with low escalation risk. Oil threats seem to have played a largely inconsequential role in the cases, contrary to how resource war scholars would generally expect (e.g. Klare 2002; 2004; 2012). High oil threats may have been important in the Tanker War and Gulf War decisions, but do not appear to have been so in any other of the cases sampled. The major-most oil security threats were either accompanied by escalation risk (e.g. Iraq in the 1973 Oil Embargo; Iranian Revolution) or have occurred in conjunction with other threats and led to intervention (Oil Tanker War; Gulf War). The configuration Ohae was not present in the case studies, which means that the isolated effect of high oil threat with low escalation risk was not tested, however it was present in the robustness test with Iraq in the 1967 Oil Embargo, and led to non-intervention. I am opposed to making any major inferences from this finding as the underlying case study showed that the oil threat was mitigated by the oil market, and there did not appear to be a significant price increase. The robustness test indicated that with an elevated cutoff point on hostile threat, oil threats can lead to intervention in conjunction with high ally threat and low escalation risk, as I=OAe was part of the minimized expression. The inference is uncertain as the underlying cases received high hostile threat values in the case studies, and these were satisfyingly substantiated. Consequently, from the analysis we can infer that high oil threats do not reliably lead to intervention outcomes unless in conjunction with low escalation risk and high hostile threat.

A very interesting observation from the case studies is appropriate for the consideration of oil threats: In several cases, the U.S. has taken actions that have threatened its own oil security and arguably imposed higher oil threats to itself than the other actor. This is the case with the oil boycotts of Iranian oil (1951-1953; 1979-) and Iraqi oil (1990-2003)¹⁷ as well as military interventions that have caused disruptions in these states (e.g. the Iraq War). With the 1973 Oil Embargo, the U.S. was arguably aware of that by resupplying Israel with military materiel, they ran a risk of spurring high oil threats as had happened in the Six-Day War —

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¹⁷ With substantial variation within these timeframes.

thus, the resupply was covert, but discovered because of a delay (Yergin 2009:587). The QCA could not measure this behavior satisfyingly.

The apparent low impact of oil threats does not appear to be due to a conservative conceptualization or operationalization of the concept; the operationalization of this factor was satisfying and its cutoff point well-supported. The case studies found numerous first order oil security threats, including four that were ineffectively mitigated by the market context, and this was shifted to seven in the robustness test. My conceptualization of the "oil factor" does neglect the company interest factor. This was a deliberate choice in the research design as I believed, with support from O'Sullivan (2013) among others that the effect was insignificant; but as a necessary precaution this was tested in the robustness test.

Across the cases, there are shifts in the oil market context and there were developments in the market that affected the U.S.' and market's ability to mitigate oil threats. I find that the framework and operationalization have not struggled notably with handling these developments. My general impression from the case studies is that the oil threats are not important to intervention decisions as oil threats are generally unsustainable and can rarely be mitigated by the use of force, but oil security is important to U.S. strategy and long-term alignments in the Gulf.

4.4 A Principal Driver: Hostile Threat

I found that high hostile threats reliably lead to intervention with low escalation risk, and the presence of additional threats to oil or allies still leads to intervention. Hostile threat was an important factor for intervention decisions in the analysis: All interventions in the case studies shared high hostile threat, which meant that only three cases with high hostile threat did not lead to intervention. These three were Iraq in the 1973 Oil Embargo, the Iranian Revolution, and Iran in the Land War; these cases shared high escalation risk due to Soviet retaliation threats. Thus, the impact of hostile threat on U.S. intervention decisions is difficult to overstate in the absence of high escalation risk. The robustness test showed that this causal configuration was robust in that I=He was present in the minimized Boolean expression, although with fewer underlying cases for the initial I=oHae

Soviet threats differ between Iran and Iraq; in Iran, the perceived threat was a Communist takeover or a Soviet invasion, while in Iraq the threat was primarily Iraq's alliance and

cooperation with Moscow. Consequently, Moscow's relations with Iraq generally fell below the cutoff point for high hostile threat values, and escalation risk values were generally high for the duration of the Cold War. With Iran, the threats generally crossed the cutoff point for hostile threat, but the effect of Soviet deterrence varied — I did not find deterrence to be a significant factor in the 1953 Coup or the Hostage Crisis; however as noted it seems that a covert operation outcome differs in the effectiveness of deterrence from overt operations.

