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Chapter One: Introduction

On December 17, 2010, Mohammed Bouazizi, a 26 year old Tunisian fruit vendor, set himself on fire after being ignored and humiliated by Tunisian authorities when he complained that his cart was confiscated by the police and that he was brutally attacked by the Tunisian police for selling products without a permit. On January 4, 2011, Bouazizi died of his wounds.

Although this incident appeared as a personal tragedy at first, Mohammed Bouazizi’s self-immolation sparked the so called “Arab Spring,” the ongoing series of revolutionary and political upheavals challenging the established government authorities throughout the Middle East and North Africa (MENA). Tunisians had endured the authoritarian rule of the Tunisian president, Zine-el-Abidine Ben Ali for so long, and the situation reached its boiling point after Bouazizi’s death. Thousands of Tunisians took to the streets to demonstrate against the Ben Ali regime and people across the MENA followed the footsteps of the Tunisians protesting against their respective regimes. So far, these protests have resulted in toppling of the thirty-year-old regimes in Egypt in Tunisia, major civil uprisings in Syria and Yemen, and a civil war in Libya that eventually led to the death of the Libyan leader, Muammar Gaddafi. While these popular protests, revolutions and uprisings brought about change to the political systems of many states across the MENA, this change came at the cost of many civilian lives due to government-directed violence in response to Arab-Spring uprisings. By the end of 2011, the death toll in Libya had reached 30,000. According to the United Nations, over

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1 According to the World Bank definition, MENA region includes Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates, West Bank and Gaza and Yemen (http://web.worldbank.org/WEBSITE/EXTERNAL/COUNTRIES/MENAEXT/0,,menuPK:247619~pagePK:146748~piPK:146812~theSitePK:256299,00.html).

2 Source: Amnesty International.
5,000 people had died in Syria by the end of 2011. As of the first quarter of year 2012, the death toll in Syria is increasing due to the alleged “democide,” the killing of people by their own government, which is being carried out by the government of Syria, under the President Bashar al-Assad. While there are considerably high death tolls in states like Libya, Syria and Yemen, states like Bahrain and Tunisia had seen relatively low numbers of casualties as a result of the Arab Spring.

From its onset to the present, the Arab Spring has become a phenomenon that has captured global attention. It is unlikely that people in the MENA and the rest of the world anticipated the termination of decade long tenures of Tunisia’s Ben Ali or Egypt’s Hosni Mubarak; or an end to Gaddafi’s rule. This is because the governments across the MENA were infamously known for their robust authoritarianism and resistance to democratization. For example, MENA states failed to catch the third wave of democratization that took place between 1974 and 1990 where many Latin American and Eastern European states transitioned into democracies. In fact, as Bellin notes, the number of electoral democracies in the MENA has actually registered an absolute decline since 1972 while the number in the rest of the world has nearly doubled. Therefore, the signs of a potential emergence of democracy and the political transformation the MENA region is experiencing at the moment have generated conversations even about a possible “fourth wave of democracy,” among

3 Source: United Nations
5 By the end of 2011, Amnesty International reported that there have been 47 deaths in Bahrain, and 308. (Source: Amnesty International). The Yemeni government had reported to the UN in March, 2012 that 2,000 people had died in Yemen in 2011 due to the Arab-Spring uprisings.
scholars and analysts who attempt to interpret the future of the MENA region after the Arab Spring. 

When observing the events of the Arab Spring, especially how governments responded to the popular protests, it is apparent that the Arab Spring uprisings came as a surprise to the leaders of the MENA states. For many years MENA states have been distinguished by their absence of political inclusivity. But now we are able to witness the initial reactions and responses to the Arab Spring uprisings by these leaders due to the unforeseen nature of this political upheaval that spread across the region. While some state leaders attempted to calm down the demonstrators and the protesting crowds with non-violent measures, some leaders responded to the Arab Spring protests in their states with excessive violence. For example, while the Yemeni president Ali Abdullah Saleh attempted to calm down the thousands of protesters in the Yemini capital Sana’a in early February of 2011 by promising not to seek reelection in 2013, Libya’s Muammar Gaddafi deployed mercenaries and armed prisoners to clear the streets of Libyan people protesting against the Gaddafi regime. The Syrian president Bashar al-Assad also has been accused of using excessive force against Syrians.

What interested me to write my thesis on the Arab Spring is the variation in the levels of government-directed violence in response to popular protests and uprisings related to the Arab Spring. Although authoritarianism is common in all MENA governments, it is interesting to observe that the level of government-directed violence varies from state to state. Therefore, in order to come up with an explanation for this variation in government-directed

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10 Timeline Arab Spring, Uppsala Conflict Database Program (UCDP) (http://www.pcr.uu.se/digitalAssets/87/87711_chronologic_timeline_arabian_spring.pdf)
violence, I decided to look for other characteristics that states in MENA would have in common, but also in different levels: oil wealth.\textsuperscript{11}

The MENA region constitutes vast oil reserves compared to the rest of the world. According to the 2010 Annual Statistical Report by the Organization of Petroleum Exporting Countries (OPEC) 58.5\% of world’s proven crude oil reserves are in the MENA region.\textsuperscript{12}

Therefore, the economies of these MENA states rely heavily on the windfalls of oil revenue that they make from the petroleum industry.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure1.jpg}
\caption{Middle East and North Africa (Source: UNICEF)}
\end{figure}

\textsuperscript{11} Other factors these states have in common are their colonial history and Islam. All the states in my sample of cases have been colonized by a European state at one point in their history. Although Islam is also a shared characteristic in all MENA states (with the exception of Israel), the difference within the levels of Islamic population in each state is extremely low as all states have significantly high presence of Islam. Therefore, in my research both colonial history and Islam are considered constants.

A large body of scholarly literature, popularly known as “resource-curse” literature, suggests an inverse relationship between this resource wealth and development. While most of the “resource-curse” literature explains the adverse economic outcomes due to natural resource endowments, some literature argues about adverse political outcomes due to oil wealth in addition to unfavorable economic outcomes. As I take into account this “oil impedes democracy” argument of the resource-curse hypothesis for my research, my decision to particularly use oil wealth as the independent variable to explain different levels of government-directed violence in response to the Arab Spring uprisings is not a coincidence. While some scholars like Michael Ross, Kai Kaiser, and Nimah Mazaheri are using the resource-curse hypothesis to assess the future of the political stability in the MENA region following the Arab Spring, I particularly look at mechanisms of how government leaders of MENA states might have used oil revenues to fund violent activities against the citizens of their states in response to Arab-Spring uprisings.13

In this thesis I investigate whether there is a positive correlation between the level of government-directed violence and oil wealth, against the backdrop of the Arab Spring. Have governments of MENA states that posses more oil wealth used more violence on their protesting citizens than governments of states that have little or no oil wealth? Does the so-called “resource curse” apply to the outcomes of the Arab Spring? I attempt to answer these questions by (1) studying the levels of government-directed violence in the Arab Spring uprisings and (2) examining the oil wealth and oil reliance of six MENA states: Bahrain, Egypt, Libya, Syria, Tunisia and Yemen. Although all these states are known for their

reliance on oil wealth, it is important to note that the levels of oil wealth in each state still vary, just as the levels of government-directed violence in response to the Arab Spring uprisings vary from state to state despite the authoritarian nature of all six states. Based on this information, I suspect that there is a robust positive correlation between the levels of government-directed violence and oil wealth.

In Chapter Two of my thesis, I explore existing scholarly literature on the resource-curse hypothesis. To generate my hypothesis about different levels of oil wealth and government-directed violence in the Arab Spring uprisings, I draw on major works that explain various relationships between oil wealth, democracy, and economic development within and beyond the MENA region. Although my assumptions in this thesis are primarily based on the political aspect of the resource-curse hypothesis, it is important to explore the literature on the economic aspect of the hypothesis as well, because it helps us better understand the origins of resource curse. Therefore, in this chapter, I will first explore resource-curse literature related to economic outcomes and then literature related to political outcomes. While there are both proponents and opponents of the resource-curse hypothesis, I argue that the resource-curse hypothesis might help explain the government-directed violence in the Arab Spring. At the end of Chapter Two, I apply the theory and present the hypothesis which I derived from the events of the Arab Spring and previous scholarship on oil wealth and democracy.

Chapter Three is the Research Design, and in Chapter Four I present the analysis of my thesis, where I analyze and assess the levels of oil wealth and government-directed violence of Bahrain, Egypt, Libya, Syria, Tunisia and Yemen. In this chapter I will provide the empirical evidence I gathered from my research. In the first third of this Chapter, I provide a more detailed overview of the Arab Spring while giving particular attention to the six states mentioned above. Since the Arab Spring is still ongoing in some MENA states like Syria and
Yemen (unlike in Egypt and Tunisia where regime changes occurred), the empirical data on government-directed violence in response to the Arab Spring uprisings that I use for my research will be taken from events that unfolded only up to January 31, 2012. The second third of the chapter presents data and other information related to oil wealth and government directed violence in each of the six states. Based on the salient qualitative and quantitative evidence provided in the previous chapters, the final third of Chapter Four will cover a discussion and a final assessment. Finally, in Chapter Five, I present my conclusions and propose possible outcomes for the future of the Arab Spring in the MENA region.
Chapter Two: Literature Review

In order to better understand the theoretical background for my research question which asks whether there was more government-directed violence in response to Arab-Spring uprisings in states that have more oil wealth, this chapter will explore existing scholarly literature on the resource-curse hypothesis. The term “resource curse” first appeared in 1993 in Richard M. Auty’s book “Sustaining Development in Mineral Economies: The Resource Curse Thesis.” Although the term “resource curse” was coined recently, the Greek myth about “King Midas and His Golden Touch” is a good example of the fact that the notion that natural resources tend to bring more misfortune than benefits goes back to ancient times.  

Also known as the “paradox of plenty,” the resource-curse hypothesis suggests that states with an abundance of natural resources tend to experience adverse economic and political outcomes. The adverse economic outcomes that correlate with higher levels of natural resources include slow or negative rates economic growth, and adverse political outcomes due to the resource curse include outbreaks of civil war and high levels of authoritarianism.

Literature on the notion that there is a correlation between natural resources and adverse economic outcomes is often linked with parallel literature that suggests a correlation between

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14 Juan Pablo Pérez Alfonso was Venezuela’s oil minister in the early 1960s and was one of the founders of the Organization of Petroleum Exporting Countries (OPEC). He is considered as one of the first people in recent history to call attention to the resource curse, specifically with regard to oil.

