Why Are Some Countries Immune to the Negative Political Effects of Natural Resource Wealth: An Empirical Analysis

by

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STATEMENT OF AUTHORSHIP

This thesis contains no material which has been accepted for any award or any other degree or diploma in any university or other institution. It is affirmed by the candidate that, to the best of his knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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ABSTRACT

This study presents a quantitative analysis on the question of why natural resource wealth has strong antidemocratic effects in some countries but not in others. Although the relevant literature acknowledges the perverse effects of natural resource wealth on democratic governance in general through systematic analyses, only anecdotal evidence has been presented regarding the immunity of some countries to this effect. This thesis is the first study to address this issue systematically by introducing a new variable: the level of market-contracting in a society, i.e. the degree by which individuals obtain their incomes, goods, and services by contracting on a market. Informed by the newly emerging economic norms theory, the empirical evidence suggests that societies with higher level of market-contracting are significantly less prone to the detrimental effects of natural resource wealth on democracy. This effect in such societies can be attributed primarily to a lack of patronage opportunities and a collective interest in the rule of law.

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Keywords:

Natural resource wealth, democratization, economic norms theory, clientelism, rentier state

ÖZET

Bu araştırma doğal kaynak zenginliğinin neden bazı ülkelerde güçlü anti-demokratik etkilere sebep olurken diğer bir takım ülkelerde böyle bir etkinin görülmediği sorusu üzerine kantitatif bir analiz sunmaktadır. Her ne kadar ilgili literatür genel olarak doğal kaynak zenginliğinin demokratik yönetim üzerindeki kötü etkilerini sistematik analizlerle göstermiş olsa da bazı ülkelerin bu etkilere karşı olan bağışıklığı hakkında sadece anekdotlara dayalı kanıtlar sunulmuştur. Mevcut tez bu konuyu sistematik olarak inceleyen ilk çalışma olup, soruya yeni bir değişken ile yanıt aramaktadır: toplumdaki sözleşmelere dayalı işlemlerin düzeyi, yani bireylerin ne derecede gelirleri, malları ve servisleri pazarda sözleşmelere dayalı işlemlerle elde ettiği. Kuramsal olarak ekonomik normlar teorisini baz alan çalışmanın ampirik sonuçlarına göre sözleşmelere dayalı işlemlerin yüksek düzeyde gerçekleştiği toplumlarda doğal kaynak zenginliğinin demokratik yönetim üzerindeki kötü etkileri diğer toplumlara göre çok daha az görülmektedir. Bu duruma neden olarak sözleşmelere dayalı işlemlerin yüksek düzeyde gerçekleştiği toplumlarda iltimasa dayalı ilişkilerin azlığı ve hukukun üstünlüğü ilkesinin toplumun ortak çıkarı olması öne sürülmektedir.

Anahtar Sözcükler:

Doğal kaynak zenginliği, demokratikleşme, ekonomik normlar teorisi, kliyentalizm, rantiye devlet

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CHAPTER I

INTRODUCTION

I. 1. RESEARCH QUESTION

In comparative politics the general wisdom about natural resource wealth is that it impedes both economic and political development. While the discussion of the economic consequences of natural resource wealth has a relatively long history in the relevant literature (e.g. Delacroix, 1977; Sachs and Warner, 1995; Karl, 1997), the systematic investigation of the "political resource curse" has only begun with the highly-influential article of Michael Ross in 2001 who reported that "the oil-impedes-democracy claim is both valid and statistically robust; in other words, oil *does* hurt democracy" (Ross, 2001: 356). Most subsequent empirical studies have confirmed this detrimental effect of natural resource wealth on political regimes (e.g. Wantchekon, 2002; Jensen and Wantchekon, 2004; Smith, 2004; Ramsay, 2007; Ulfelder, 2007; Goldberg, Wibbels, and Mvukiyehe, 2008), while only very few studies (e.g. Herb, 2005) do not find empirical support for it. The most-cited causal mechanism linking natural resource wealth and political regime is the "rentier state" hypothesis that is first articulated by Mahdavy (1970) to study Iranian politics during the late Shah regime. The rentier state hypothesis essentially operates in two dimensions. First, the accruing resource rents into the state's coffin obviate the need

to tax the population which in turn reduces the citizens' interest in government accountability and representation. Second, rentier states tend to have greater spending on patronage to buy off opposition. Either way the political regime slides towards authoritarianism.

Although the literature on the relationship between natural resource wealth and political regimes acknowledges the perverse effect of the former on the latter in general, only anecdotal evidence has been presented regarding the immunity of some countries to the detrimental effects of natural resource wealth. Indeed, there is nothing inherent in the rentier state hypothesis that explains or predicts why countries like Norway or Botswana did not become actual rentier states like Saudi Arabia and are able to maintain their democratic political regime. Norway, for example, is the world's seventh-largest oil and third-largest natural gas exporter as of 2008, and the petroleum sector accounts for nearly 50% of exports and 30% of state revenues (U.S. Central Intelligence Agency, 2008). Yet, the country was able to maintain the highest possible Polity regime score (+10) since the discovery of resource wealth until today (Marshall and Jaggers, 2007). Perhaps a more interesting case, Botswana's Polity regime score increased continuously during the last 40 years while the country, once considered to be one of the poorest countries in the world, has achieved middle-income country statues due to its diamond wealth and today Botswana has the second-highest Polity regime score (+9) while it relies on diamond revenues for a third of its GDP and 70-80% of its exports (U.S. Central Intelligence Agency, 2008). Also historically, Goldberg et al. (2008) points out to the historical experiences of countries such as the U.S., Canada, Australia and Great Britain which displayed no

symptoms of the political (and economic) resource curse despite significant natural resource wealth. The authors also note that while some scholars suggest that the rentier state hypothesis only applies to the developing world below a certain income threshold, "…the mechanisms adduced to explain the correlation are independent of income and therefore ought to still be at work" (Goldberg et al., 2008: 479). Thus, it can be argued that there is a gap in the literature regarding the question of why some countries do not experience the political resource curse despite significant natural resource wealth.

I. 2. PURPOSE

This study presents a first step towards answering the question of why natural resource wealth has strong antidemocratic effects in some countries but not in others. The starting observation for the study is that the existing studies do not distinguish between the different types of the broader economic setting of societies in which natural resource rents accrue. Informed by the newly emerging economic norms theory (Mousseau 2000, 2003, 2009; Mousseau and Mousseau, 2008) the present study addresses this issue systematically by introducing a new variable: the level of "contract-intensity" of a society, i.e. the degree by which individuals obtain their incomes, goods, and services by contracting on an impersonal market. Economic norms theory asserts that while individuals in contract-rich[1] societies are

[1]Throughout the text the terms of "contract-rich" and "contract-intensive" will be used interchangeably, referring to a society where most goods and services are highly commoditized on an impersonal market. The opposite of this situation is referred as to a "contract-poor" society. Due to the prevalence of clientelist relations in such societies the term "clientelist economy/society" would be also appropriate to characterize contract-poor societies; however, given some specific meanings of clientelism in the literature (e.g. political clientelism) this term is not used.

characterized with respect for the rule of law where people have "a direct interest in the existence of a strong state that enforces contracts impartially", societies consisting of individuals who are more dependent on favors reciprocally exchanged among in-groups (i.e. contract-poor societies) exhibit loyalty to group leaders (rather than to state institutions) and a tendency to discriminate against strangers (Mousseau and Mousseau, 2008: 330-332). If the economic norms theory is correct, then we would expect the detrimental political effects of natural resource wealth to be present only in societies with a low level of contract-intensity. The immunity of contract-rich societies to the detrimental effects of natural resource wealth can be attributed primarily to a lack of patronage opportunities and a collective interest in the rule of law. The present analysis will test this hypothesis with a time-series cross-country dataset of 156 countries from 1975 to 2006, building on and updating the study of Ross (2001). A more detailed discussion of economic norms theory and the hypothesis of the study will be presented in the next chapter but we can succinctly restate the hypothesis as:

H: Natural resource rents should be detrimental for democratic governance only in contract-poor societies. Once we account for a contract-poor society, natural resource rents alone should not hurt democracy, contrary to the general wisdom in the literature.