After the Cold War, I have found hostile threat effective for understanding the sampled cases of this era — the Gulf War and the Iraq War. This supports my assumption that containment of the Soviet Union is not inherently different from the containment of other regimes, and can be measured by the same factor. In addition to the perception of hostile threats from Iraq, Iraq's deterrent was substantially weakened with the end of the Cold War — both the Gulf War and Iraq War have high hostile threat and low escalation risk values.

4.5 Support for Allies

Limited diversity meant that the analysis was unable to consider the impact of threats to allies satisfyingly. The findings indicate that threats to allies in conjunction with other threats and low escalation risk leads to intervention, but high ally threat is not necessary in the presence of high hostile threat. Only four of eleven cases posed high threats to U.S. allies: The Gulf War, the Tanker War, the Iranian Revolution, and Iraq in the 1973 Oil Embargo. The two former cases led to intervention, while the two latter did not. In the Gulf War, ally threat seems to have been important in the intervention decisions: The U.S. immediately sent forces to Saudi Arabia and statements from the president emphasize the threat to Riyadh in the decision. In the Tanker War, the ally threat factor was likely less significant and probably less significant than both the oil threat and hostile threat; Saudi Arabia did not formally request U.S. military support and appears to have managed the threat from Iran well enough without direct support. In the Iranian Revolution, the U.S. inclination to support the Shah was unquestionable, but the Soviet Union explicitly warned against intervention. The ally threat here was in all likelihood still the most significant driver for intervention, although there were high oil and hostile threats in this case also. Finally, the Iraqi threat to Israel in 1973 was a small part in a much greater threat, and led to U.S. arms support, but no direct intervention. The findings were not significantly shifted in the robustness test, although I=OAe was part of the final Boolean expression, which indicates that configurations with high oil and ally threats with low escalation risk could lead to intervention. From this, I infer that it is very possible that given low escalation risk, threats to American allies can lead to intervention; unfortunately, no ohAe causal configuration was present in the data.

5 Summary and Conclusion

In this chapter, I briefly summarize the findings of the study pertaining to the initial research question, and offer some concluding remarks. The thesis first introduced the research question with basis in realist theory and resource war literature:

Under what conditions can oil threats explain U.S. military interventions and non-interventions in Iran and Iraq?

From this starting point, I offered some additional background for this research question and explained the research design for this study. This included sections on case selection and analytical techniques, and I made the case for wielding a crisp-set QCA, which impacted the research design and operationalizations. Chapter 2 constructed a calibrated and operationalized theoretical framework of high measurement validity. It first drew on realist theory for three key concepts: Containment, alignments, and deterrence for three control factors, named hostile threat, ally threat, and escalation risk. I operationalized oil threats likely to lead to intervention as unmitigated oil security threats, developed a three-tiered framework for classifying oil security threats, and explained the impact of oil market context on these threats. Following this, I wrote case studies amounting to eleven cases in the QCA. The case studies were structured in accordance with my theoretical framework, as their purpose was to identify causal configurations and outcomes, and drew on analytic narratives (Bates et al. 1998). After the case studies, I conducted a comparative analysis with crisp-set QCA. I explained the QCA technique and minimization procedures in this chapter. The choice to wield QCA both augmented and condensed the research design. With my operationalization and calibration of the theoretical model, I sought measurement validity through evaluating the theoretically-defined and operationalized concepts, and substantiating the cutoff points.

With regard to my research question, I have inferred from my research that oil threats are not a prominent or reliable factor for explaining U.S. intervention decision-making against Iran or Iraq. Contrary to what is commonly argued by resource war scholars, the U.S. does not appear systematically inclined to use military intervention against oil threats. I found that the U.S. used military intervention in two cases of high oil threat — the Gulf War and the Tanker War. These cases posed security threats to Kuwait and Saudi Arabia as well, and in the former, the Soviet Union sought influence with Kuwait and was invited to establish a major naval

presence in the Gulf region. In the comparative analysis, I inferred that due to cases with low oil threat and high hostile threat leading to intervention, the oil threat was logically redundant in these cases. Thus, none of the cases conclusively show the impact of oil threats on intervention decisions. On the other hand, two cases of high oil threat led to non-intervention, arguably due to risk of escalation with the Soviet Union — the Iranian Revolution and Iraq in the 1973 Oil Embargo. An unequivocal pattern in the data was that the U.S. deliberately deteriorated and jeopardized its oil security as part of greater strategic concerns in several cases. This indicates that oil security is not a prominent interest relative to other concerns. In the robustness test, I found that oil threats in conjunction with threats to an American ally, and low risk of escalation can lead to intervention, but this inference is uncertain and based on extreme elevation of the cutoff point on hostile threat.