15 King Midas was granted one wish by the god Dionysus and his wish was to have everything he touched turn to gold. After this wish was granted, everything he touched turned to gold. Eventually, he was unable to eat or drink anything for everything turned gold at his touch. In the end, King Midas had to ask Dionysus to take back his golden touch because this gift had turned into curse. The god took pity on him and took away the golden touch. (http://www.hipark.austin.isd.tenet.edu/mythology/midas.html)
natural resources and authoritarianism. Taken together, there is a voluminous body of resource-curse literature in which scholars have both supported or rejected this notion that resource-rich states are cursed by what seems like a blessing to common intuition. The paradox of why resource-rich states have not developed in the ways that we would normally expect a wealthy state to be developed has led to extensive research as well as a rise in public interest on the resource-curse, so the literature available on this topic is substantial. It ranges from political-economy literature to policy reports produced by non-governmental organizations (NGOs) to even articles on the mass media such as Thomas Friedman’s 2006 article on *Foreign Policy*, “The First Law of Petropolitics” in which he posits that the price of oil and the pace of freedom always move in the opposite directions in oil-rich states.\(^{16}\)

Although my assumptions in this thesis are primarily based on the political aspect of the resource-curse hypothesis, it is important to explore the literature on the economic aspect of the theory as well, because it helps us better understand the origins of resource curse. This chapter will, therefore, present scholarly literature on research of the resource-curse phenomena done by both economists and political scientists.

**The Resource Curse and Economic Development**

There has been a considerable amount of theoretical and empirical works that provide support for the resource-curse hypothesis from an economic perspective. Works by Auty (1994), Gylfason (2001, 2001a, 2001b), Rodriguez and Sachs (1999), Sachs and Warner (1995, 1997, 1999a, 1999b) have all provided strong support to the idea that natural resource wealth is likely to hinder economic growth rather than promote it. Providing an empirical

justification for this hypothesis, Sachs and Warner (1995) presented the first extensive statistical analysis which stimulated further research on the resource-curse hypothesis.\(^7\)

Using this analysis they were able to show that during the twenty-year period between 1970 and 1990, economies with a high ratio of natural resource export to GDP in 1970 (i.e. the base year) tended to grow slowly over time, even after controlling for many variables that were found to be vital for economic growth.\(^8\)

Over the past four decades, numerous scholars have conducted research in order to explicate the mechanisms of the resource-curse hypothesis. According to Corden (1984), states that are resource-rich and therefore resource-reliant, tend to suffer from currency overvaluations and loss of competitiveness because of the overabundance of natural resources. This idea is closely in association with the Dutch Disease.\(^9\) Another mechanism would be the increase in corruption and rent-seeking as shown by Krueger (1974) and Torvik (2002), because natural resources may tempt individuals, especially government leaders, to engage in rent-seeking competitions rather than using the wealth for the development of the state. With regards to the same idea, Papyrakis talks about the mismanagement of resource rents to relieve internal pressure from domestic interest groups in oil-rich states. He presents a theoretical mechanism explaining the tendency of resource income to decrease incentives to save and invest; he says that “resource-rich countries tend to neglect the necessity to save and


\(^{19}\) The “Dutch disease” refers to revenues from a newly-discovered natural resource creating a demand shock that triggers inflationary pressures and results in an overvaluation of the local currency. The term “Dutch disease” originated from a crisis in the Netherlands in the late 1950s after the discovery of vast deposits of natural gas in the North Sea. This newfound oil wealth caused the Dutch guilder to rise, causing exports of all non-oil products to become less competitive in the world market. Therefore, the “Dutch disease” too could be considered as another mechanism of the resource-curse.
direct their resource windfalls into productive investment.”\textsuperscript{20} He finds ample evidence of policy failures across developing states linked to underinvestment of natural-resource revenues. Atkinson and Hamilton (2003) have noticed low capital investment in resource-rich states while Gylfason (2001a) provides evidence of low levels of educational quality, which is an important factor in the development of a state. Bad decision making (Sachs and Warner 1999b, Auty 2001) and political instability (Collier and Hoefler, 1998) are also two of the mechanisms of the economic version of the resource-curse hypothesis.

Speaking of significant injections of oil revenues made from oil-extractive industries of oil-rich states, Gylfason (2001b) notes that over the past five decades this wealth that was injected into their local economies has not prevented them from experiencing negative rates of income growth. Diaz-Alejandro (1970) points out this phenomenon with the example of Argentina, which ranked among the ten wealthiest states at the beginning of last century, but failed to prevent its continuous downgrade to a developing state despite its vast resource base. In comparison to other developed states during the first part of the 20\textsuperscript{th} century, Argentina’s economy was relatively quite strong, but it started to decline in the 1950s. The same happened to Venezuela after its first oil boom. Before, it had the second highest GDP per capita in Latin America, but it sustained an average income growth rate of -3\% after the boom. According to Papyrakis and Gerlagh (2004b), the same applies to Alaska, because despite its vast oil reserves and its fishing industry, it is the only state in the United States with negative growth over the last three decades.

Early development economists such as Nurkse (1953) and Watkins (1963) dispute the idea of a resource curse by saying that natural-resource endowments could improve living

standards by economic expansions. Therefore, one should recognize that despite much empirical evidence and theoretical work that provides strong support to the resource-curse hypothesis, there is also a genre of literature that challenges the assumptions made in support of the resource curse. Papyrakis, therefore, says that the resource-curse hypothesis is by no means an economic law without exceptions.²¹

Many opponents of the resource-curse hypothesis draw examples from history to dispute the thesis. For example, Wright (1990) argues that the discoveries of the minerals supported the rapid industrial expansion and technological transformation in the United States to a large extent at the beginning of the twentieth century. Sachs and Warner (1999a), for instance, argue that Ecuador benefited from its oil boom between 1972 and 1986, and the same authors (1995) point out that the industrial revolutions in Great Britain and Germany were supported by extensive deposits of coal and iron ore. A more recent example would be the case of Norway, the second largest oil exporter in the world. Gylfason and Zoega (2001) say that Norway shows no symptoms of stagnation as proponents of the resource-curse hypothesis might expect, because Norway manages to convert its resource wealth into economic prosperity.

Given these various scholarly literature in which we find both strong support as well as convincing disputes of the resource-curse hypothesis, we could agree with Wright (1990) who posits that “there is no iron law associating natural resource abundance with national industry strength.”

Resource Curse, Democracy, and Authoritarianism

The notion that economic and fiscal reliance on natural resources like petroleum, natural gas and minerals tends to create and perpetuate authoritarian and undemocratic political regimes is the basis of the resource-curse hypothesis from a political-economy viewpoint. There is a substantial literature that supports this hypothesis, and the genesis of the resource-curse hypothesis from this aspect can be found in the works of Mahdavy (1970). Mahdavy notes that petroleum revenues in Middle Eastern states amount to an external source of rents that is directly captured by the governments, thus rendering them unaccountable to the citizens of those states, because these oil-revenues “enable the governments to embark on large public expenditure programs without resorting to taxation.” This idea paved way for other scholars to start building upon Mahdavy to offer general laws about authoritarianism and rents obtained from natural resources.

Building upon Mahdavy, several scholars including Luciani (1987) have reiterated the proposition that oil-rich governments need not resort to taxation, which ultimately leads to authoritarian or undemocratic political regimes. Luciani notes that when there is no taxation, there is no representation. Explaining the mechanism for this, Huntington says, “oil revenues accrue to the state: they therefore increase the power of the state bureaucracy and, because they reduce or eliminate the need for taxation, they also reduce the need for the government to solicit the acquiescence of the public to taxation. The lower the level of taxation, the less the reasons there are for the public to demand representation.”22 Ross views this as autocrats buying off citizens, because “when rulers want to raise taxes, citizens demand

22 Huntington, “The Third Wave of Democracy.” p.95
accountability,” and by providing them with many benefits with virtually no taxation, citizens cannot demand accountability.23

Speaking specifically on Africa, Jensen and WANTCHEKON (2004) note that many resource dependent states in Africa experienced a backslide toward authoritarian rule and struggled with democratic consolidation even after the so called “third wave” of democratization. These resource-dependent states include Algeria, Nigeria, Libya, Gabon, Cameroon and the former Zaire. Although there is evidence that suggest that discoveries of natural resources and resource abundance in general have led to a decrease in the economic growth rates in oil-rich states in Africa, Jensen and WANTCHEKON say that the relationship between authoritarianism and natural resources is less studied. After comparing the above resource-dependent states with other African states, they find that with the exception of South Africa, the transition to democracy has been successful only in resource-poor states such as Benin, Mali, Senegal and Madagascar.24 They also find that resource-dependent economies were more likely to be authoritarian, associated with worse governance, are more likely to exhibit higher levels of government spending, and were more likely to lead to breakdown in democracy following the third wave of democratic transitions in the last decade of the twentieth century. Their findings on the negative correlation between the level of resource dependence and the level of democracy corroborate a finding by Bratton (1998) that there was a decline in the level of democracy in several African states in the post-third wave democratization period between 1995 and 1997. Bratton finds that there was a decline in the rate of leadership alternation (from 37% to 6.6%) between the founding elections that took

23 Ross, Michael L. “Will oil drown the Arab spring?: Democracy and the Resource Curse” September/October 2011 p.6

place from 1989 to 1994 and the second elections that took place from 1995 to 1997. Building on Bratton’s finding, Jensen and Wantchekon suggest that this result could be attributed partly to natural-resource dependence of these African states.

Explaining some of the other mechanism of natural resources causing to fuel undemocratic politics, Ayittey (1998) posits that high levels of resource rents and executive discretion in the distribution of these rents allow incumbents to simply use the rents to buy off the opposition. This mechanism is clear in most sub-Saharan African states because their weak political institutions easily let incumbent politicians to use this resource wealth for political gain, as Ayittey has observed in Nigeria and Niger. Ross also explains a similar mechanism by noting that autocrats use the revenues gained from national oil industries to lavishly fund—and buy off the loyalty of—the armed forces of their states. He says, “Iranian President, Mahmoud Ahmadinejad, for example, has given billions of dollars in no-bid contracts to business associated with the elite paramilitary Revolutionary Guards.”

In his seminal article titled “Does Oil Hinder Democracy?” in World Politics, Ross (2001) concludes that a state’s reliance on either oil or mineral exports tends to make the state less democratic. In his article Ross provides three causal explanations for his argument: rentier effect, repression effect, and modernization effect. A rentier effect is produced through a mechanism in which governments use low tax rates and high spending to dampen pressures for democracy. Oil revenues allow government leaders to spend more on patronage and impose very low domestic taxes so that it helps reduce demands for government accountability to citizens. In addition, governments sponsor associations with oil revenues to


drive out independent civil associations. A repression effect is formed when oil wealth enables governments to spend more on security and repression forces to build up their internal security.\textsuperscript{27} Finally, a modernization effect is produced when the dependence on commodity exports retards social and cultural changes that are necessary for democracy, because Ross says that the population’s failure to move into industrial and service sector jobs renders them less likely to push for democracy. Using a statistical analysis from 113 states between 1971 and 1997, Ross (2001) he makes the above conclusion that oil does hinder democracy. He also concludes that this effect is not caused by other types of primary exports and that it is not limited to the Arabian Peninsula, to the Middle East, or sub-Saharan Africa nor is it limited to small states.