I. 3. JUSTIFICATION

The selection of the thesis topic can be justified on three dimensions. The first and most obvious reason for the importance of the thesis topic is that the present study aims to fill in a significant void in the comparative politics literature. The current literature on natural resource wealth vs. democratization postulates that the negative political effects of natural resource wealth are universal, i.e. the political resource curse should apply to all countries. Yet, we know that some countries (both in the present and historically) with significant natural resource wealth have escaped this curse, and to the best of my knowledge this thesis will be the first study to systematically investigate what these countries may have in common. Essentially, it will be argued that the rentier state hypothesis is underspecified such that natural resource rents are detrimental only in the context of a contract-poor society.

Second, the thesis topic is directly related to the arguments over the persistence of authoritarian regimes in the Middle East. Bellin (2004: 139) notes that "while the number of electoral democracies has nearly doubled since 1972, the number in this region [the Middle East and North Africa] has registered an absolute decline" and asks why the region has remained "so singularly resistant to democratization". Given that most of the highly oil-reliant states reside in the Middle East (Ross, 2001), it should be no surprise that the rentier state hypothesis has originated from this region in order to establish a causal link between natural resource wealth and the persistence of authoritarianism. Also Huntington (1991) has argued that the region of the Middle East may be an exception to the democratization trend of 1970-1980s due to the oil wealth of the states in the region which in turn

increases state control over society. Thus, the possession of significant natural resource wealth is blamed for the continuing rule of authoritarian regimes in the Middle East. The hypothesis of this study, on the other hand, argues that the primary explanatory factor for the persistence of authoritarianism is not the presence of natural resource wealth alone, but a combination of contract-poor economy *and* natural resource wealth. Natural resource rents by themselves should not be detrimental for democratic governance, but natural resource rents in the presence of a contract-poor economy should cause a slide in the regime towards authoritarianism. Given that the region of the Middle East represents a unique (albeit unfortunate) combination of countries with contract-poor economies (none of the countries in the Middle East has a contract-intensive economy) and significant natural resource wealth, it should be no surprise that it stands out as a region resistant to democratization.

Lastly, this study will present an empirical test of the economic norms theory in an area other than its original domain. Economic norms theory was originally constructed to explain peace among some nations by imposing economic conditionality on the so-called "democratic peace" (Mousseau, 2000) and was later successfully applied to other domains helping to explain the social roots of terror (Mousseau, 2003) and better human rights practices (Mousseau and Mousseau, 2008). As such, this study will present yet another testing avenue for the observable implications of the economic norms theory since if the theory is correct, contract-intensive economies should not be subject to the detrimental political effects of

natural resource wealth. I believe that testing a theory outside its original arena is a valuable endeavor to gauge the theory's predictive power.

I. 4. NATURAL RESOURCE WEALTH IN THE LITERATURE

It can be argued that in comparative politics literature the implications of possessing natural resource wealth have been analyzed primarily in three distinct yet related domains. These domains are the civil war literature (whether there is a causal link between natural resource wealth and occurrence of civil war), economic development literature (whether natural resource wealth impedes or enhances economic development), and democratization literature (whether natural resource wealth has an effect on political regime). While the literature on natural resource wealth vs. democratization will be reviewed in detail in the next chapter, I will very briefly discuss the place of natural resource wealth in the civil war and economic development literature in the following.

I. 4.1. Natural Resource Wealth and Civil War

De Soysa and Neumayer (2007: 201-202) note that it has been generally acknowledged in the literature that natural resource wealth is a cause of civil war, and there are two "distinct and prominent models explaining the link – finance for rebellion and weak states". Having reviewed 14 cross-national econometric studies from 1998 to 2004, Ross (2004) also concludes that as a statistical regularity oil wealth (but not some lootable commodities like gemstones and drugs) seems to increase the likelihood of civil war, yet this result is not robust and depends on

coding of civil wars. Moreover, "cross-national studies often suggest causal mechanisms but provide little evidence to back them up" (Ross, 2004: 340).

The first proposed causal mechanism, finance for rebellion, is pioneered by Collier (2000a, 2000b) and Collier and Hoeffler (1998, 2004). Essentially, this research project looks for economic causes of civil wars based on a rational choice theory perspective with the assumption that "rebels will conduct a civil war if the perceived benefits outweigh the costs of rebellion" (Collier and Hoeffler, 1998). Conducting civil war is a costly (and risky) activity and there should be some kind of incentive for people to participate in such an endeavor. In the model of Collier and Hoeffler (1998: 564) "the incentive for rebellion conditional upon victory is determined by the capacity of a future rebel government to reward its supporters". Thus, the role of natural resource wealth in this setting is that it both encourages participation of people (leaders can credibly promise private gain conditional upon victory) and provides opportunity to finance a large enough force to incite and sustain a civil war (de Soysa and Neumayer, 2007). Yet there is a caveat in this argument: The relationship between natural resource wealth and likelihood of civil war is not linear. Although higher natural resource wealth initially increases probability of civil war, at some threshold the likelihood of civil war actually begins to decrease. The argument here is that higher natural resource wealth for a state means a larger army and after some point it would be prohibitively costly for a rebel group to conduct civil war (Collier, 2000b; de Soysa and Neumayer, 2007).

The second causal mechanism that seeks to explain the link between natural resource wealth and civil war points out that countries with significant natural

resource wealth (particularly oil) have exceptionally weak state institutions (Fearon and Laitin, 2003; Fearon, 2005). Fearon and Laitin (2003: 81) argue that "oil producers tend to have weaker state apparatuses than one would expect given their level of income because the rulers have less need for a socially intrusive and elaborate bureaucratic system to raise revenues – a political "Dutch disease"". De Soysa and Neumayer (2007) suggest that natural resource abundance might cause leaders to display excessive patronage and rent-seeking behavior, undermining the effectiveness of state institutions. As an example, Humphreys (2005: 513) cites Mobutu's Zaire, an administration that is "divorced from the domestic economy". The implication is that such states are more vulnerable to socioeconomic and political breakdown and the presence of a lootable resource makes the state "a more tempting prize relative to working in the regular economy", increasing the likelihood of a civil war (Fearon, 2005: 487).

I. 4.2. Natural Resource Wealth and Economic Development

The empirical investigations of a possible causal link between natural resource wealth and economic wealth has been sparked by the observation that "resource-poor and economies often vastly outperform resource-rich economies in economic growth", both historically and in the late 20th century (Sachs and Warner, 1995: 1). Goldberg, Wibbels and Mvukiyehe (2008) note that proponents of the claim that natural resource wealth impedes economic growth have put forward two causal mechanisms to explain the correlation. The first mechanism is directly related to the rentier state hypothesis in the sense that the politically-motivated distribution of

resource rents inevitably results in inefficient investments, draining the country's financial resources. Moreover, rent-seeking behavior becomes the dominant economic activity in a rentier state and pushes productivity further down (Goldberg et al., 2008).

The second mechanism proposed to explain why natural resource wealth may hinder economic development is the real exchange rate appreciation of a resource-exporting state, better known as the Dutch Disease (Sachs and Warner, 1995; Goldberg et al., 2008). Boom periods of a large natural sector make other domestic economic sectors extremely uncompetitive compared to foreign markets by causing an overvaluation of the currency. In turn, the distribution of employment and investment in the economy radically shifts away from non-mineral tradable goods manufacturing, leading to the de-industrialization of the economy and subsequent low growth performance (Sachs and Warner, 1995). As it is the case in the civil war literature, the general wisdom in the economic development literature about the effects (at least in the long-term) of natural resource wealth is quite negative.