Across the cases, I found that high escalation risk *reliably* lead to non-interventions regardless of threat values present in the causal configuration. This was particularly substantiated with the 1973 Oil Embargo and the Iranian Revolution as these cases each contained three high threats, high escalation risk, and led to non-intervention. In addition to escalation risk being a major factor in intervention decision-making, I found that containment of the Soviet Union and other adversaries posed significant impact on decision-making. The final Boolean expressions showed that interventions were reliably caused by high hostile threat combined with low escalation risk. Among eight cases with high values on hostile threat, five led to intervention, and this value was shared among all intervention cases in the case studies. In the robustness test, the causal configuration with high hostile threat and low escalation risk remained firm through the analytical reduction, but had fewer underlying cases. Ally threats appeared prominent for interventions in some cases — particularly the Gulf War, but did not offer a conclusive pattern due to limited diversity in the data. In many cases, high threats to allies appeared in conjunction with high escalation risk, and led to non-intervention outcomes (e.g. 1973 Oil Embargo; Iranian Revolution).

This study's research design, while imperfect, holds major advantages relative to most of the resource war literature and the scholarly works advocating a "war for oil argument". Intrinsically, the conceptualization of the "oil factor" used by resource war scholars (e.g. Klare) has poorly defined boundaries and calibration, which leads researcher to measure an "oil factor" as part of what I find are intrinsically other factors. For instance, Operation Desert Storm protected Saudi Arabian oil fields, but within my framework this is considered ally

support, rather than an "oil factor". Similarly, Iraq's annexation of Kuwait is considered a high hostile threat, rather than an "oil factor". As I have systematically tested the impact of unmitigated oil threats across the cases, which resource war scholars generally argue should spur interventions, and have no found conclusive evidence for this, there is a need to reexamine much of the resource war literature and its inferences. My research design takes a balanced and nuanced approach to the field of research, and is overall satisfying in its reliability and validity. I have taken steps towards high internal validity through a strong theoretical foundation, case knowledge, and the use of solid accounts. There was an endogeneity challenge with the operationalization of escalation risk, but this appears inevitable and the factor is instrumental to the research question. The thesis is systematic and thorough, and wields QCA, which comprise a general methodological improvement to this field of research. The QCA required a rigid, calibrated model, which helped guide the analysis and give it greater depth than I believe it otherwise would have attained. For future research based on this thesis, there are two clear opportunities: Including more cases and shifting the crisp-set QCA to fuzzy-set. I have no doubt that a fuzzy-set replication is possible and could offer interesting inferences.

In ultimate conclusion, oil threats to the U.S. appear to have low and unreliable impact on intervention decision-making, while realist factors are systematic and deciding. I found that risk of escalation with the Soviet Union was effective for causing non-intervention outcomes, while containment of hostile threats was a reliable driver for intervention given low escalation risk.

6 References

Adcock, Robert and David Collier (2001). "Measurement validity: A shared standard for qualitative and quantitative research", *American Political Science Association* 95 (3): 529-546.

Art, Robert J. (1991) "A defensible defense: America's grand strategy after the Cold War", *International Security* 15 (4): 5-53.

Ashraf, Ahmad, and Ali Banuazizi (1985). "The state, classes and modes of mobilization in the Iranian revolution", *State, Culture, and Society* 1 (3): 3-40.

Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, Robert B. Weingast (1998). *Analytic narratives*. New Jersey: Princeton University Press, 1998.

Beaubouef (2014). "The U.S. Strategic Petroleum Reserve and Energy Security Lessons of the 1970s", in Robert Lifset, Robert, (ed.) *American Energy Policy in the 1970s*. Oklahoma: University of Oklahoma Press.