With regard to a rentier effect, Ross finds that higher personal and corporate taxes are strongly associated with more democratic governments and that the larger the government is, the less movement toward democracy over the following years. With regard to a repression effect, Ross finds that oil wealth may be linked to higher levels of military spending, which in turn tends to impede democracy. However, he does not find evidence of a similar pattern for mineral wealth nor he finds no evidence to support the claim that oil or mineral wealth leads to higher levels of military personnel. As for the modernization effect, he finds that states with greater natural-resource wealth tend to grow slower than resource-poor counterparts, that states with natural-resource wealth have more civil wars, that states with oil and mineral wealth are less democratic and that this relationship is present not just in the Middle East, but also in Africa, Latin America, and Asia.

\textsuperscript{27} Ross also says that extra security might be needed to quell ethnic conflict, since mineral wealth is often geographically concentrated but benefits are diffused.
Although Ross (2001) was not the first author to suggest that oil hinders democracy, it touched off a debate over the relationship between resource wealth and regime types. While some studies supported Ross’s central finding that oil inhibits democratization (Jensen and Wantchekon 2004; Epstein et al. 2006; Ulfelder 2007; Gassebner, Lamala and Vreeland 2008), there are dissenters like Herb (2005) who argues that oil’s impact on government accountability has been exaggerated and that it does not stand up to alternative statistical tests (Haber and Menaldo 2007; Acemoglu et al. 2008; Horiuchi and Wagle 2008).\(^\text{28}\) Herb (2005) and Dunning (2008) argue that oil has both positive and negative effects on the likelihood of democratic transitions, which made its net impact ambiguous and thereby questioning the validity of the central finding of Ross (2001). Therefore, in 2009 Ross revisits the analysis in his earlier work and offers several improvements that include better measures of the key variables and a wider data set. He explains that despite flaws in the previous analysis and many challenges from other scholars, he still finds strong evidence that oil wealth tends to prolong authoritarian rule. However, he also finds that there are intriguing anomalies such as the undemocratic effects on oil seem to have grown over time and to have no impact in Latin America. In addition, Ross no longer finds support for repression effect or the modernization effect in his improved analysis. But he finds that rentier effect still applies and that it is also consistent with public opinion data. Finally, Ross admits that although it is possible to explain how oil income impedes democracy, it is harder to explain why it impedes democracy.\(^\text{29}\)

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\(^\text{28}\) Ross, Michael. “Oil and Democracy Revisited.”
http://www.sscnet.ucla.edu/polisci/faculty/ross/Oil%20and%20Democracy%20Revisited.pdf [Preliminary Draft]

\(^\text{29}\) Ross. “Oil and Democracy Revisited.” P.25
Bringing in different perspectives to the resource-curse hypothesis, Papyrakis and Gerlagh (2004d) propose that “natural wealth may enhance idleness, bureaucracy and discourage people from innovation and efficiency improvements,” which eventually leads to policy failures. In his book “The Political Economy of King Midas” Papyrakis calls this process “easy riches leading to sloth.” He says that this might be because resource wealth leads people to believe that they have a larger margin of error when planning ahead.

Collier and Hoeffler (1998, 2004) provide another finding related to the resource-curse hypothesis by suggesting that the onset of civil war is more likely in states that are more dependent on natural-resource exports. In investigating whether civil wars have economic causes, they found that the amount of natural resources in a state was both a significant and strong determinant of the duration and the probability of civil wars.

While many scholars have provided support for the existence of a resource curse, some scholars have come up with arguments against the resource-curse hypothesis and have provided evidence that dispute the negative correlation between the level of natural resources and economic growth. Herb (2005) disagrees with the hypothesis by reasoning that “resource-reliant states would have been substantially poorer had they not found oil, gas, or minerals, and that their lower GDPs would have caused them to be even less democratic.” Smith (2004) finds that oil wealth is robustly associated with increased regime durability, even when controlling for repression. Using cross-sectional time series data from 107 developing states between 1960 and 1999, he tests the effects of oil wealth on regime failure,


31 Other determinants of the duration and the probability of civil wars were, initial income, ethno-linguistic fractionalism, and initial population size.
political protests, and civil war. He also finds that higher levels of oil wealth are associated with lower likelihoods of civil war and antistate protests.

Haber and Menaldo (2011) address a number of problems that proponents of the resource-curse hypothesis have failed to understand. They point out that extant cross-country regressions are not an effective strategy for uncovering causal relationships, because natural-resource reliance is not an exogenous variable. They also say that numerous sources of bias maybe driving the results, the most serious of which is omitted variable bias induced by unobserved country-specific and time-invariant heterogeneity. To address these problems, they develop unique historical datasets, employ time-series centric techniques, and operationalize explicitly specified counterfactuals. Their results indicate that oil and mineral wealth reliance does not promote dictatorship over the long run. If anything, Haber and Menaldo say that the opposite is true, and that in many specifications they generate results that suggest a resource blessing.

In addition to findings supporting or disputing the resource-curse hypothesis, there is also scholarly research that suggests the non-existence of a resource-curse hypothesis or the conditional nature of the hypothesis in a political aspect. Challenging the findings of Collier and Hoeffler (1998), Elbadawi and Sambanis (2002) find no significant effect of natural-resource dependence on civil war prevalence. Speaking about the same topic, de Soysa (2002), Fearon and Laitin (2003) and Humphreys (2003) all suggest that various types of natural resources may differ in their effects on civil war onset and duration.

Morrison (2009) not only finds that oil revenues may not be particularly unique, but also claims that all nontax revenues which include oil revenues in fact lead to regime stability. He argues that an increase in nontax revenues should be associated with less taxation of elites in democracies, more social spending in dictatorships and therefore more stability for both regime types. Morrison shows that the particular source of nontax revenue
does not make a difference and that they all act similarly with regard to regime stability and the causal mechanisms. According to him, these nontax revenues not only include natural-resource revenues obtained through state-owned enterprises and foreign aid, but also borrowings from abroad or the Central Bank and all other revenues besides taxation. He says that if oil revenues are more significant compared to other non-tax revenues it would be so only if oil revenues make up a large percentage of such externally obtained revenues.

Suggesting the need for conditional theories for the resource-curse hypothesis, Dunning (2008) argues that different states have varied paths from resource wealth to political and economic outcomes. He looks at three cases, post-independence Botswana, Mobutu’s Zaire, and Suharto’s Indonesia and argues that three variables—the world market structure for the resource, the degree of societal opposition to elites, and the prior development of the non-resource private sector—influenced elites’ incentives for diversification and thereby shaped outcomes along the dimensions of political stability and economic performance of these three states.

**Concluding Remarks and the Hypothesis**

In the context of explaining the different levels of government-directed violence by different MENA states in response to the Arab-Spring uprisings using the resource-curse hypothesis, the works of Ross and other scholars provide the most compelling findings that support the above hypothesis. Their findings of a positive correlation between levels of natural resources that states own and adverse political outcomes such as authoritarianism, higher levels of repression, and civil conflict are of particular relevance to the research.

question I ask in my thesis; i.e. did states with more oil use more violence against their people in response to Arab-Spring uprisings? Especially, Ross’s argument that oil wealth provides greater resources for tools of repression—as he finds that oil wealth may be linked to higher levels of military spending, which in turn tends to impede democracy—provides the basic foundation and the mechanism for my own argument that more oil lead to more government-directed violence in the Arab Spring.

After examining the events that unfolded in the Arab Spring and exploring previous scholarly literature on the resource-curse hypothesis, I have derived the following hypothesis: there is a positive correlation between the level of oil wealth of each state and the level of government-directed violence in response to Arab-Spring uprisings in the respective states. In other words, the greater the level of oil wealth of a MENA state is, the greater the level of government-directed violence. The fact that most MENA governments have the ability to transform oil wealth into large revenues which they can use to control their citizens as well as to fund their militaries make my argument that “more oil, more government-directed violence” a plausible argument. I do not claim that government-directed violence in response to Arab-Spring uprisings solely depends on oil wealth, but I will demonstrate that oil wealth does have a noteworthy effect on government-directed violence.
Chapter Three: Research Design

We have already discussed that most MENA states are known for the robust authoritarian nature of their governments. We have also discussed the considerable amount of natural resource endowments these states possess compared to other parts of the world. This thesis will examine both the extent to which the government leaders of MENA states used violence against their people in response to Arab-Spring uprisings and the level of oil wealth each government depends on, and then investigate whether there is a positive correlation between the levels of government-directed violence and oil wealth of each MENA state. I study the events of the Arab Spring in particular to investigate a possible relationship between government-directed violence and oil wealth, because the unforeseen and surprising nature of the Arab-Spring uprisings provided us with the opportunity to witness firsthand the tools of repression that MENA governments use against their people. In my opinion, these unplanned and quick government responses best reveal the different levels of authoritarianism in MENA states. That the Arab Spring is a shared phenomenon in the MENA region is also another reason for me to conduct research against the backdrop of the Arab Spring.

In order to answer my research question, whether there is a positive correlation between the level of government-directed violence and oil wealth, I have selected six MENA states that participated in the Arab Spring: Bahrain, Egypt, Libya, Syria, Tunisia and Yemen. Although there were Arab-Spring related demonstrations and protests in other MENA states like Algeria, Iraq, Israel, Jordan, Kuwait, Lebanon, Morocco, Oman and Saudi Arabia, I selected the states that were above the 25-deaths-per-calendar-year threshold by the end of year 2011. I made this selection according to the definition of a “campaign of one-sided violence” provided by the Human Security Report Project (HSRP). In my research, a “campaign of one-sided violence” corresponds with the government-directed violence in
response to the Arab Spring uprisings, and according to HSRP, a “campaign of one-sided violence is defined as the use of armed force against civilians by the government of a state or a formally organized group which results in 25 or more reported and codable deaths in a given state in a calendar year.\textsuperscript{33} These deaths, however, do not need to occur at the same time as long as they occur in the given year. Thus, using this definition, I was able to narrow down the sample of cases into Bahrain, Egypt, Libya, Syria, Tunisia, and Yemen.

As one could guess from the number of casualties of these states, it is in these six states where there have been major political upheavals. The Arab Spring started in Tunisia in the December of 2010, which eventually led to the collapse of the thirty-year-old Ben-Ali regime. Tunisia’s events had a domino effect as popular protests and demonstrations against governments started spreading into neighboring North African states like Algeria, Egypt, Libya, and Morocco, and then to Middle-East states like Bahrain, Iraq, Jordan, Syria, and Yemen. The Arab Spring so far has resulted in regime change in Egypt and Tunisia, major civil uprisings in Bahrain, Syria and Yemen, and a civil war in Libya. By the beginning of 2012, in addition to Tunisia’s Ben-Ali’s fall, Egypt’s Hosni Mubarak, Libya’s Muammar Gaddafi, and Yemen’s Ali Abdullah Saleh have also been thrown out from their thirty-year-old dictatorships. All of these leaders with the exception of the Libyan leader Muammar Gaddafi resigned from their presidencies. Gaddafi, who refused to give into the demands of the Libyan people and fought to the end was captured in his compound and was executed by NATO –backed rebel forces on October 9, 2011. Syria’s al-Bashar, however, is still in power as of the first quarter of 2012.