I. 5. ORGANIZATION OF THE THESIS

This thesis is composed of six chapters. The second chapter will present an overview of prior research surrounding the quantitative democratization literature on the impact of economic development, economic crises and natural resource wealth on political regimes. The focus of the discussion will be on the hypothesized causal relationship between natural resource wealth and authoritarianism where the two most-frequently cited causal mechanisms behind the effect of natural resource wealth on political

regimes in the literature –the rentier effect and repression effect- are presented. At this point, some methodological notes regarding the studies of natural resource wealth vs. democratization literature will be discussed, highlighting important methodological similarities as well as differences across the studies in this field.

The following third chapter will introduce the theoretical perspective of the current study. First, it will be stressed that the existing theoretical explanations for the political resource curse fail to explain why some countries have not been adversely affected by natural resource wealth. As an explanation for this situation, it will be argued that the existing arguments do not distinguish between the different socio-economic settings in which natural resource rents accrue and thus, they are essentially underspecified. At this point the economic norms theory will be proposed as a novel approach to remedy for this deficiency of the literature, allowing us to distinguish between the different socio-economic settings (i.e. contract-poor vs. contract-rich). In order to introduce the economic norms theory the study will present brief discussions on new institutionalism, bounded rationality and political clientelism. Using the framework of the economic norms theory and as a response to the puzzle of why some countries are immune to the negative political effects of natural resource wealth, it will be argued that societies with highly contract-rich economies should be significantly less prone to the detrimental political effects of resource wealth primarily due to a collective interest in the rule of law and lack of patronage opportunities.

In the fourth chapter we will introduce the dataset and methodology used to test the hypothesis of the study where all the independent, dependent and control

variables as well as the utilized estimation method will be discussed. This chapter also includes a methodological discussion on the significance of selecting appropriate control variables for the empirical model. The next (fifth) chapter reports the results of the analysis which includes data from 156 countries between 1975 and 2006. The results broadly support the hypothesis of the study: Once we account for the presence of a contract-poor economy, the detrimental political effects of natural resource wealth disappear. That is, significant resource rents have negative effects on democratic governance only in contract-poor societies whereas in contract-rich societies no such effect could be observed. The following last chapter reviews the study and discusses the implications of the results.

CHAPTER II

PRIOR RESEARCH

This chapter will review the prior research on the relationship between economic development (as well as some other economic factors such as economic crises, globalization and income distribution) and democratization before discussing the literature about the impact of natural resource wealth on political regimes in depth.

II. 1. ECONOMIC DEVELOPMENT AND DEMOCRATIZATION

Given that the subject of this thesis is the relationship between natural resource wealth and democratic governance, it would be appropriate to briefly review the quantitative democratization literature, especially the studies focusing on the link between economic development and democratization. In this respect, the seminal work of Lipset (1959) can be considered as the earliest and the most influential study establishing a positive relationship between economic development and democratic governance. Advocating that there should be a set of conditions (social requisites, to use the actual term) that cause the rise of democratic governance in a country, he asserts that economic development is one of the structural characteristics of a society that sustains a democratic political system. Lipset (1959) considers economic

development as a complex phenomenon comprising industrialization, wealth, urbanization and education.

In order to test this very broad hypothesis, the paper considers two areas (Latin America and European/English-speaking countries) and makes an internal comparison between the levels of democracies of countries within these regions in order to control for different political cultures. The explanatory variables are the above mentioned four factors that comprise economic development which have been operationalized in various dimensions (e.g. per capita income and number of telephones per thousand persons for wealth, tons of coal consumed per person-year for industrialization etc.). The averages of these indices have been computed for the countries which have been classified as more or less democratic in both areas. As a result, Lipset (1959: 75) reports that "…in each case, the average wealth, degree of industrialization and urbanization, and level of education is much higher for the more democratic countries". It is this correlation (or some variants of it) that has been tested continuously by scholars until today.

Although Lipset (1959) establishes the positive relationship between economic development and democratic governance as a strong empirical regularity, theoretical explanations for it are not so clear. Very broadly, the essence of Lipset's argument can be found in the following excerpt:

> From Aristotle down to the present, men have argued that only in a wealthy society in which relatively few citizens lived in real poverty could a situation exist in which the mass of the population could intelligently participate in politics and could develop the self-restraint necessary to avoid succumbing to the appeals of irresponsible demagogues (Lipset, 1959: 75).

The paper suggests a number of causal mechanisms to explain the correlation. First, economic development permits people in the lower classes to develop a more complex and gradualist view of politics, making them less susceptible to having extreme political views. Second and related with the first one, increased wealth causes a significant enlargement of the middle class in the society. Lipset (1959: 83) argues that a large middle class is important for democratic governance since it is "able to reward moderate and democratic parties and penalize extremist groups". Third, economically developed nations will be politically more tolerant since there is enough wealth in the country rendering it insignificant if some redistribution takes place. In contrast, if the loss of office is considered to be an important loss for major power groups –as it is a more probable case in an underdeveloped country - then the political groups could clash with each other to retain the office. Lastly, Lipset (1959) points out that economic development ensures the presence and effectiveness of intermediary institutions which can act as a balancing power to the executive and help sustain democracy. In short, Lipset (1959) outlines several mechanisms about how development promotes democracy.

Many empirical studies following the path opened by Lipset (1959) have reported that economic development has a positive impact on democratic performance (e.g. Burkhart and Lewis-Beck, 1994; Londregan and Poole 1996; Barro, 1999; Feng and Zak, 1999). Most studies in this area employ a continuous measure of democracy, scored numerically from low to high values, as the dependent variable obtained from two primary datasets (Freedom House and Polity index) while some papers build on survival analysis where they seek to investigate instances of

democratic transition or breakdown (e.g. Feng and Zak, 1999). As for the independent variables, the most used variables to measure economic development include GDP per capita, GDP growth rate, and energy consumption per capita. Control variables most commonly included in the models are prior democratic experience, urbanization rate, ethnolinguistic/religious fractionalization, trade dependence, and dummy variables for some religions (such as Islam and Confucianism). Using this general framework, Burkhart and Lewis-Back (1994) notes that while the lagged economic development variable is a significant predictor of democracy, the lagged democracy variable is not a significant predictor of economic development, suggesting that the causality runs from economic development to democracy. Similarly, Barro (1999) notes that the propensity for democracy rises with GDP per capita, the level of primary schooling and a smaller gap between male and female primary school attainment. Contrary to the original hypothesis of Lipset (1959), however, he reports that propensity for democracy tends to fall with urbanization (for a given standard of living). Employing a survival analysis, Feng and Zak (1999: 163) assert that democratic transitions are more likely to take place "…in nations where GDP per capita is relatively high, income inequality is relatively low, the citizenry are better educated, and there is a history of democratic experiences". It should be noted, however, although these studies are broadly supportive of ideas of Lipset (1959), they do not develop a novel theoretical perspective.

A significant challenge to the modernization perspective of Lipset (1959) is presented by Przeworski and colleagues (Przeworski, Alvarez, Cheibub and Limongi

1996; Przeworski and Limongi 1997). In essence, this stream of literature asserts that democratization is an outcome of society's key players' actions, not of conditions, and thus the emergence of democracy is not a by-product of economic development. However, once democracy is established, only then do economic factors play a role such that the chance for the survival of democracy is greater when the country is richer. Thus, the essential hypothesis of Lipset (1959) that development breeds democracy is not correct and we observe a higher proportion of democracies among rich countries than among poor countries because economic development makes established democracies less likely to fall into dictatorship. In a nutshell, the causal mechanism is presented as "…in poor countries the value of becoming a dictator is greater and the accumulated cost of destroying capital stock is lower. In wealthy countries, by contrast, the gain from getting all rather than a part of total income is smaller and the recuperation from destruction is slower. Hence, struggle for dictatorship is more attractive in poorer countries" (Przeworski and Limongi, 1997: 166). Empirical analysis suggests that a democracy can be expected to last an average of only about 8.5 years in a country with a per capita income of $1,000 while it can last 100 years for an income interval of $4,000 to $6,000 (Przeworski et al., 1996). Interestingly, the authors confidently assert that "…with per capita income of more than $6,000 a year, democracy is certain to survive, come hell or high water" (Przeworski et al., 1996: 49), pointing out that no democratic governance has ever fallen in a country where per capita income level exceeds $6,055.