Berg-Schlosser, Dirk and Gisèle De Meur (2009): "Comparative Research Design: Case and Variable Selection", in Rihoux, Benoît and Charles C. Ragin (eds.) *Configurational comparative methods. Qualitative Comparative Analysis and Related Techniques.* Thousand Oaks, CA: Sage Publications, Inc.

Berg-Schlosser, Dirk, Gisèle De Meur, Benoît Rihoux, and Charles C. Ragin (2009): "Qualitative Comparative Analysis (QCA) as an Approach", in Rihoux, Benoît and Charles C. Ragin (eds.) *Configurational comparative methods. Qualitative Comparative Analysis and Related Techniques.* Thousand Oaks, CA: Sage Publications, Inc.

Blix, Hans (2003). "The Security Council, 27 January 2003: An Update on Inspection" http://www.un.org/Depts/unmovic/Bx27.htm [Accessed March 30, 2015]

BP Statistical Review (2014). "BP Statistical Review of World Energy June 2014", dataset. http://www.bp.com/en/global/corporate/about-bp/energy-economics/statistical-review-of-world-energy.html [Accessed: September 1, 2014]

Bromley, Simon (1991). American Hegemony And World Oil: The Industry, The State System And The World Economy. Cambridge: Policy Press.

Brown, Michael E. (1979). "The Nationalization of the Iraqi Petroleum Company", *International Journal of Middle East Studies* 10 (1): 107-124.

Brzezinski, Zbigniew, Brent Scowcroft, and Richard Murphy (1997). "Differentiated Containment", *Foreign Affairs* 76 (3): 20-30.

Buzan, Barry, Ole Wæver, and Jaap De Wilde (1998). *Security: A New Framework for Analysis*. London: Lynne Rienner Publishers.

Bush, George H. W. (1990a). "Remarks By The President

To The Joint Session Of Congress". http://www.cryan.com/war/speech/ [Accessed: April 28, 2015]

Bush, George H. W. (1990b). "President George H.W. Bush's Address on Iraq's Invasion of Kuwait, 1990". http://www.cfr.org/iraq/president-george-hw-bushs-address-iraqs-invasion-kuwait-1990/p24117> [Accessed: April 28, 2015]

Carter (1980): "The State of the Union Address Delivered Before a Joint Session of the Congress" http://www.presidency.ucsb.edu/ws/?pid=33079 [Accessed: April 28, 2015]

Ciută, Felix (2010). "Conceptual Notes On Energy Security: Total Or Banal Security?", *Security Dialogue* 41 (2): 123-144.

Claes, Dag Harald (2001). *The Politics of oil-producer cooperation*. Boulder, CO: Westview Press.

Claes, Dag Harald (2003). "Oljen som amerikansk motivasjon?", in Rasch, Bjørn Erik, Janne Haaland Matlary and Per Kristen Mydske (eds.) *Spillet om Irak*. Oslo: Abstrakt forlag.

Claes, Dag Harald (2010) "Geopolitical Implications of US Energy Independence", Conference paper for FA60: Conflict and Cooperation in International Petroleum Geopolitics.

Conant, Melvin A. (1982). *Oil Factor in US foreign policy, 1980-1990*. Massachusetts: D.C. Heath and Company.

Daoudi, M. S., and M. S. Dajani (1984). "The 1967 oil embargo revisited", *Journal of Palestine Studies* 13 (2): 65-90.

Daugherty, William J. (2015). "Argo/Our Man in Tehran", *International Journal of Intelligence and Counter Intelligence* 28 (1): 156-165.

Davidson, Jason W. (2011). *America's Allies and War: Kosovo, Afghanistan, and Iraq*. London: Palgrave Macmillan.

Duffield, John S. (2013). "Oil and the decision to invade Iraq", in Cramer, Jane K. and A. Trevor Thrall (eds.): *Why did the United States Invade Iraq*. New York: Routledge.

Gause, F. Gregory III (2010). *The international relations of the Persian Gulf*. Cambridge: Cambridge University Press.

Gause, F. Gregory III (2002). "Iraq's Decisions to Go to War, 1980 and 1990", *Middle East Journal* 56 (1): 47-70.

Gause, F. Gregory III (1994). "The Illogic of Dual Containment", *Foreign Affairs* 73 (2): 56-66.