Measuring Government-Directed Violence

In my investigation, in order to analyze the level of government-directed violence, I use the “number of deaths” of each state that has resulted in the Arab-Spring uprisings as the dependent variable. I use the “number of deaths” in the Arab Spring as a measurement of government-directed violence because death tolls provide the best representation of the intensity of government-directed violence occurred in each state.

While the “number of deaths” represent the dependent variable (i.e. government-directed violence), I use “military expenditure” and “military personnel” of each state as independent variables. I use these two variables to analyze the different levels of government-directed violence in each state, because they not only show the capacity of a government to use violence on its people, but also give us a sense of how much oil wealth can been transferred into a tool of repression (i.e. the military) that the government could use against its people. “Military expenditure” is a appropriate variable to link oil wealth to government-directed violence in the Arab Spring, because Ross (2001) finds that oil wealth may be linked to higher levels of military spending, which in turn tends to make governments use more violence on their people.34 Although he finds no evidence to support the claim that oil wealth (or mineral wealth) leads to higher levels of military personnel35, comparing the different levels of military personnel across Bahrain, Egypt, Libya, Syria, Tunisia and Yemen does provide a sense of the capacity of each government’s capacity to use violence against its people.

For the “number of deaths” for Bahrain, Egypt and Tunisia I obtained data from Amnesty International. For Yemen, the number of deaths in 2011 was obtained from a speech


35 “Ross, Michael.“Does Oil Hinder Democracy?” p. 352
the Yemeni minister of human rights delivered at the United Nations. While I obtained data for Syria from the United Nations (UN), I had to rely on the figures provided by the National Transitional Council of Libya (NTC) for the death toll of Libya. As much as I would like to use data from the same source for consistency, it was not possible to get death tolls for each country from just the UN or Amnesty International. Therefore I had to use the death tolls from a combination of the above internationally recognized non-governmental organizations. I decided to use the figures provided by the NTC as legitimate data because the UN General Assembly voted to award Libya’s seat in the UN to the NTC of Libya on September 16, 2011.

Since the beginning of the Arab Spring, many MENA states have been undergoing major political transformations, and it is difficult for not only international organizations but also MENA governments to keep track of accurate data in the process of these changes. For these reasons I have come across certain problems with the validity of data. One problem I had with using the “number of deaths” to measure the different levels of government-directed violence was that the sources that providing the data did not break down the death toll to specify how many on the government side were killed and how many civilians were killed as a result of clashes between the MENA governments and Arab-Spring protestors. Generally, the pro-government casualties include military personnel, policemen, and pro-government activists. The casualties that resulted due to government-directed violence include civilians, anti-government activists and sometimes, and defected military personnel. Defected military


personnel are the soldiers who joined the opposition by leaving the government’s side, and this happened in Egypt, Tunisia, Yemen and also Syria. As defected soldiers, civilians, the military, the police, and pro-government activists all got involved in these Arab-Spring clashes, it is almost impossible at times to decode the numbers when it comes to identifying who got killed fighting for which side.

Another problem that I encountered in obtaining accurate data was the large discrepancies between data from government sources and international organizations. For example, while the UN reported over 5,000 deaths in Syria by the end of 2011, the Syrian president Assad al-Bashar dismissed the UN reports saying that most of the Syrians killed during the Syrian uprising were in fact security forces and not civilians as the UN had reported. Al-Bashar put the death toll of the Syrian security forces at 1,100 which meant that according to him, the total death toll due to the Arab Spring by the end of 2011 was around 2,200. Another example is the case of Yemen, where the death toll by the end of 2011 according to Amnesty International is 200 whereas that number according to Yemen’s minister of human rights 2,000. Therefore, it was difficult to decide which sources were less biased and more accurate.

As of the first quarter of 2012, Arab-Spring related demonstrations are still ongoing in states like Bahrain, Syria and Yemen. Also, government-directed violence in response to these Arab-Spring protests has not been subdued in some MENA states like Syria and Yemen. Therefore, for my analysis I will only count the “number of deaths” of each of the six MENA states until December 31, 2011. The figures I have obtained will be presented in the next chapter.

“Military expenditure” is one of the independent variables that I use to assess the levels of government-directed violence. According to the CIA Factbook, from which I obtain the data, military expenditure is defined as “spending on defense programs as a percent of the gross domestic product (GDP).”[^40] For Bahrain, Tunisia and Yemen the most recent data on military expenditure come from 2006 and for Egypt, Libya and Syria only 2005 estimates are available. To be able to compare different levels of military expenditure of each state in the next chapter, I will use this data to calculate per-capita values of military expenditure. Data for the other independent variable, “military personnel” is also obtained from the NationMaster, and is presented in Chapter Four. Data on “military personnel” is presented as military personnel for every 1,000 people of each state.

It is important to present some of the alternatives that could be used to assess the level of government-directed violence; and also the reasons I have not used them in my research, because one might argue that the “number of deaths” or “military expenditure” alone cannot capture the level of government-directed violence in the Arab Spring. In order to answer this question, it is important to identify what government-directed violence exactly is. As government-directed violence is closely associated with state repression, let’s first take a look at what state repression is. According to Goldstein, “state repression involves the actual or threatened use of physical sanctions against an individual or organization, within the territorial jurisdiction of the state, for the purpose of imposing a cost on the target as well as deterring specific activities and/or beliefs perceived to be challenging to government personnel, practices or institutions.”[^41] Having observed the different ways the governments in MENA have responded so far to the Arab Spring uprisings, we can say that that this

[^40]: Military Expenditure. Source: CIA FactBook

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definition of “state repression” is it is a fair description of the government-directed violence with regard to the current situation in the MENA region. If we look at the different types of government-directed violence with regard to “state repression,” they include harassment, surveillance/spying, bans, arrests, torture, and mass killing by government agents and/or affiliates within their territorial jurisdiction.\textsuperscript{42} With these forms of state-repression and with regard to government-directed violence during the Arab-Spring uprisings, we can obtain quantitative measures for arrests, torture and mass killing by government until the end of year 2011. The reason I opted for data on only mass killing by government agents or its affiliates to measure different levels of government-directed violence is the unavailability of data on the number of arrests or the number of wounded in some of the MENA states. While this data was available for some states, it was either unavailable or unreliable in some states. Therefore, this thesis will use only the “number of deaths” as a measure of government-directed violence.

As it is a well-known fact that rents obtained from oil wealth do not normally go into the hands of the ordinary citizens in the MENA region, it makes it possible for government leaders to allocate these oil rents to oppress and intimidate their own people by investing the rents on the military and buying off the loyalty of military personnel. As wealth made from oil exports constitutes a major part of the GDP of almost all of these MENA states, using data on oil wealth in order to evaluate how leaders might fund government-directed violence will certainly provide us with an approximate representation of the strength of the relationship between oil wealth and government-directed violence.

Measuring Oil Wealth

Although I use independent variables such as “military expenditure” and “military personnel” to explain different levels of government-directed violence in the Arab Spring uprisings, it is very important to note that the mechanisms of the said independent variables are explained through the resource curse. As I take into account these certain mechanisms of the resource-curse hypothesis, I will take “oil” as the “resource,” to explain different levels of government-directed violence during the Arab Spring. In order to assess the oil wealth of Bahrain, Egypt, Libya, Syria, Tunisia and Yemen, I will collect data on oil exports and oil production in a given year. I have used two variables—oil exports and oil production—to assess the levels of oil wealth, because I think that both variables will lead to a more accurate estimate of the strength of the relationship between government-directed violence and oil wealth.

For my analysis I use per-capita values of oil production so that I could examine the oil wealth of each state in comparison to other five states. Also, comparing per-capita values give us a better sense of how much a certain government is capable of funding armed forces, which ultimately determines how much a government is capable of directing violence against a citizen. I obtained data for oil production from NationMaster.

The data on oil exports were measured in barrels per day (bbl/day) and were obtained from the CIA Factbook. Data for oil production is data from 2007, and data for oil exports is from 2009. Using data from just one year for my analysis can be justified, because my research focuses on the variation across states and not over time. Also, these data for each state do not change drastically. Therefore, as long as the data is taken from a year closer and prior to the Arab-Spring uprisings, the analysis will not be flawed by using data from a single year.
Chapter Four: Analysis and Assessment

4.1. The Arab Spring in a Nutshell

It was the personal tragedy of a Tunisian fruit vendor that sparked the major political and revolutionary upheavals in the MENA region that is known as the Arab Spring. Although Mohammed Bouazizi the fruit vendor did not live to witness the outcome of his desperate act of self immolation, the so called Arab Spring was sparked by his self-immolation that brought together masses to protest against their authoritarian leaderships across the MENA.

Witnessing how Tunisians were able to overthrow the government of Ben Ali, who was in power for almost 24 years, demonstrators across other MENA states such as Algeria, Jordan, Syria and Egypt also took to the streets to protest the injustices of their government authorities. On January 21, 2011 alone, 5000 Jordanians took to the streets in Amman demonstrating against the government’s imposition of high level of taxation and increasing fuel prices. These protests later resulted in the dissolution of the government by King Abdullah, the Jordanian King. Egypt saw an even bigger protest on January 25, 2011, also known as the “day of rage,” when tens of thousands of Egyptians took to the streets in Cairo and other cities like Alexandria, Mansura, Tanta, Aswan and Assiut.43 The demonstrators in Cairo’s main Tahrir Square were crying out “Down with Mubarak,” and they were met with attacks by the police. Ironically, this “day of rage” happened on a national holiday to commemorate the very police forces that fired tear gas and used water cannons against the demonstrators. Egyptian president Hosni Mubarak made a few concessions during the next few days, which the Egyptians were not satisfied with, and on February 1, 2011 Mubarak

announced that he would not seek reelection in the upcoming presidential elections. After the situation in Egypt got more and more tumultuous with clashes between demonstrators and pro-Mubarak factions, Mubarak stepped down as president of Egypt and handed power to the military on February 11. Mubarak had ruled Egypt for almost 30 years. Although the events that unfolded in Egypt resembled those in Tunisia, many other states experienced somewhat different situations compared to the first two Arab-Spring states. Governments of these states responded to the civil disorder in their states rather violently, using excessive force against their citizens. In Bahrain, protests that were largely peaceful and inspired by the revolutions in Egypt and Tunisia met with police violence. At the beginning, Bahrainis only demanded “political reforms, right of political participation, respect for human rights, stopping of systematic discrimination against Shias,” but following incidents like the police attacking protesters at the Pearl Roundabout in Manama on February 17, 2011 and the Bahraini government forces opening fire on mourners at a funeral procession, the protesters started demanding the overthrow of both the Bahraini government and the monarchy. It is important to note that the majority of the Bahraini population is Shiite while the ruling monarchy is Sunni.