The assertions of Przeworski and his colleagues did not remain unchallenged, of course. Referring to Przeworski and Limongi (1997-hereafter as PL1997) as "a

study that hit the field of political development like a bolt of lightning and immediately changed the landscape", Boix and Stokes (2003: 517) challenge PL1997's analysis on both theoretical and empirical grounds. Formalizing the causal mechanism explained in PL1997, Boix and Stokes (2003) show that economic development is positively linked to democracy not only under the condition of a preexisting democracy (as PL1997 assert) but also of a preexisting autocracy. Methodologically, Boix and Stokes (2003) argue that PL1997 suffers from sample selection problem and omitted variable bias. By correcting for these deficiencies, Boix and Stokes (2003) report that economic development increases both the probability of the transition to democracy and the probability that an existing democracy will sustain itself. This fact is, however, less salient if we look only to the post-1950 sample (as PL1997 does) because countries that were economically developed by 1950 were already democratic by that time. By extending the sample to observations starting in the mid-nineteenth century, Boix and Stokes (2003) remedy this problem and reach a different conclusion than PL1997 does.

Another interesting challenge to Przeworski and colleagues come from Epstein, Bates, Goldstone, Kristensen and O'Halloran (2006) who find the study of Przeworski et al. (2000) flawed and argue that a more reined measure of regime type generates evidence for the impact of GDP on democratization. Specifically, Epstein et al. (2006) note that Przeworski et al. (2000) employ a dichotomous classification of political regimes where governments are classified as either being democratic or authoritarian. Such a specification, they argue, ignores a significant possibility of an intermediate category, "partial democracies" which possess only some properties that

define full democracies (operationalized as countries with Polity regime score between +1 and +7, examples are Russia and Venezuela). After the inclusion of this category in their model, Epstein et al. (2006: 566) report that "…higher incomes per capita significantly increased the likelihood of democratic regimes, both by enhancing the consolidation of existing democracies and by promoting transitions from authoritarian to democratic systems". Noting that partial democracies are poorly understood while becoming more numerous and influential in global politics, the authors also make a call for a shift away from the study of autocracies and democracies towards the study of partial democracies in the democratization literature.

Lately, another significant research project led by Daron Acemoglu and James A. Robinson argues that although economic development (specifically income per capita) and the level of democracy are correlated, there is no evidence of a causal effect of income per capita on democracy (Acemoglu and Robinson, 2000, 2001, 2006; Robinson, 2006; Acemoglu, Johnson, Robinson and Yared, 2008). They point out that the relevant literature underemphasizes the importance of identifying and testing a causal relationship, and "there is a big gap between the theory and testing" (Robinson, 2006: 504). Moreover, the majority of empirical work positing a causal relationship between income per capita and democracy suffers from methodological problems (especially from omitted variable bias), and once these problems are accounted for, the causal effect of economic development on democracy disappears.

Specifically, Acemoglu and Robinson point out that the current empirical studies on economic development vs. democracy treat the economic development variable (income per capita) to be exogenous to the system where in fact it is very likely that there are some omitted variables that may have causal effect both on the type of political regime and level of economic development. Robinson (2006: 518) states that "many aspects of the institutions and organization…of a society will help to determine its prosperity and its level of democracy. Yet many of these factors will be unobserved and thus omitted from the equations we estimate". The result of this omission is that the ordinary least-squares (OLS) estimator in the model will be biased and inconsistent since a consistent estimation of the income per capita parameter using OLS regression requires it to be uncorrelated with the error term. Thus, the existing studies essentially do not control for factors that simultaneously affect both economic and political development and therefore are misleading (Acemoglu et al., 2008).

In order to test the potential causal effect of economic development on democracy properly, Acemoglu and Robinson propose two methodological strategies (Robinson, 2006; Acemoglu et al., 2008). First, they note that major sources of potential estimation bias in a regression of democracy on income per capita are country-specific, historical factors that affect both political and economic development. If we assume that these characteristics are time-invariant for the time being, then the inclusion of fixed effects[2] will account for these omitted variables and

[2] Fixed effects regression is a method for controlling for omitted variables in panel data when the omitted variables vary across entities but do not change over time. A fixed effects regression model includes a set of binary variables which absorb the influences of all omitted variables that are constant over time (Stock and Watson, 2003: 278-283).

remove the bias. By giving the example of comparing the U.S. and Colombia in terms of economic development and democratic level, Acemoglu et al. (2008) note that "the idea of fixed effects is to move beyond this comparison and investigate the "within-country variation", that is, to ask whether Colombia is more likely to *become* (relatively) democratic as it *becomes* (relatively) richer". Such an approach is also compatible with the original hypothesis of Lipset (1959) who articulated that countries should become more democratic as they get richer. Introducing fixed effects to the models, however, eliminates the positive relationship between income per capita and democracy: there is no indication that as countries become richer they also become more democratic (Robinson, 2006; Acemoglu et al. 2008). Moreover, this result is robust to using different indicators for democracy (Freedom House vs. Polity), to different country samples, and to different econometric specifications (linear vs. nonlinear effects of income on democracy).

The second methodological strategy employed by Acemoglu and Robinson directly addresses the problem of endogeneity of income per capita variable. To state the problem again, an explanatory variable is considered to be endogenous to the regression equation if it is correlated with the disturbance term. If this is the case, than OLS estimation is inconsistent for every explanatory variable (Ramsay, 2007). Instrumental variable regression addresses this problem by introducing a valid exogenous variable (called instrument) for economic development that is not correlated with democracy. Specifically, Acemoglu and Robinson use two instruments for this purpose (Robinson, 2006; Acemoglu et al., 2008): The first instrument is past saving rates of a country; the authors argue that variations in past

saving rates affect income per capita but do not have a direct relationship with democracy. The second instrument employed in the study is more complicated and consists of a matrix of trade shares that constructs predicted income per capita levels for each country using a trade-share-weighted average income of other countries. The authors justify this instrument by pointing out that while it has considerable explanatory power for income per capita of a country, it should not directly affect the democracy level. As a result of these procedures, it has been shown that the estimated coefficient of the income per capita variable is indistinguishable from zero if we correct for its potential endogeneity using the above-mentioned instruments. The authors conclude that along with the fixed-effects procedures discussed earlier, this result presents further evidence that the previous studies have reported a positive relationship between economic development and democracy due to omitted-variable bias (Robinson, 2006; Acemoglu et al., 2008).

The last theme in the research agenda of Acemoglu and Robinson is to explain the presence of a positive cross-country correlation between income per capita and democracy despite the lack of a causal impact of the former on the latter. In a nutshell, they argue that "the same things that cause sustained economic development, such as good economic institutions (secure property rights, a level playing field, equality before the law, etc.), also influence whether a country is democratic" (Robinson, 2006: 516), so that "the political and economic development paths are interwoven" (Acemoglu et al., 2008). To illustrate the argument, Robinson (2006) notes that nondemocratic elites would typically attempt to create rent-extracting economic institutions which are detrimental for prosperity while at the

same make also democratization more difficult since elites would lose too much if the country democratizes. In contrast, the presence of a favorable institution like secure property rights both promotes economic growth and helps democratization since it lessens the stakes from the politics for the nondemocratic elites. Ultimately, Robinson and Acemoglu assert that the impact of such different institutions implies that income per capita and democracy will be positively correlated due to the effects of the same underlying factors and not due to a causal connection between them.