Gerring, John (2007). *Case Study Research: Principles and Practices*. Cambridge: Cambridge University Press

Goldstein, Joshua S. (2001). International Relations. Fourth Edition. New York: Longman

Evans, John and Gavin Brown (1991). *OPEC and the World Energy Market. A Comprehensive Reference Guide. Second Edition.* Essex: Longman Current Affairs.

Fermann, Gunnar (2007). "Utenrikspolitiske målsettinger og virkemidler", in Hovi, Jon and Raino Malnes (eds.) *Makt, anarki og normer*. Oslo: Abstrakt forlag.

Freedman, Lawrence (2004). Deterrence. Cambridge: Polity.

Freedman, Lawrence and Efraim Karsh (1991). "How Kuwait Was Won: Strategy in the Gulf War", *International Security* 16 (2): 5-41.

Fukuyama, Francis (1980). "The Soviet Union and Iraq Since 1968", in *A Rand Note prepared for the United States Air Force*. *N-1524-AF*. Santa Monica, CA.

Fuller, Graham E. (1991). "Moscow and the Gulf War", Foreign Affairs 70 (3): 55-76.

Hermann, Charles (1969). "International Crisis as a Situational Variable", in Rosenau, James (ed.) *International Politics and Foreign Policy*. New York: Free Press.

Homer-Dixon, Thomas (2003). "Environmental Scarcity and Mass Violence", in Simon Dalby, Paul Routledge, and Gearóid Ó. Tuathail (eds.) *The Geopolitics Reader*. London: Routledge.

Indyk, Martin (2004)".US Policy Priorities in the Gulf: Challenges and Choices", in *International Interests in the Gulf Region*. Abu Dhabi: Emirates Center for Strategic Studies and Research.

Jalali, Ali A. (2001). "The Strategic Partnership of Russia and Iran", *Parameters* 31(4): 98-111.

Jervis, Robert (2012). "Explaining the War in Iraq", in Cramer, Jane K. and A. Trevor Thrall (eds.): *Why did the United States Invade Iraq*. New York: Routledge.

Katz, Mark N. (2010). "Iran and Russia", in Robin Wright (ed.) *The Iran Primer: Power, Politics, and US Policy*. Washington, D.C.: United States Institute of Peace.

Katzman, Kenneth (2006). "The Iran-Libya Sanctions Act (ILSA)". *CRS Report for Congress*. Washington, D.C.: The Library of Congress.

Keohane, Robert O. and Arild Underdal (2011). "The West And The Rest In Global Economic Institutions", in Claes, Dag Harald and Carl Henrik Knutsen (eds.) *Governing the Global Economy: Politics, Institutions and Economic Development*. London: Routledge.

Kinzer, Stephen (2003). *All the Shah's men: An American Coup and the Roots of Middle East Terror*. New Jersey: John Wiley & Sons.

Klare, Michael (2001). *Resource Wars: The New Landscape of Global Conflict*. London: Macmillan, 2001.

Klare, Michael (2004). *Blood and Oil: The dangers and Consequences of America's Growing Dependency on Imported Petroleum.* London: Macmillan.

Klare Michael. (2012) "Blood for Oil, in Iraq and Elsewhere", in Cramer, Jane K. and A. Trevor Thrall (eds.): *Why did the United States Invade Iraq*. New York: Routledge.

LeCompte, Margaret D., and Judith Preissle Goetz (1982). "Problems of reliability and validity in ethnographic research", *Review of educational research* 52 (1): 31-60.

Lesser, Ian O. (1991). "Oil, The Persian Gulf, and Grand Strategy. Contemporary Issues in Historical Perspective". Santa Monica, CA: RAND Corporation. http://www.rand.org/pubs/reports/R4072 [accessed May 7, 2015]

Mahoney, James, and Gary Goertz (2004):. "The Possibility Principle: Choosing Negative Cases in Comparative Research", *American Political Science Review* 98 (4): 653-669.

Mackenzie, Peter (2010). "A Closer Look at China-Iran Relations", in *CNA China Studies Roundtable Report* 2. Virginia, USA.

McNaugher, Thomas L. (1985). *Arms and Oil: US Military Strategy and the Persian Gulf.* Washington, D.C.: Brookings Institution Press.

Mearsheimer, John J. (1984). "Nuclear weapons and deterrence in Europe", *International Security* 9 (3): 19-46.