Of all the Arab-Spring participating states, Libya saw the most bloodshed and government brutality. There have been reports of the Libyan government under the leadership of Muammar Gaddafi using helicopter gunships, artillery and anti-aircraft missiles against

46 Background Arab Spring. Uppsala Conflict Database Program (UCPD) (http://www.pcr.uu.se/digitalAssets/87/87709_Background_narrative_arabian_spring.pdf)
Libyan demonstrators. Gaddafi had allegedly hired prisoners as mercenaries to attack the protesters. The situation in Libya turned into a civil war between rebel forces and Gaddafi’s regime that resulted in many casualties among both pro-Gaddafi and rebel forces. The Arab Spring in Libya had reached its final stage as NATO-backed rebel forces raided Gaddafi’s complex on October 20, 2011 killing him, toppling his 42 year old rule. On October 23, 2011, the Transitional National Council (TNC) that was formed as the de-facto opposition of the Libyan government earlier in February declared the liberation of Libya.

Started on March 15, 2011, the mass protests in Syria are still ongoing. The protests demanding the resignation of the Syrian President Bashar al-Assad have turned into a full-scale uprising that has resulted in a large number of casualties of both civilians and Syrian security forces. The Syrian government claims that over 2000 of the Syrian security forces and 700 civilians have been killed. However, according to reports by the United Nations, more than 3,500 protesters including 180 children have been killed by the Syrian government forces. Similar to the situation in Libya, Syrian forces have also used (and are still using) tanks and heavy weaponry to attack unarmed protesters. These acts of violence have been condemned by the Secretary General of the United Nations, the Arab League, the European Union and many states around the world.

In Yemen, thousands of protestors gathered in the streets of Sanaa, the Yemeni capital demanding the resignation of President Ali Abduhlla Saleh. The Yemeni uprisings erupted in parallel with the uprisings of Egypt, thousands of protestors in Yemen. Due to the pressure from protestors, Saleh made an announcement on February 2, 2011 that he would not seek re-

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47 Timeline Arab Spring, UCDP (http://www.pcr.uu.se/digitalAssets/87/87711_chronologic_timeline_arabian_spring.pdf)
election in the next presidential elections in 2013. As the number of protests and protestors only increased over time, government forces had started using force against civilians. On March 18, 2011 40 people were killed by Yemeni security forces as they opened fire on a demonstration in Sanaa. This incident resulted in President Saleh declaring the Yemen to be under emergency rule. After much violence between the Saleh government and the Yemeni opposition over the next few months, on November 23, 2011 President Saleh finally resigned by signing a document that transferred his power to the vice president, ending his 33 year rule. So far, the Yemeni uprisings have cost over 1,800 Yemeni lives.

In addition to the events mentioned in the states above, there have been protests in states like Algeria, Iraq, Kuwait, Morocco and Oman that were inspired by the popular revolts elsewhere in the MENA. Also, there were minor protests in Lebanon, Mauritania, Saudi Arabia, Sudan and Western Sahara, but they were subdued without much violent outcomes. Clashes between Israelis and Palestinians on May 15, 2011 on the Israel border were also reported to have been inspired by other Arab Spring uprisings.

As of January 31, 2012, protests of the so called Arab Spring are still ongoing in Bahrain, Egypt, Syria, and Yemen, along with minor protests in some countries like Jordan, Mauritania, Kuwait and Morocco. Despite major outcomes like the ousting of Mubarak in Egypt and the resignation of Yemeni president Ali Abdullah Saleh that ended his 33-year rule, Egyptians and Yemenis still protest as most of their demands have not yet been met.

The next section of this chapter presents information on the different levels of government-directed violence and oil wealth of Bahrain, Egypt, Libya, Syria, Tunisia and Yemen. This section will be followed by an analysis of the data and a discussion on the findings as well as possible explanations for the findings.
4.2. Government-directed Violence and Oil Wealth

Table 4.1: Arab-Spring Death Toll until December, 2011.

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>DEATH TOLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>BAHRAIN</td>
<td>47</td>
</tr>
<tr>
<td>4</td>
<td>EGYPT</td>
<td>926</td>
</tr>
<tr>
<td>1</td>
<td>LIBYA</td>
<td>30,000</td>
</tr>
<tr>
<td>2</td>
<td>SYRIA</td>
<td>5,000</td>
</tr>
<tr>
<td>5</td>
<td>TUNISIA</td>
<td>308</td>
</tr>
<tr>
<td>3</td>
<td>YEMEN</td>
<td>2000</td>
</tr>
</tbody>
</table>

Table 4.2: Oil production (Source: NationMaster)  Table 4.3: Oil exports (Source: CIA Factbook)

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>OIL PRODUCTION (bbl/day per 1,000 people)</th>
<th>RANK</th>
<th>STATE</th>
<th>OIL EXPORTS (bbl/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>BAHRAIN</td>
<td>68.603</td>
<td>3</td>
<td>BAHRAIN</td>
<td>239,900</td>
</tr>
<tr>
<td>6</td>
<td>EGYPT</td>
<td>8.265</td>
<td>5</td>
<td>EGYPT</td>
<td>163,000</td>
</tr>
<tr>
<td>1</td>
<td>LIBYA</td>
<td>305.62</td>
<td>1</td>
<td>LIBYA</td>
<td>1,580,000</td>
</tr>
<tr>
<td>3</td>
<td>SYRIA</td>
<td>22.428</td>
<td>2</td>
<td>SYRIA</td>
<td>263,000</td>
</tr>
<tr>
<td>5</td>
<td>TUNISIA</td>
<td>8.389</td>
<td>6</td>
<td>TUNISIA</td>
<td>91,200</td>
</tr>
<tr>
<td>4</td>
<td>YEMEN</td>
<td>12.822</td>
<td>4</td>
<td>YEMEN</td>
<td>207,700</td>
</tr>
</tbody>
</table>

Table 4.4: Military expenditure (Source: CIA Factbook)

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>MILITARY EXPENDITURE (% OF GDP)</th>
<th>GDP PER CAPITA</th>
<th>MILITARY EXPENDITURE PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BAHRAIN</td>
<td>4.5%</td>
<td>$27,300</td>
<td>$122,850</td>
</tr>
<tr>
<td>4</td>
<td>EGYPT</td>
<td>3.4%</td>
<td>$6,500</td>
<td>$22,100</td>
</tr>
<tr>
<td>2</td>
<td>LIBYA</td>
<td>3.9%</td>
<td>$14,100</td>
<td>$54,990</td>
</tr>
<tr>
<td>3</td>
<td>SYRIA</td>
<td>5.9%</td>
<td>$5,100</td>
<td>$30,090</td>
</tr>
<tr>
<td>6</td>
<td>TUNISIA</td>
<td>1.4%</td>
<td>$9,500</td>
<td>$13,300</td>
</tr>
<tr>
<td>5</td>
<td>YEMEN</td>
<td>6.6%</td>
<td>$2,500</td>
<td>$16,500</td>
</tr>
</tbody>
</table>
Table 4.5: Military personnel per 1,000 people

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>Military personnel</th>
<th>Population</th>
<th>Military personnel per 1,000 people</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>BAHRAIN</td>
<td>21000</td>
<td>1,248,348</td>
<td>16.8</td>
</tr>
<tr>
<td>4</td>
<td>EGYPT</td>
<td>799000</td>
<td>83,688,164</td>
<td>9.5</td>
</tr>
<tr>
<td>3</td>
<td>LIBYA</td>
<td>76000</td>
<td>6,733,620</td>
<td>11.3</td>
</tr>
<tr>
<td>1</td>
<td>SYRIA</td>
<td>416000</td>
<td>22,530,746</td>
<td>18.5</td>
</tr>
<tr>
<td>6</td>
<td>TUNISIA</td>
<td>47000</td>
<td>10,732,900</td>
<td>4.38</td>
</tr>
<tr>
<td>5</td>
<td>YEMEN</td>
<td>138000</td>
<td>24,771,809</td>
<td>5.6</td>
</tr>
</tbody>
</table>

4.3. Analysis of Tables 4.1-4.5

Both Table 4.1 and Figure 4.1 above show the number of deaths that each of the six states experienced as a result of the Arab-Spring uprisings until December, 2011. These death

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50 Data from 2005. Source: NationMaster (http://www.nationmaster.com/graph/mil_per-military-personnel)

tolls range from 47 to 30,000, the lowest being in Bahrain and the highest being in Libya. When looking at Figure 4.1, we can see that there have been considerably large numbers of casualties in Libya and Syria compared to the other four states. Although Bahrain, Egypt, and Tunisia all had death tolls below 1,000, Bahrain’s 47 deaths is relatively very low compared to the other three states. Yemen lies between Egypt and Syria with a death toll of 2,000. Since “number of deaths” is one of the measures of government-directed violence in this research, we can say that Libya, Syria and Yemen respectively had higher levels of government-directed violence, while Bahrain, Tunisia and Egypt had the relatively lower levels of government-directed violence in that order.

![Figure 4.2: Oil Production](image)

**Tables 4.2 and 4.3** respectively provide information on the different levels in oil production and oil exports of Bahrain, Egypt, Libya, Syria, Tunisia and Yemen. Of the six states, Libya and Bahrain produce more barrels of oil per day per 1,000 people compared to other four states. Libya produces an amount of 305.62 barrels per day per 1,000 people.
Bahrain ranks second with its 68.603 barrels per day per 1,000 people, which is almost five times less than the amount that Libya produces. While Syria produces 22.428 barrels per day for every 1,000 people, the other three states, Egypt, Tunisia and Yemen do not produce as much oil as the other three states do. The oil production is low in these three states, because in comparison to other oil-rich states, Egypt, Tunisia and Yemen have relatively smaller oil reserves. For this reason, Egypt and Tunisia are known as states with little or no oil. Of these three states, Egypt produces the least amount of oil with 8.265 barrels per day per 1,000 people, followed by Tunisia and Yemen respectively.

Figure 4.3: Oil Exports

Also in oil exports, Libya ranks first among the sample of six states. As shown in Table 4.3, Libya exports 1,580,000 barrels per day. Although Bahrain produced more oil per 1,000 people according to Table 4.2, Syria exports more oil than Bahrain. In both oil production and oil exports, however, Libya leads by a very large margin. When assessing the oil wealth of each state, we see in Table 4.3 above and Figure 4.3 below that Egypt, Tunisia

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52 Ross, Michael L. “Will oil drown the Arab spring?: Democracy and the Resource Curse” September/October 2011 p.4
and Yemen are still in the bottom three of all six states when it comes to measuring oil wealth. This is due to the fact that these three states produce less oil compared to Bahrain, Libya and Syria, and thereby they have less oil to export. Tunisia exports the least amount of oil with 91,200 barrels per day. Egypt exports 163,000 barrels per day and Yemen exports 207,700 barrels per day. Since the amount of oil exports are translated into wealth, we can say that Libya, Syria and Bahrain obtain the biggest amounts of revenues from oil wealth of their states.

Tables 4.4 and 4.5 present information on “military expenditure” and “military personnel” of the six MENA states. As I have explained in the Research Design earlier, I use “military expenditure” of each state to analyze the levels of violence, because how much a government spends on its military not only shows the capacity of a government to use on its people, but also gives us a sense of a possible mechanism of oil wealth being transferred into a tool of repression. While I have explained earlier that Ross (2001) finds no evidence to support the claim that oil wealth leads to higher levels of military personnel, comparing the different levels of military personnel across Bahrain, Egypt, Libya, Syria, Tunisia and Yemen helps us understand the extent to which governments are capable of using the military as a tool of repression.