II. 2. ECONOMIC CRISES, GLOBALIZATION, AND DEMOCRATIZATION

Before moving on to the discussion of the role of natural resource wealth on the democratization literature, it would be appropriate to briefly discuss some important studies that do not precisely focus on economic development, yet consider the role of economics on democratization by analyzing the impact of economic crises, globalization, and income distribution. Gasiorowski (1995), for example, questions whether there is a systematic relationship between economic crises and political regime change such that economic crises may trigger democratic breakdown and/or democratic transition. The theoretical background of the study owes to the works of O'Donnell (1973) and Linz (1978) who argue that democratic breakdowns occur when governments face severe economic crises and are unable to carry out necessary reforms due to popular pressure. Using the variables of inflation rate and real economic growth rate as indicators of the presence/absence of an economic crisis and considering the period of 1950 to 1989, Gasiorowski (1995) reports that while

economic crises usually trigger democratic breakdowns, their role on democratic transitions are not clear.[3]

The effect of globalization on democratization is another issue of interest in the literature. Noting that the relevant theoretical literature presents conflicting views on this issue, Li and Reuveny (2003) presents the first study systematically assessing the effects of globalization on democracy. Specifically, the authors measure globalization by four indicators: Trade openness, Foreign Direct Investment (FDI) inflow, portfolio investment inflow, and spread of democratic ideas (operationalized as the yearly number of democracies within a region around each country). Controlling for other economic variables (such as inflation, GDP per capita, GDP growth rate), Li and Reuveny (2003: 52-53) report that (i) trade openness and portfolio investment inflows negatively affect democracy, (ii) FDI inflows have a positive impact on democracy but it weakens over time, and (iii) the spread of democratic ideas positively affect democracy that is consistent over time. Together these results suggest that "globalization erodes the prospects of democracy" (Li and Reuveny, 2003: 53). According to the authors, the primary reason for this finding is the lack of social safety nets in developing countries where class cleavages are exacerbated as a result of the negative effects of globalization. A similar argument is also advanced by Rudra (2005: 705) who argue that "…if safety nets are used during globalization as a strategy for providing social stability and maintaining political

[3] Interestingly, Gasiorowski (1995) notes that the period of 1980s qualitatively differs from the rest of the time period considered in the study: While high inflation increased the likelihood of democratic breakdown until the mid-1970s, no such effect was present afterwards. Moreover, high inflation reduced the likelihood of democratic transition until 1970s, yet it marginally increased the same likelihood in the late 1980s. Gasiorowski (1995: 892) cautiously suggests that these findings "…support the arguments of [Karen] Remmer and [Samuel] Huntington that the processes affecting democratization were very different in the 1980s than in earlier eras".

support for the existing authorities, democratic rights in LDCs will improve". By considering 59 developing countries from 1972 to 1997 and measuring the degree of globalization by capital and trade flows, Rudra (2005) reports that openness in trade and capital markets has a positive effect on democracy if and only if the social spending simultaneously increases. If there is no change in social spending, the conditional effect of capital flows on democracy is significant and negative. Thus, Rudra (2005: 716) concludes that "democratization in LDCs is…a function of increasing exposure to global market activity *and* spending on welfare".

Lastly, Reenock, Bernhard and Sobek (2007) analyze the role of socioeconomic distribution on democratic breakdown. Their work is motivated by the observation that "if inequality is detrimental to the survival of democracy, why in the face of rising income inequality do many democracies appear to be in a period of stability unequaled in their histories?" (Reenock et al. 2007: 693). The authors' explanation for this "puzzle" is that democratic governance is threatened only if democracies develop economically and fail to respond to the basic needs of their people at the same time, because in this case it is more likely that radical demands for redistribution will emerge. Such a situation is named as "regressive socioeconomic distribution" (the presence of basic needs deprivation despite economic development) and measured by an interactive term involving average daily per-capita caloric consumption and the real GDP per capita. The results of the regression model confirm that basic needs deprivation attenuates the positive benefits of economic development on democratic governance. Especially for democracies that reach mid-level development the issue of addressing regressive socioeconomic distribution is

significant. Developed democracies, on the other hand, are not negatively affected by rising income inequality because the basic needs of the citizens are already met.

II.3.THE IMPACT OF NATURAL RESOURCE WEALTH ON DEMOCRACY

In this broader picture of democratization literature, the first systematic test about the impact of natural resource wealth on democracy has been conducted by Ross (2001). Ross (2001: 325) describes his motivation by noting that "the 'oil impedes democracy' claim has received little attention outside the circle of Middle East scholars; moreover, it has not been carefully tested with regression analysis, either within or beyond the Middle East". Many empirical large-n studies of democratization (e.g. Inglehart, 1997; Przeworski and Limongi, 1997; Przeworski et al., 2000) do not incorporate the Middle East region into their analyses or drop the oil-rich states from their database (Ross, 2001). Qualitative studies of natural resource wealth, on the other hand, almost exclusively are limited to the Middle East. The problem with this situation is that, as Ross (2001: 331) notes "…the Mideast is nevertheless a difficult place to test this claim, since virtually all oil-rich Mideast governments have been highly authoritarian since gaining independence. The absence of variation on the dependent variable…has made testing difficult". Against this perspective, the study of Ross (2001) has a threefold purpose: First, it checks the validity of "oil impedes democracy" claim. Second, it inquires the claim's generality along the geographical and sectoral dimensions. Lastly, the possible causal mechanisms behind the claim have been explored. The next section will review the

two most-frequently cited causal mechanisms behind the effect of natural resource wealth on political regimes –the rentier effect and repression effect- in the literature.

II. 3.1. The Rentier State Hypothesis

Although the term "rentier state" was first used by Mahdavy (1970), it is Beblawi's (1987) definition of rents and rentier state that is widely recognized in the literature: A rentier state depends on rents for a large portion of its revenues where rents come from foreign actors, accrue directly to the state, and "only a few are engaged in the generation of this rent (wealth), the majority being only involved in the distribution or utilization of it" (Beblawi, 1987: 51). Herb (2005) further notes that the generated wealth is also largely independent of any efforts made by citizens of the rentier state and is a result of windfall profits. In this respect, while states that heavily rely on oil and mineral exports for revenues qualify as rentier states, exporters of agricultural commodities do not (Ross, 2001). Particularly the oil exporting states are considered to be rentier states *par excellence*: The exploitation of oil is more depletable, more capital-intensive, more enclave-oriented, and more centralized in the state compared to other commodities and it also results in very high levels of rents over a long period of time (Karl, 1999).

In the context of rentier state, the literature identifies two causal mechanisms through which natural resource rents exert a detrimental effect on democratic governance (Ross, 2001; Okruhlik, 1999; Smith, 2004; Herb, 2005; Ulfelder, 2007). The first mechanism is related to the taxation need of the state: As natural resource rents increase to constitute a significant share of government's revenues, the state is

effectively relieved of the need to tax the population. Smith (2004: 233) points out that in such a situation the government "…evolves from an extractive state into a distributive one". The crucial reasoning at this point is that this absence of tax burden reduces the citizens' interest in government accountability so that the public will be less likely to demand representation in the government (Ross, 2001). Ulfelder (2007) designates this mechanism of perverse effects of natural resource wealth on democratization as a "demand-side explanation" where the rents reduce popular pressures for government accountability and democratization.