Neff, Donald (1995). "Israel Bombs Iraq's Osirak Nuclear Research Facility", *Washington Report on Middle East Affairs*, June, 1995: 81-82. http://www.wrmea.org/1995-june/israel-bombs-iraq-s-osirak-nuclear-research-facility.html [accessed May 4, 2015].

Noreng, Øystein (2002). Crude Power: Politics and the Oil Market. London: I.B. Tauris.

O'Rourke, Ronald (1988). "The Tanker War",

http://www.usni.org/magazines/proceedings/1988-05/tanker-war [accessed April 28, 2015]

O'Sullivan, Meghan L. (2013). "The Entanglement of Energy, Grand Strategy, and International Security", in Andreas Goldtau (ed.): *The Handbook of Global Energy Policy*. New Jersey: Wiley-Blackwell.

Petroleum Economist, dataset. London.

Pollack, Kenneth (2002). *The Threatening Storm: What Every American Needs to Know Before an Invasion in Iraq.* New York: Random House.

Rodin, Jens Duus(2013). "Amerikansk utenrikspolitikk og den" arabiske våren": En teoretisk analyse av Obama-administrasjonens tilnærming til Egypt, Libya og Bahrain". Master's thesis from the University of Oslo. Oslo: Reprosentralen.

Saul, Samir (2007). "Masterly Inactivity as Brinkmanship: The Iraq Petroleum Company's Route to Nationalization, 1958–1972", *The International History Review* 29 (4): 746-792.

Simpson, George L. (2010). "Russian and Chinese Support for Tehran. Iranian Reform and Stagnation" http://www.meforum.org/2690/russian-chinese-support-for-iran [accessed April 28, 2015]

Sick, Gary (1985). *All Fall Down: America's Tragic Encounter With Iran*. New York: Random House.

Snyder, Glenn H. (1997). Alliance politics. New York: Cornell University Press.

Terzian, Pierre (1985). OPEC: The Inside Story. London: Zed Books.

Tripp, Charles (2010). A history of Iraq. Third Edition. Cambridge: Cambridge University Press.

Tuathail, Gearóid Ó. (2003). "Thinking Critically about Geopolitics", in Simon Dalby, Paul Routledge, and Gearóid Ó. Tuathail (eds.) *The Geopolitics Reader*. London: Routledge.

Skeet, Ian (1991). *Opec: Twenty-Five Years of Prices and Politics*. Cambridge: University Press, Cambridge.

Smolansky, Oles M. and Bettie M. Smolansky (1991). *The USSR and Iraq. The Soviet Quest for Influence*. Durham and London: Duke University Press.

Stokke, Olav Schram (2007). "Qualitative Comparative Analysis, Shaming, and International Regime Effectiveness", *Journal of Business Research* 60 (5): 501-511.

U.S. Office of Fossil Energy. "SPR Quick Facts and FAQs" http://energy.gov/fe/services/petroleum-reserves/strategic-petroleum-reserve/spr-quick-facts-and-faqs [accessed April 28, 2015]

U.S. EIA (2015a). "Historical U.S. Field Oil Production", dataset ">http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS1&f=A>"|accessed April 28, 2015]

U.S. EIA (2015b) "U.S. Imports of Crude Oil", dataset ">http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRIMUS1&f=A>"|accessed April 28, 2015]

U.S. EIA (2015c). "Spot Prices", dataset http://www.eia.gov/dnav/pet/pet_pri_spt_s1_w.htm [accessed April 28, 2015]

Ragin, Charles C. (1989). *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. Berkeley, CA: University of California Press.

Ragin, Charles C. (2000). Fuzzy-set social science. Chicago: University of Chicago Press.

Ragin, Charles C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago: University of Chicago Press.

Winzer, Christian (2012). "Conceptualizing energy security", Energy Policy 46: 36-48.

Yergin, Daniel (2009). *The Prize: The Epic Quest For Oil, Money & Power*. New York: Simon and Schuster.

Yergin, Daniel (2011). *The Quest: Energy, Security, And The Remaking Of The Modern World.* London: Penguin.

Yergin, Daniel (1988). "Energy Security in the 1990s", Foreign Affairs 7 (1): 110-132.

Yetiv, Steve A. and Chunlong Lu (2007). "China, global energy, and the Middle East", *The Middle East Journal* 61 (2): 199-218.