The most recent data available for military expenditure as a percentage of the GDP came from the year 2006. The GDP per capita values that I use to calculate military expenditure per capita for Bahrain, Egypt, Syria, Tunisia and Yemen are from year 2011, while the figure for Libya is the 2010 estimate of GDP per capita. As the GDP of these states vary, analyzing the military expenditure as a percentage of the GDP does not paint the best picture of how much each state spends on the military in comparison to other states. For example, Table 4.2 shows that Bahrain spends 4.5% of its GDP on the military, and both Syria and Yemen spends higher percentages of the GDP on the military. But when we
translate these percentages into per capita values of military expenditure, we have a different picture: Bahrain has the highest military expenditure per capita of the six states and Yemen, whose percentage of GDP on military expenditure is the highest, has the second lowest military expenditure per capita value. For this reason, I have calculated the military expenditure per capita values for each state.

![Military expenditure per capita](image)

**Figure 4.4: Military Expenditure per Capita**

When we look closely at **Figure 4.4** above, we can see that despite the relatively low number of deaths in Bahrain shown in **Table 4.1**, Bahrain spends the most on its military per person in comparison to Egypt, Libya, Syria, Tunisia and Yemen. Libya ranks second with military expenditure worth $54,990 per capita. Syria is also spends over $30,000 per capita on military expenditure. Egypt, Tunisia and Yemen are the bottom three states in military expenditure, with Tunisia spending the lowest amount of money on its military with an amount of $13,300. Yemen’s military expenditure per capita of $16,500 is slightly above that of Tunisia, and below Egypt’s $22,100. When looking at military expenditure as a percentage of GDP, Yemen spends 6.6% of its GDP on its military. However, it has a relatively low GDP per capita compared to other states. Tunisia spends on its military only 1.4% of its
GDP, and because of this reason, it has the lowest military expenditure per capita value of all six states.

![Military personnel per 1,000 people](image)

**Figure 4.5: Military Personnel**

When examining the number of military personnel in each state, we see that Syria and Bahrain have the highest numbers of military personnel per 1,000 people. For every 1,000 Syrians, there are 18.5 military personnel, and for Bahrain, there are 16.8 military personnel. Libya still belongs to the top three states, ranking as the third highest state in the number of military personnel with 11.3 per 1,000 people. With only 4.38 military personnel for every 1,000 Tunisians, Tunisia has the lowest number of military personnel of the sample of six states. Egypt and Yemen also have fewer than 10 military personnel for every 1,000 people with 9.5 and 5.6 military personnel respectively. By examining **Figures 4.4 and 4.5** and considering the assumption that oil wealth could be invested in tools of repression that governments can use against its people, we can say that Bahrain, Libya and Syria invest the most in government-directed violence of all six states. In contrast, Egypt, Tunisia and Yemen appear to invest less in tools of repression needed for government-directed violence.
4.4. Findings

In my analysis, the level of government-directed violence was represented by the number of deaths due to the Arab Spring. While military expenditure per capita and the number of military personnel did not necessarily represent the level of government-directed violence directly, these two variables represent a possible mechanism of oil wealth being translated into tools of repression. The level of oil wealth was represented by oil production and oil exports. Using these variables, I expected to find a positive correlation between government-directed violence and oil wealth. For example, if my hypothesis holds, if “state X” had the most number of deaths or spends the most on its military, I expect “state X” to export the most amount of oil. Or, if “state Y” had the least number of deaths, I expected “state Y” to have little or no oil. Also, I expected a consistent pattern among the variables. For example, I expected the states that had higher death tolls to spend more on its military and have more military personnel; or states that produce more oil to export more oil. However, my hypothesis did not hold because of one state: Bahrain. Although Bahrain had the lowest level of government-directed violence with a death toll of 47, it also has the highest level of military expenditure per capita as well as the second highest level of military personnel per 1,000 people. Therefore, when it came to Bahrain, there was an inconsistency in the different independent variables I had used to measure government-directed violence. When analyzing the relationship between oil and government-directed violence, Bahrain did not hold to my hypothesis because despite Bahrain’s relatively very low death toll during the Arab-Spring uprisings, of the six states, it was still one of top states that both produced and exported oil. Bahrain ranked second in oil production with 68,603 barrels per day per 1,000 people, and ranked third in oil exports with 239,900 barrels per day slightly falling behind Syria which exported 236,000 barrels per day. Therefore, Bahrain appears to give the notion “more oil, less violence,” which is contrary to my hypothesis.
Although Bahrain’s behavior made it difficult to find a pattern when analyzing the relationship between different levels of government-directed violence and oil wealth, it was still quite noticeable that Libya had the highest death tolls of all six states and also the highest oil production and oil exports per capita. Therefore, there was still a possibility for the hypothesis to hold under certain circumstances. When looking at Syria, it was observed that Syria always belonged in the top three states in terms of both government-directed violence and oil wealth; thus Syria has had both high levels of government-directed violence as well as high levels of oil. Compared to other states, Egypt and Tunisia have both had relatively lower levels of government-directed violence due to Arab-Spring uprisings, as well as lower levels of oil wealth. Yemen, whose level of government-directed violence lies between the levels of Egypt and Syria, also takes the same position between Egypt and Syria in terms of oil wealth. Therefore, while Bahrain appeared to be out of place in the sample of six states, the other five states painted a picture that supported the resource-curse hypothesis.

Since my hypothesis does not hold for Bahrain, I decided to investigate whether there were any other striking differences in Bahrain compared to the other five states, and found that Bahrain is different from Egypt, Libya, Syria, Tunisia and Yemen in certain aspects like the size of the state, oil reserves, the economy and the government type. Compared to the size of other five states, Bahrain is a very small state with an area of only 760 square kilometers, only 3.5 times bigger than Washington D.C.\textsuperscript{53} Bahrain is the first Gulf state to discover oil and its reserves are expected to run out in the next 10 to 15 years.\textsuperscript{54} For this reason, Bahrain has tried to diversify its economy accordingly, and has succeeded in doing so by becoming

\textsuperscript{53} However, with its population of 1,248,348, Bahrain is one of the most densely populated states in the world. It also has a large foreign labor force which constitutes 20\% of the population. (Source: CIA Factbook)

\textsuperscript{54} Source: U.S. Department of State: Background Notes on Bahrain (Accessed: March 25, 2012)
the most diversified economy in the Persian Gulf. Due to highly developed transportation and communication facilities, Bahrain is home to many multinational corporations and businesses. Although revenues from petroleum industry account for approximately 25% of Bahrain’s GDP oil wealth still bring about 76% of government income.\textsuperscript{55}

When government types of Bahrain, Egypt, Libya, Syria, Tunisia and Yemen were compared, Bahrain stood out as the only constitutional monarchy.\textsuperscript{56} Since Bahrain did not support the “more oil, more violence” argument, I decided to investigate the oil production and Arab-Spring casualties of other monarchies in the MENA. Table 4.6 presents information on oil production and the death toll related to the Arab Spring of each monarchy.

Note that Libya is not a monarchy and it is included in the table for the purpose of showing how much oil Middle-East monarchies produce compared to the six states of my research.

<table>
<thead>
<tr>
<th>STATE</th>
<th>TYPE OF GOVERNMENT</th>
<th>OIL PRODUCTION (bbl/day per 1,000 people)\textsuperscript{57}</th>
<th>RANK IN OIL PRODUCTION PER 1,000 CAPITA</th>
<th>ARAB-SPRING DEATH TOLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qatar</td>
<td>Absolute monarchy</td>
<td>1,240.04</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kuwait</td>
<td>Hereditary constitutional monarchy</td>
<td>1,042.88</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>Constitutional federation of absolute monarchies</td>
<td>663.365</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>Absolute monarchy</td>
<td>371.363</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Libya</td>
<td></td>
<td>305.62</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Oman</td>
<td>Absolute monarchy</td>
<td>222.878</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Bahrain</td>
<td>Constitutional monarchy</td>
<td>68.603</td>
<td>21</td>
<td>47</td>
</tr>
</tbody>
</table>

Table 4.6: Monarchies in the Middle East

\textsuperscript{55} Source: U.S. Department of State: Background Notes on Bahrain (Accessed: March 25, 2012)

\textsuperscript{56} Syria, Tunisia and Yemen were all unitary presidential republics and Libya was a “Jamahiriya”, a ‘state of the masses’, at the onset of the Arab-Spring uprisings in the MENA.

\textsuperscript{57} Data from 2007. Source: NationMaster (accessed: March 2, 2012)
Table 4.6 clearly shows that monarichies in the Middle East produce the most oil per 1,000 people in the world and also have very low death tolls, if there are any at all, due to the Arab Spring uprisings in the MENA. In fact, the Arab Spring did not even reach states like Qatar and United Arab Emirates. When comparing Arab-Spring death tolls of Bahrain, Egypt, Libya, Syria, Tunisia and Yemen, Bahrain that had the lowest number of casualties. However, according to the table above, Bahrain’s 47 deaths is the highest number of deaths we see among the monarchies in the Middle East. It is interesting to observe that in this group of oil-rich monarchies, the states that produce relatively high levels of oil per capita showed little to no government-directed violence in response to the Arab Spring while states like Bahrain that produce relatively lower levels of oil per capita saw a noteworthy presence of government-directed violence. Although this observation alone is contrary to the resource-curse hypothesis, it is important to remember that most of the monarchies above are known for high levels of authoritarianism and repression.

Focusing back on the original research question, and taking into consideration the differences in Bahrain, especially the fact that Bahrain as a constitutional monarchy has a regime type that is very different to the other five states, I decided to analyze the same sample of states in which Bahrain is excluded. The following tables and figures present information on government-directed violence and oil wealth of only Egypt, Libya, Syria, Tunisia and Yemen.

58 Qatar is a leading supporter of the supports the Arab-Spring protest movements in the rest of the MENA, and it is in support of the Muslim Brotherhood and the Syrian opposition. Qatar strives to maintain good relations with both Iran and the United States as both states are important to Qatar’s survival. As Iran supports al-Assad’s government in Syria, Qatar fears that the situation in Syria might risk destabilizing its traditional balancing act between the United States and Iran. (Source: Steinburg, Guido. “Qatar and the Arab Spring” Stiftung Wissenschaft und Politik Comments February, 2012. German Institute for International And Security Affairs. http://www.swp-berlin.org/fileadmin/contents/products/comments/2012C07_sbg.pdf)

59 According to Freedom House, Kuwait is ‘partly free’ and all of the other Middle East monarchies are ‘not free’ indicating that they have repressive political institutions.
4.5. Government-directed Violence and Oil Wealth (without Bahrain)

Table 4.7: Arab-Spring death toll until December, 2011.