The second mechanism through which natural resource wealth negatively affects political development is designated as the "spending effect" by Ross (2001). Essentially, this mechanism asserts that governments that fund themselves through natural resource rents tend to have greater spending on patronage to buy off opposition (Ross, 2001; Herb, 2005). In this way, externally obtained natural resource rents are distributed internally using political criteria as the central mechanism of allocation, resulting in networks of complicity (Karl, 1999). Okruhlik (1999) points out that in rentier states government funds are used as a source of control to maximize obedience by manipulating the structure of the market and the flow of funds. Overall, such effects of natural resource wealth on the durability of autocracies can be considered as the "supply-side explanation" where rentier states are able to resist calls for democratization through the domestic distribution of accrued rents (Ulfelder, 2007).

Although the taxation and spending effects described above together constitute the core of the rentier state hypothesis and many studies that examine the

relationship between natural resource wealth and regime type/democratization employ the rentier state hypothesis as their theoretical base, the testing of these causal mechanisms (taxation and spending effects) in the literature is actually rare. Herb (2005), Ulfelder (2007) and Ramsay (2007), for example, examine the link between rentier states and democracy using large datasets without actually invoking the causal mechanisms behind the rentier state hypothesis, but by simply testing the relationship between the magnitude of a country's natural resource rents and its regime type. While Ulfelder (2007) and Ramsay (2007) conclude a negative relationship between natural resource wealth and political institutions, Herb (2005) does not find empirical support for the harmful effects of rentierism on democracy scores. Specifically, invoking the argument of Lipset (1959) that development is positively correlated with democracy, he asserts that "…the definition of rentierism assures that rentier state will be drawn largely from amongst the world's poorer states, and hence those that we would expect to be more authoritarian" (Herb, 2005: 310). Instead, the study finds that democracy scores in the surrounding region are strongly correlated with a country's own democracy score. Regardless of the results, however, we should be careful about these studies since they only examine the overall correlation between natural resource rents and political regime score of a country without actually testing specific hypotheses about the observable implications of the proposed underlying causal mechanisms.

The study of Ross (2001), on the other hand, is one of the very few studies that directly test the observable implications of the causal mechanisms of taxation and spending effects. Analyzing panel data across 113 countries from 1971 to 1997

and measuring natural resource revenues (in this case oil and minerals) by export values as a fraction of GDP, the study concludes that natural resource wealth has a statistically significant negative correlation with a country's political institutions. In order to test the taxation effect, Ross (2001) considers the hypothesis that states that fund themselves through personal and corporate taxes (operationalized as the percentage of government revenue raised through taxes on goods, services, income, profits and capital gains) should be more democratic whereas states that fund themselves through other means should be more authoritarian. As a result, he finds that a higher percentage of personal and corporate tax revenues in the total government budget is significantly associated with more democratic government. However, this effect is significant only when the taxes-variable is lagged one year; if the same variable is entered with two- or three year lags, then it loses significance. As for the spending effect, Ross (2001) tests the hypothesis that higher levels of government spending should result in less democracy. He finds that as expected, more government spending is associated with authoritarian regimes. Moreover, this effect remains significant even if the government spending variable is introduced with a three-year lag instead of one. In short, we can assert that while the study of Ross (2001) presents evidence for the spending effect, the support for the taxation effect is more ambiguous.

A directly observable implication of the spending effect is related to the boom and bust periods of natural resource wealth revenues. During the boom periods, the rentier state is able to amass more revenues so that it has greater capability to buy off opposition by patronage networks. In a similar vein, we would expect the natural

resource rents to decrease significantly during the bust periods so that the government should experience difficulties to contain opposition in the society by spending. Thus, regimes dependent on natural resource wealth should be prone to greater instability during the bust periods. It is this hypothesis that Smith (2004) tests when he compares oil-rich states across pre-boom, boom, and bust periods in terms of regime durability. Surprisingly, the study reports that although oil wealth is associated with more durable regimes, neither the boom nor the bust periods have any significant effect on regime durability of oil dependent countries. For our purposes, it is important to note that the durability effect of natural resource wealth is independent of consistent access to rents and the bust periods create no tendency for regime crisis. Smith (2004: 242) points out that "this trend of regime durability, its robustness throughout the oil bust period…suggests that there is more to the durability of regime in oil-rich states than patronage and coercion" and as a mechanism to explain this outcome he only asserts that "…many of these regimes may have had robust social coalitions that went much deeper than the simple purchase of legitimacy" (Smith, 2004: 242), leaving the details of his proposition as a agenda for future research. In short, the study of Smith (2004) casts doubt on the empirical validity of the spending effect.

In a case study of opposition in Saudi Arabia, a classic rentier state, Okruhlik (1999) also questions the claim that in a rentier state opposition to the government should be very weak since the government can buy off the opposition, essentially the hypothesis of the spending effect. Contrary to the conventional view, he asserts that natural resource rents can be a catalyst for opposition to the state rather than a tool to

pacify dissent for two reasons.[4] First, external rents are usually distributed inequitably among the domestic actors for political reasons and since the prosperity of private citizens is dependent upon the acquisition of government wealth through access to state contracts, the unequal distribution of rents may engender resentment towards the government. In the case of Saudi Arabia, for example, the governing al-Saud family has strongly favored their home region of Najd (the center region around the capital Riyadh) in expense of the Hejaz region (the area around Jeddah and Makkah, the traditional commerce center of Arabian peninsula) while redistributing immense oil revenues, causing the emergence of a Hejazi merchant community advocating their interests against the government decisions. Thus, in the case of Saudi Arabia the deployment of wealth has fostered challenges to the regime's authority by those who think that they did not get their fair share of rents. Second, Okruhlik (1999) argues that natural resource wealth can provide potential dissenters with the resources necessary for mobilization against the government. Again in the example of Saudi Arabia Okruhlik (1999) recalls that several individuals and social groups who actually benefited from the redistribution schemes of the government have voiced their demands for government reform. Specifically, their demands were not for democracy but for predictability and regularity of governance, i.e. for the rule of law. Thus, the case study of Okruhlik (1999) demonstrates that the role of natural resource wealth in the creation of a politically quiescent population (the spending effect) should not be exaggerated.

[4] Recently we have witnessed the emergence of several disputes between the Iraqi central government and the autonomous region of Northern Iraq. It has been noted that the Northern Iraqi local government is able to voice opposition to central government due to its large oil reserves. (Robertson and Farrell, 2009; Bruno, 2008; The Economist, 2009; Today's Zaman, 2008).

A game-theoretical model of the rentier state hypothesis focusing on the effects of resource rents on political competition and a comparative analysis of three natural resource rich countries (Norway, Botswana and Nigeria) are presented by Wantchekon (2002). Specifically, he argues that "…when state institutions are weak so that budget procedures either lack transparency or are discretionary, resource windfalls tend (1) to help consolidate an already established authoritarian government and (2) generate incumbency advantage in democratic elections, which could incite the opposition to resort to political violence in competing for political power, thereby generating political instability and authoritarian governments" (Wantchekon, 2002: 2). According to the argument, if the ability of the state to enforce the law is weak, the incumbent government will have some discretionary power to distribute natural resource rents to citizens. In turn, this power provides both an informational advantage to the incumbent government over the availability of rents and the ability to structure the state budget for gaining electoral advantage. This position gives the incumbent government a significant advantage in democratic elections and if the opposition in the country is unable to resort to illegal means to compete for political power, then we observe a situation of long-term one-party dominance with seemingly democratic governance. In a more probable situation, however, the opposition can potentially use political unrest and anticipating this, the incumbent government can take authoritarian measures (e.g. banning the opposition party), ultimately leading to an authoritarian regime. Thus, in either case we observe a significant relation between natural resource wealth and authoritarianism where the key point leading to

such an outcome is the discretionary power of the incumbent government over the distributive policies of rents (Wantchekon, 2002).

The study of Wantchekon (2002) is especially interesting since it explicitly tries to account for why natural resource wealth leads to authoritarian regimes in some countries but not in others. A transparent and rule-oriented process of rent distribution (or budget allocation), argues Wantchekon (2002), would ensure that the electoral process is competitive and as a result, the democratic governance would be preserved even in a rentier economy. Thus, the case of Norway constitutes an example where budgetary procedures are transparent and the executive has limited discretion over the distribution of rents, eliminating any potential incumbency advantage. To a lesser extent compared to Norway, Botswana had also a strong state and a relatively decentralized government structure at the time of natural resource (diamonds) discovery and although the resource abundance created incumbency advantage and one-party dominance, the country did not slide to authoritarianism.[5] On the other hand, Nigeria had a weaker state capacity when oil was discovered which created a more centralized federal system and incumbency advantage. In turn, marginalized political groups reverted to nonconstitutional means of competing for political power leading to political instability and an authoritarian political rule. In short, Wantchekon (2002) asserts that the key variable affecting the relationship between natural resource wealth and political regimes is the level of incumbent's discretion over the distribution of natural resource rents which is determined by the

[5] The case of Botswana attracted considerable attention in the literature and different explanations for the "Botswanan exceptionalism" exist. Dunning (2005), for example, points out to the unusual structure of the world market for diamonds (the primary export commodity of Botswana) that provided Botswana a steady stream of resource revenues with very low volatility which in turn helped the country to escape economic and political resource curse.

presence (or the lack) of a transparent and rule-oriented process. Later, Jensen and Wantchekon (2004) also present empirical evidence for this claim by analyzing 46 sub-Saharan countries in Africa from 1960 to 1995.

Lastly, an interesting article by Thomas Friedman (2006: 30) suggests that "…there must be a correlation…between the price of oil and the pace, scope, and sustainability of political freedoms and economic reforms in certain countries". Naming this correlation based on few observations (e.g. Iran, Venezuela, Russia) as the "First Law of Petropolitics", Friedman (2006) asserts that the price of oil and the pace of freedom always move in opposite directions in oil-rich petrolist states – states that are defined to be both dependent on oil production for the bulk of their GDP and have weak state institutions. Again the rentier state hypothesis stands at the heart of the causal mechanism underlying the suggested "law" while Friedman (2006) repeatedly invokes the arguments of Ross (2001). The novel contribution of the "First Law of Petropolitics", according to Friedman (2006), is that it posits a correlation between the price of oil and the pace of freedoms so that it moves beyond the dominant argument in the literature, namely that an overdependence on oil is pernicious for democracy. Although the examples presented in Friedman (2006) to support the general argument are quite striking, it is not based on a systematic observation but on a few highlighted cases.

II. 3.2. The Repression Effect

Apart from the rentier state hypothesis, another causal mechanism in the literature linking natural resource wealth and authoritarianism –albeit far less discussed than

the rentier state claim- is the repression effect (Ross, 2001; Smith, 2004; Bellin, 2004). In a nutshell, the repression effect's main argument is that "…citizens in resource-rich states may want democracy as much as citizens elsewhere, but resource wealth may allow their governments to spend more on internal security and so block the population's democratic aspirations" (Ross, 2001: 335). In order to test the validity of the claim that states with natural resource wealth arm themselves more heavily than others, Ross (2001) considers two variables: the size of the military budget as a fraction of GDP and the size of the military personnel as a fraction of country's labor force. Covering about 100 states between 1985 and 1995, Ross (2001) reports that while military spending is positively and significantly associated with oil exports, it is negatively and significantly correlated with mineral exports. This result is puzzling, since there is no suggested reason why oil and mineral exporters should diverge in military spending. A possible explanation would be the fact that Ross (2001) does not control for the Arab-Israeli conflict which may have a reinforcing effect on the military spending of many Arab states that are primarily oil exporters. Additionally, Ross (2001) finds that neither oil nor mineral exports are significantly linked with larger military personnel. Thus, the claim that natural resource wealth itself causes greater military spending is open to suspicion. Moreover, even if it is found that natural resource wealth causes greater military spending, it does not vindicate the repression effect since the core observable implication of the repression effect thesis (citizens being demanding democracy but the internal security of the state blocking it) is not actually tested.

Smith (2004) also examines the validity of the repression effect in his study while he reports a robust and significant negative effect of oil dependence on the likelihood of regime failure in authoritarian states. Specifically, he adds a dummy variable for highly authoritarian regimes in his model observing that largely negative democracy scores in the Polity dataset (between -6 and -10) indicate "…not just an absence of political freedoms but also the regular use of coercion, and thus help to fill in the causal gap between repression and regime outcomes" (Smith, 2004: 238). As a result, although the included dummy variable decreased the risk of regime failure significantly, it did not reduce the effect of oil wealth. Thus, Smith (2004: 238-239) concludes that "…factors other than spending on coercion are at work in the robust relationship between oil wealth and regime durability". Again, the repression effect did not find empirical support in this study.

Lastly, a rather indirect effect of repression on the relationship between natural resource wealth and authoritarianism is suggested by Bellin (2004). Heavily influenced by the work of Theda Skocpol, Bellin (2004) constructs an analogy between revolutions and democratic transition by noting that while the strength and effectiveness of the state's coercive apparatus distinguish among cases of successful and unsuccessful revolution attempts, the same might be said also of democratic transitions such that a democratic transition can be carried out successfully only when the state's coercive apparatus lacks the will or capacity to crush it. The robustness of the coercive apparatus of a state, on the other hand, is determined first by the availability of funds to sustain such apparatuses, and second by the successful maintenance of international support networks. The main argument of Bellin (2004)

is that the primary reason for the prevalence of authoritarianism in the Middle East is the presence of conditions that ensure this robustness of the coercive apparatuses of the states in region and it is at this point natural resource wealth (in this case oil wealth) plays a significant role. First, most countries in this region have ample access to substantial discretionary rents so that "…even if the country is overall in poor economic health, the state is still able to…give first priority to paying the military and security forces" (Bellin, 2004: 148). Second, the concern of reliable oil supply have caused the Western powers to persist in providing patronage to many authoritarian states in the region such that they can maintain an international support network.[6] As a result, although the end of the Cold War has signaled a retreat from patronage of authoritarianism in Latin America and Africa, this was not the case in the Middle East. These two conditions, argues Bellin (2004), foster authoritarianism in the Middle East by supporting a robust coercive apparatus in the states of the region.

II. 3.3. Some Methodological Highlights

In this section, some methodological issues regarding the studies of natural resource wealth vs. democratization will be discussed. First, it can be noted that most studies (especially early ones) construct a regression model to predict regime types using a scalar measure of regime type and a pooled time-series cross-national data set that includes countries with different regime types (e.g. Ross, 2001; Wantchekon, 2002; Jensen and Wantchekon, 2004; Herb, 2005). Within this framework, the dependent

[6] It should be noted that Bellin (2004) fails to supply any concrete evidence about how the Western powers provide patronage to the authoritarian regimes in the Middle East.

variable is either the regime score from the Polity dataset or Freedom House's democracy score while the independent variable is a measure of natural resource dependence – usually defined as fuel/mineral/metal exports as a percentage of GDP. Among the control variables employed the most common ones are economic development (per capita GDP), Muslim percentage of population, regime type (lagged), and some dummy variable for regions (such as the Middle East and sub-Saharan Africa). The models are estimated using OLS with panel-corrected standard errors (PCSEs) (Wantchekon, 2002; Jensen and Wantchekon, 2004; Herb, 2005) and feasible generalized least-squares (GLS) (Ross, 2001; Wantchekon, 2002).