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>DEATH TOLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>EGYPT</td>
<td>926</td>
</tr>
<tr>
<td>1</td>
<td>LIBYA</td>
<td>30,000</td>
</tr>
<tr>
<td>2</td>
<td>SYRIA</td>
<td>5,000</td>
</tr>
<tr>
<td>5</td>
<td>TUNISIA</td>
<td>308</td>
</tr>
<tr>
<td>3</td>
<td>YEMEN</td>
<td>2000</td>
</tr>
</tbody>
</table>

Table 4.8: Oil production (Source: NationMaster)

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>OIL PRODUCTION (bbl/day per 1,000 people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>EGYPT</td>
<td>8.265</td>
</tr>
<tr>
<td>1</td>
<td>LIBYA</td>
<td>305.62</td>
</tr>
<tr>
<td>2</td>
<td>SYRIA</td>
<td>22.428</td>
</tr>
<tr>
<td>4</td>
<td>TUNISIA</td>
<td>8.389</td>
</tr>
<tr>
<td>3</td>
<td>YEMEN</td>
<td>12.822</td>
</tr>
</tbody>
</table>

Table 4.9: Oil exports (Source: CIA Factbook)

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>OIL EXPORTS (bbl/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>EGYPT</td>
<td>163,000</td>
</tr>
<tr>
<td>1</td>
<td>LIBYA</td>
<td>1,580,000</td>
</tr>
<tr>
<td>2</td>
<td>SYRIA</td>
<td>263,000</td>
</tr>
<tr>
<td>5</td>
<td>TUNISIA</td>
<td>91,200</td>
</tr>
<tr>
<td>3</td>
<td>YEMEN</td>
<td>207,700</td>
</tr>
</tbody>
</table>

Table 4.10: Military expenditure (Source: CIA Factbook)

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>MILITARY EXPENDITURE (% OF GDP)</th>
<th>GDP PER CAPITA</th>
<th>MILITARY EXPENDITURE PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>EGYPT</td>
<td>3.4%</td>
<td>$6,500</td>
<td>$22,100</td>
</tr>
<tr>
<td>1</td>
<td>LIBYA</td>
<td>3.9%</td>
<td>$14,100</td>
<td>$ 54,990</td>
</tr>
<tr>
<td>2</td>
<td>SYRIA</td>
<td>5.9%</td>
<td>$5,100</td>
<td>$ 30,090</td>
</tr>
<tr>
<td>5</td>
<td>TUNISIA</td>
<td>1.4%</td>
<td>$9,500</td>
<td>$13,300</td>
</tr>
<tr>
<td>4</td>
<td>YEMEN</td>
<td>6.6%</td>
<td>$2,500</td>
<td>$ 16,500</td>
</tr>
</tbody>
</table>
After removing Bahrain from the previous sample of Arab-Spring participating states, now we have a new sample of five states for the new analysis: Egypt, Libya, Syria, Tunisia, and Yemen. According to Table 4.7, Libya and Syria respectively have the highest number of deaths. Tables 4.8 and 4.9 which represent the level of oil wealth of the states also indicate that Libya and Syria produce and export the most amount of oil of the five states. In military expenditure per capita, Libya leads once more with $54,900 military expenditure per capita with Syria in the second place with spending $30,000 per person on military expenditure. Table 4.11 however shows that Syria has more military personnel per 1,000 people and that Libya ranks second behind Syria. Regardless, Libya and Syria both dominate the first two positions in the number of deaths, oil production, oil exports, military expenditure and military personnel. As Libya and Syria show he highest levels of government-directed violence as well as the highest levels of oil wealth of the five states, Egypt, Tunisia and Yemen observably show relatively low levels of government-directed violence as well as relatively low levels of oil wealth compared to Libya and Syria.

Table 4.11: Military personnel per 1,000 people

<table>
<thead>
<tr>
<th>RANK</th>
<th>STATE</th>
<th>Military personnel(^{60}) (2005 data)</th>
<th>Population(^{61}) (July 2012)</th>
<th>Military personnel per 1,000 people</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>EGYPT</td>
<td>799000</td>
<td>83,688,164</td>
<td>9.5</td>
</tr>
<tr>
<td>2</td>
<td>LIBYA</td>
<td>76000</td>
<td>6,733,620</td>
<td>11.3</td>
</tr>
<tr>
<td>1</td>
<td>SYRIA</td>
<td>416000</td>
<td>22,530,746</td>
<td>18.5</td>
</tr>
<tr>
<td>5</td>
<td>TUNISIA</td>
<td>47000</td>
<td>10,732,900</td>
<td>4.38</td>
</tr>
<tr>
<td>4</td>
<td>YEMEN</td>
<td>138000</td>
<td>24,771,809</td>
<td>5.6</td>
</tr>
</tbody>
</table>

4.6. Analysis of Tables 4.7-4.11

\(^{60}\) Source: NationMaster

\(^{61}\) Source: CIA FactBook
Figure 4.6: Arab Spring Death Toll until December, 2011

Figure 4.7: Oil production

Figure 4.8: Oil Exports (without Bahrain)
4.7. New findings

Tables 4.7-4.11 and Figures 4.6-4.10 clearly show that Libya and Syria not only have the highest levels of government-directed violence, but also have the highest levels of oil wealth of the five states. When analyzing the “ranks” in Tables 4.6-4.10 the states that rank high in oil wealth, Libya and Syria, also happen to be the states that rank high in government-
directed violence during the Arab-Spring uprisings. Egypt and Tunisia are in the bottom two states in terms of both the levels of government-directed violence and the levels of oil wealth. Of these three states with little or no oil, Tunisia and Egypt appear to be the states that produce and export the least amount of oil. In Yemen, it has the third highest level of government-directed violence, as well as the third highest level of per capita oil production and oil exports.

When looking at per capita values of military expenditure and military personnel of each state in Tables 4.9 and 4.10 which were used to explain the possible mechanisms of oil wealth translating into government-directed violence, Egypt appears to have higher levels of military expenditure per capita as well as military personnel per capita than Yemen. However, if we compare military expenditure of the two states only as a percentage of their GDPs, Egypt spends only 3.4% of its GDP on its military, which is less than the 6.6% of the GDPA that Yemen spends on its military.

As we can see from the data provided in the tables and figures above, states like Libya and Syria that had higher levels of government-directed violence during the Arab-Spring uprisings are also the states with higher levels of oil wealth. States like Egypt and Tunisia with relatively lower levels of government-directed violence also happened to be states with lower levels of oil wealth. Once Bahrain is excluded from the previous sample of states, my hypothesis holds true. Thus, I have found a positive correlation between the level of oil wealth and the level of government-directed violence in response to Arab-Spring uprisings under certain conditions (i.e. states that are not constitutional monarchies), and thereby I have also been able to provide support for the resource-curse hypothesis.

This chapter ends with the following discussion in which I have incorporated the above findings into the various incidents and outcomes of the Arab-Spring in the MENA that I was not able to quantify in my research.
4.8. Discussion

In this thesis, I attempted to apply the resource-curse hypothesis to answer the question, “Did states with more oil wealth tend to use more government-directed violence in response to Arab-Spring uprisings?” I examined both the extent to which the government leaders of MENA states used violence against their people in response to the uprisings and the level of oil wealth each government depended on prior to the onset of the Arab Spring. The sample of six states I chose for my research includes Bahrain, Egypt, Libya, Syria, Tunisia and Yemen. By examining the different levels of government-directed violence and oil wealth of the six MENA states, I intended to find out whether there was a positive correlation between oil wealth and government-directed violence. Initially, my hypothesis did not hold, because Bahrain’s relatively low level of government-directed violence, which was represented by the number of deaths during the Arab-Spring uprisings, could not be explained by its high levels of oil wealth as well as its high levels of military expenditure. When compared with other monarchies in the MENA such as Qatar, Kuwait, the United Arab Emirates and Saudi Arabia, I found that the negative correlation between oil wealth and government-directed violence that Bahrain exhibited was present in the said monarchies as well. These were all monarchies that produce and export a substantial amount of oil, but there weren’t as many casualties in these states that resulted from the Arab-Spring uprisings.

However, the hypothesis did hold when Bahrain was excluded from the sample of states. The new sample comprised of Egypt, Libya, Syria, Tunisia and Yemen and the states that were more oil wealthy exhibited more government-directed violence. Therefore, I come to the conclusion that the resource-curse hypothesis does hold under certain conditions.

In my research I was not only able to show that that under certain conditions there is a positive correlation between the level of government-directed violence and the level of oil wealth, but I was also able to find support for a possible mechanism of oil wealth translating
into government-directed violence that Ross (2001) talks about: government leaders lavishly funding their military to buy the loyalty of their armed forces. By examining how much governments in the MENA spend on their military and how much military personnel there are in each state, I found that there were more military expenditure and more military personnel in the states where there was more oil wealth. Ultimately, in the same states that had high levels of oil wealth and high levels of expenditure on the military and military personnel, (i.e. Libya and Syria) we saw that the level of government-directed violence in response to the Arab Spring was much higher in comparison to other states like Egypt and Tunisia. Similarly, states that had little or no oil (i.e. Egypt and Tunisia) spent less on their militaries and had relatively lower numbers of military personnel and in the end had relatively lower levels of government-directed violence during the Arab Spring.

Although data on per capita military expenditure or military personnel per 1,000 people of each provide sufficient support in explaining the positive correlation between levels of government-directed violence and oil wealth, the final outcomes of the Arab Spring in each of the states also provide substantial support for the mechanism of oil wealth being translated into funding the militaries. The first examples are Tunisia and Egypt. Both Tunisia and Egypt spend relatively less on their militaries, possibly because the two states are not as oil rich as states like Libya or Syria are. As Tunisia’s Ben Ali and Egypt’s Hosni Mubarak had not funded the military enough to buy the complete loyalty of the armed forces, the result was the armed forces in both Tunisia and Egypt who were once loyal to their leaders changing the allegiance from the government to the people. In Tunisia, the military did attack the protesting Tunisians at first who were demanding Ben Ali’s ouster. But as the civilian protests gained momentum quicker than ever, allegedly at the command of General Rashid Ammar of the Tunisian military, the armed forces had refused to obey the orders of President Ben Ali by informing their leader of 25 years that the military would no longer shoot the
Tunisian protesters.\textsuperscript{62} Likewise, Ben Ali’s orders to dismiss General Rashid Ammar were also dismissed. This change of allegiance by the Tunisian military was the last straw on the camel’s back for the collapse of Ben Ali’s long-standing regime, as Ben Ali stepped down as president on as early as January 14, 2011, less than two months after Bouzizi’s self immolation. If Tunisia were wealthier in terms of oil resources, Ben Ali might have been able to fund the Tunisian military more lavishly and thus he would have been able to have full control over the Tunisian military.

The case in Egypt is also similar, but as Egypt obtained more revenues from oil exports than Tunisia, it took longer for Mubarak to lose the allegiance of the Egyptian military than Ben Ali in Tunisia. The Egyptian military was the source of Mubarak’s authority, but just like the Tunisian armed forces, the Egyptian armed forces had informed Mubarak in early January in 2011 that they would no longer stand in the way of protesters calling for the ouster of the dictator who has ruled Egypt for thirty years. In a statement released to the public the army said, “The presence of the army in the streets is for your sake and to ensure your safety and well-being. The armed forces will not resort to use of force against our great people.”\textsuperscript{63} The statement further said, “Your armed forces, who are aware of the legitimacy of your demands are keen to assume their responsibility in protecting the nation and the citizen, affirms that freedom of expression through peaceful means is guaranteed to everybody.”\textsuperscript{64} This was a huge blow to Mubarak and on February 11, 2011, he had to hand power to the military upon his resignation. Mubarak was later put on trial for


\textsuperscript{64} Ibid.
several charges including premeditated murder as he had ordered the Egyptian military to fire live ammunition at unarmed demonstrators. When comparing to the situation in Tunisia in terms of oil wealth and thus the ability to fund repressive apparatuses such as the military, we can say that as Egypt was slightly wealthier in oil resources Mubarak was able to have enough control of the military at first, but since Egypt did not have as much oil wealth as Libya or Syria he failed to prevent his military from standing aside without protecting civilians as they did later on. It is possible that the Egyptian military changed its loyalty to Mubarak and took the side of the Egyptian people when it became clear that he was going to lose.

Having investigated Tunisia and Egypt, it is important to note that regardless of the little variation in the level of oil wealth in Tunisia and Egypt, the levels of oil wealth in the two states still corresponded in accordance with the resource-curse hypothesis with the level of government-directed violence in response to Arab-Spring uprisings. In other words, Tunisia, whose oil wealth is less than that of Egypt, saw government-directed violence less and major political outcomes sooner. Egypt saw relatively more government-directed violence compared to Tunisia and saw the major outcome of the collapse of the Mubarak regime after Ben Ali’s fall.

Although the Arab Spring in Libya was somewhat different compared to other MENA states due to international intervention, the Libyan government under the leadership of Colonel Muammar Gaddafi extensively used violence against the protesting Libyans on the streets until Gaddafi’s was killed on October 20, 2011. Of all MENA states, Gaddafi’s government used the most brutal and violent methods to fend off protestors. These methods

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65 Timeline Arab Spring, Uppsala Conflict Database Program (UCDP) (http://www.pcr.uu.se/digitalAssets/87/87711_chronologic_timeline_arabian_spring.pdf)
of Gaddafi ranged from hiring prisoners as mercenaries to shoot unarmed civilians to cutting off internet access to indiscriminately shelling Libyan towns with grad rockets. The civil war between Gaddafi loyalists and the anti-government rebels, who later became the Libyan National Transitional Council, resulted in 30,000 reported deaths. With the amount of oil wealth Libya has, which was the highest among the six states that I studied in my research, it is very likely that Gaddafi government used oil wealth on the large amount of weapons and armored vehicles in his military. Had not the NATO intervened in the situation to back the rebel forces that ultimately led to Gaddafi’s death in 2011, government-directed violence in Libya would be still ongoing. I make this speculation because the situation in Syria, which is also an oil-rich state like Libya, is still ongoing with the al-Assad government constantly using excessive violence against the Syrian population.

Arab-Spring uprisings in Syria are still ongoing, and al-Assad’s government is still standing strong with the help of the Syrian Armed Forces against anti-government forces. Despite making changes in the constitution, providing tax cuts and increasing public-sector salaries Syrians are still demanding the resignation of President Bashar al-Assad. Unlike other leaders like Ben Ali, Mubarak and Saleh, al-Assad has refused to resign despite massive protests against his leadership. Instead, al-Assad has ordered the Syrian Armed Forces as well as police forces to use excessive violence on civilians across Syria. As the Syrian government has more access to oil wealth compared to other states like Egypt, Tunisia and Yemen, it uses the mechanism of using revenues extracted from oil wealth to lavishly fund the military—to buy the loyalty of the Syrian Armed Forces who would in turn show their support by obeying

66 Timeline Arab Spring, Uppsala Conflict Database Program (UCDP) (http://www.pcr.uu.se/digitalAssets/87/87711_chronologic_timeline_arabian_spring.pdf)
the orders to use violence on people—and thereby stay in power longer than other leaders who spend relatively less on their militaries.

As of end of March in 2012, Arab-Spring related protests are still ongoing in Yemen, although the government had been overthrown. After many attempts, Ali Abdullah Saleh was overthrown as president on February 27, 2012. Yemen saw this regime change only after witnessing over 2,000 casualties in 2011. It is important to point out that Yemen is wealthier in oil resources and it saw this major political outcome only after less oil-wealthy Egypt experienced a major change of regime with a relatively lower level of government-directed violence compared to that of Yemen. While Yemen is poorer compared to other five states I had studied, the fact that 6.6% of its GDP was spent military expenditure explains the relatively higher level of government-directed violence during Saleh regime. If we are to explain why Saleh was not able to cling to power longer as Syria’s al-Assad is at present, it could be due to the fact that Yemen’s oil production has been declining in the recent years. Although the oil sector in Yemen represents 30% of the state’s GDP and contributes 75% to the state budget as well as 90% of export earnings, it has been reported that the oil production has been declining steadily.67

The case of Bahrain itself is an interesting one, especially after examining oil wealth and government-directed violence in other monarchies in the MENA. The “more oil, less violence” behavior of the Middle Eastern monarchies disputed the resource-curse hypothesis entirely as the Arab Spring did not even reach some of the extremely oil-rich states like the United Arab Emirates despite the fact that these states are highly repressive. As there there was little to no popular protests in these states during the Arab Spring in the other MENA states, it

is possible that the governments did not have to resort to using violence against their citizens. A possible explanation for the absence of protests against these repressive oil-rich monarchies could be that their ability to use oil wealth to shield their states from the economic and political pressures that had sparked protests in states like Egypt and Tunisia. While it could also be that large government coffers full of oil revenues do indeed meet the needs of the people, but it could also mean that people do not have the freedom or opportunity to protest their governments due to the repressive political apparatuses. This may be the case, as reports have shown that the United Arab Emirates for example, has blocked websites such as UAE Hewar in which bloggers post calls for more direct democracy. In addition, UAE has dissolved the elected boards of prominent nongovernmental organizations such as the Jurists’ Association and the Teachers’ Association whom the UAE rulers fear would mobilize citizens against their government. Therefore, there is still a possibility that the resource-curse hypothesis might still hold true if we look deeper into the political situations of these states.

Chapter Five: Conclusion

The revolutionary political upheavals across the Middle East and North Africa (MENA) which became known as the Arab Spring is a phenomenon that has captured the attention of both the public and scholars equally. The resource-curse hypothesis is also a “hot” topic not only among political economists but also among policy analysts on the MENA region and the mass media. In this thesis, I applied this popular resource-curse hypothesis to explain the different levels of government-directed violence during the first year of the Arab-Spring uprisings in the MENA.

There are many potential explanations for the surge of Arab-Spring uprisings that started in late 2009, and I was able to explain the different levels of government-directed violence using the resource-curse hypothesis. I found a positive correlation between the level of government-directed violence and the level of oil wealth among states that were not constitutional monarchies like Bahrain. I was not only able to find a pattern between government-directed violence and oil wealth, but I was also able to explain the mechanism of oil wealth being translated into funding tools of repression (i.e. military) using events related to the Arab-Spring uprisings. Since Bahrain and other constitutional monarchies in the Middle East did not follow the pattern of “more oil, more violence,” I came to the conclusion that the resource-curse hypothesis applies only to certain regime types. However, it is important to note that very low levels or absence of government-directed violence in these Middle-East monarchical states do not necessarily mean that there is less repression. In my thesis I investigated the different levels of government-directed violence, which is a form of repression, but not as same as repression. As these oil-rich monarchies in the Middle East have not used physical violence against their people as other MENA states have, it would be
interesting to build on this observation studies on limitations and conditions to the resource-
curse hypothesis.

Problems encountered

One of the biggest challenges I encountered while conducting my research was obtaining the most accurate data on the casualties of the Arab Spring. The discrepancy between data from one source and the other was sometimes unusually large. This problem applied especially to Yemen whose death toll in 2011 was strikingly different from one source to another. The estimates Yemen’s death toll provided by Amnesty International by the end of 2011 was 200, but in mid-March of 2012, the Yemeni minister of human rights informed the United Nations that at least 2,000 people have been killed in 2011 as a result of the Arab-Spring uprisings. As former President Saleh was still in power toward the end of 2011, there was an absence of independent media in the capital Sana’a and other major towns in Yemen, it led me to believe that the estimates on Yemen provided by Amnesty International were somewhat inaccurate. Therefore, I decided to rely on the data provided by the post-Saleh government of Yemen which the United Nation also considers as the official death toll. Regardless, it is still very difficult to test the validity of these numbers even for MENA governments.

Not being able to find additional ways to quantify government-directed violence during the Arab Spring was another problem I encountered. Although I wanted to incorporate data on other variables of government-directed violence such as the number of civilians wounded or the number of protestors attacked, other than news reports on separate incidents related to the Arab Spring, a complete set of data on various types of government-directed violence was unavailable. However, since my research is not primarily quantitative, but qualitative, I tried my best to incorporate into my thesis information obtained from news
articles and situation reports on the Arab Spring of each state of the sample of six states, with the hope of providing the most balanced perspective of each MENA state that I studied carefully.

**Contribution to Scholarship**

Most scholars have done research on determining the relationship between authoritarianism and oil wealth using “regime type” to measure authoritarianism. The “regime type” itself is measured by the “polity score” of each state which determines where the state lies between the range of “most autocratic” to “most democratic” in the polity scale of -10 to 10.69 However, when conducting research specifically on the MENA region whose polity scores are similar, it is difficult to analyze the variation within the MENA states.70 In my thesis, as I have used government-directed violence as a way to measure authoritarianism in which there was a noticeable variation in the levels of violence. Therefore, I believe that I have been able to present a different method to determine the extent to which a state is authoritarian.

As I have been able to provide sufficient evidence and explanations that the resource-curse hypothesis holds true under certain conditions, this thesis contributes to the resource-curse literature that supports the resource-curse hypothesis, as well as literature that explain the conditional nature of the resource-curse hypothesis.

Studies and research on the Arab-Spring uprisings have just begun and as the events of Arab Spring are still unfolding, we can only speculate how much scholarly work on the

69 In the polity scale, (-10) is the most autocratic and (10) is the most democratic.

70 Polity scores according to Polity IV project in 2009 and 2010: Bahrain (-7, -8), Egypt (-3, -3), Libya (-7, -7), Syria (-7, -7), Tunisia (-4, -4), Yemen (-2, -2). Also, according to the Democracy Index, all six states are autocratic states.
Arab Spring there will be in future. As many MENA experts and other political scientists are currently in the process of deciphering the Arab Spring in order to find possible explanations for this new wave of democracy in region that was once robustly authoritarian, it is very likely that there will a substantial amount of Arab-Spring related research done. Thus, I hope that thesis will be one of the early contributions to the larger body of “Arab-Spring literature” that we are likely to see in future.
Bibliography