Among this group of studies, the work of Herb (2005) stands out from a methodological point of view. He raises concerns about the usage of per capita GDP variable as a control variable, given that "…the per capita GDP measure does not distinguish between oil wealth and other sorts of wealth and thus assumes that all types of wealth have the same effect of democracy scores" (Herb, 2005: 301). Such an approach assumes that oil wealth has the same positive effect on democracy in a rentier state (say, Kuwait) compared to that of other sorts of wealth have on a non-rentier state (like Canada). In reality, however, Herb (2005) points out to the arguments of democratization theorists such as Lipset, Huntington and Inglehart who assert that wealth can have a positive effect on democracy only if it causes appropriate changes in economic, social and political structure of a society through a broad-based economic development. Obviously, it is difficult to argue that oil wealth in Kuwait spurs such changes as much as an industrialization-based wealth does in Canada. Thus, Herb (2005) concludes that using the standard per capita GDP variable

does not test the rentierism theory properly and causes an exaggeration in the statistical significance of the natural resource dependence variable in the models.

In order to address this problem, Herb (2005) proposes and uses counterfactual[7] per capita GDP figures instead of standard per capita GDP. He estimates counterfactual per capita GDP figures of rentier states assuming they lack rentier wealth, and uses these figures as the control variable in his regression model (instead of standard per capita GDP). Herb (2005: 303) asserts that:

> This procedure gets directly to the counterfactual argument at the heart of the rentier state theory. If this measure is used in place of standard per capita GDP, and if the measure of rentierism continues to be negative and statistically significant, then rentierism has a harmful net impact on democracy scores.

The procedure to construct counterfactual per capita GDP figures is actually quite straightforward and involves comparing rentier states to similar countries that do not have significant rent income: For each rentier state, the per capita GDP figures of its neighbors and similar countries in the same region are averaged and used in place of its actual per capita GDP. In this way, the per capita GDP of the Gulf Arab monarchies are set to the average of Jordan, Egypt and Yemen, and Iran's per capita GDP is set to the average of Turkey and Pakistan. Although Herb (2005: 302) is aware that such a procedure involves very major assumptions, he justifies his position by stating that "…without counterfactual GDP the hypothesis that rents harm democracy can not be tested in a multivariate model". Using this construction, the results of his analysis do not support "rentierism harms democracy" argument.

[7] In effect, Herb (2005) tries to find out what the per capita GDP of Kuwait would be if it did not have oil wealth.

A rather radical departure from research designs discussed so far –models predicting regime types using a scalar measure of regime type and include all country-years available – is presented by Ulfelder (2007). In a nutshell, Ulfelder (2007) argues that such a research design stretches the logic of the rentier state theory too far: Essentially, the rentier state theory is about how external rents can help an autocratic regime to persist and not about fluctuations in regime types. By setting up a research design that groups countries with different regime types together, however, the studies discussed so far "…implicitly assume that variation in resource wealth can help to explain not only broad differences in outcomes between autocracies and democracies but also gradations among liberal democracies and variation in the severity of authoritarian rule" (Ulfelder, 2007: 998). In effect, such designs suggest that the rentier state theory can help to explain the differences in the degree of democracy between Norway (resource-rich) and Japan (resource-poor). Ulfelder (2007) notes that the rentier state theory has no such provision and argues that in order to test this theory properly, we should focus solely on democratic transitions from authoritarian rule.

For this purpose, Ulfelder (2007) employs a specific type of event history models –discrete-time logistic regression – to test the impact of natural resource wealth on the likelihood of a transition from autocracy to democracy[8]. In general, event history models investigate the link between a set of independent variables and the occurrence of a qualitative change during the period of observation. Accordingly,

[8] The study of Smith (2004) is very similar to Ulfelder (2007) in terms of research design and therefore will not be discussed here to avoid repetition. Specifically, Smith (2004) investigates the impact of natural resource wealth on regime failure and compares oil exporters to other developing nations in terms of relative regime durability. Accordingly, his dependent variable is also binary and he uses logistic regression.

Ulfelder's dependent variable is a binary variable indicating a transition to democracy and his sample is limited to countries that are under authoritarian rule. Except these differences, his dependent and control variables greatly overlap with the other studies discussed earlier. As a result of his analysis, Ulfelder (2007) concludes that autocracies with substantial natural resource rents are significantly less likely to experience a democratic transition.

Lastly, the work of Ramsay (2007) distinguishes itself in the natural resource wealth vs. democratization literature by being the only study utilizing instrumental variable regression. Ramsay (2007) notes that the existing works fail to establish causation at a satisfactory level due to two problems: First, the potential problem of endogeneity between natural resource rents and political regimes is ignored, i.e. natural resource rents (say, oil income) are presumably also affected by political regime changes in the resource-exporting nations due to the risk perception of market players. Second, given that there is no agreement in the literature about which factors may derive democratization in developing countries, omitted variable bias may exists in the studies. Both of these concerns suggest that OLS estimation will result in inconsistent results, and what we need is "…a valid instrument for oil revenues…that is not correlated with regime characteristic through other pathways" (Ramsay, 2007: 3).

In order to construct the instrumental variable regression model, the paper suggests "out of region damage" done by natural disasters to oil producing countries as a valid source of exogenous variation (i.e. instrument) in oil revenues: While major natural disasters in oil producing countries can influence the price of oil in

world markets, they should have no direct effect on other countries' political regimes other than through the change in oil prices – given that the disaster is sufficiently enough away (Ramsay, 2007). The data for this instrument consists of damage estimates for five classes of disasters (earthquakes, slides, hurricanes, volcanoes, and waves). Such a research design, however, necessarily limits the sample space to the set of oil producing countries. Control variables usually employed in the literature (e.g. per capita GDP, GDP growth, previous regime scores) are also included in the model. The resulting analysis indicates that the relationship between disaster damage and Polity score is negative and significant, suggesting that "…there is a negative relationship between oil rents and political institutions that is significant in the set of oil producing nations" (Ramsay, 2007: 23).

CHAPTER III

THEORETICAL PERSPECTIVE OF THE STUDY

III. 1. IMMUNITY TO RENTIER AND REPRESSION EFFECTS?

Although the above reviewed literature on the relationship between natural resource wealth and political regimes acknowledges the perverse effect of the former on the latter in general, only anecdotal evidence has been presented regarding the immunity of some countries to the detrimental effects of natural resource wealth. Indeed, there is nothing inherent in the rentier state or repression hypotheses that explains or predicts why countries like Norway or Botswana did not become actual rentier states like Saudi Arabia and are able to maintain their democratic political regime.

An analysis of the studies considered here reveals that either they do not consider this issue at all or develop some vague arguments. Ross (2001), for example, indicating that the results of his regression analysis implies that natural resource wealth causes greater damage to democracy in poor countries than in rich ones, suggests that "…this pattern is consistent with the observation that large oil discoveries appear to have no discernible effects in advanced industrialized states, such as Norway, Britain, and the U.S., but may harm or destabilize democracy in poorer countries" (Ross, 2001: 343-344). Criticizing the current literature for stretching the rentier state theory far beyond its initial formulation, Ulfelder (2007:

999) asks "…do we really think that the discovery of oil in a consolidated, liberal democracy will cause that country to backslide toward autocracy?" while Herb (2005: 8) confidently asserts that "…it is virtually impossible that a rich, productive country of any substantial size could be a rentier".[9] Also Friedman (2006: 31) adds a caveat to his "First Law of Petropolitics" by noting that "Countries that have a lot of crude but were well-established states, with solid democratic institutions and diversified economies before their oil was discovered would not be subject to the First Law of Petropolitics". Yet, none of these assertions are backed with a coherent theoretical framework or with a systematic analysis. Only the study of Wantchekon (2002) develops a theoretical framework but he resorts to concepts such as "transparent and rule-oriented processes" and "weak state capacity" which are difficult to observe, operationalize and test; therefore, although the study includes an empirical section, surprisingly these explanatory variables are not utilized in any way. Moreover, even if these concepts are clearly operationalized and tested, the burden of explanation would be passed to another level in the sense that the next question would be why some states have strong institutions and rule-oriented processes while others lack such features. Thus, it would not be an exaggeration to state that there is a significant gap in the literature in this respect.

[9] I find this claim of Herb (2005) disputable. Saudi Arabia, a country that is a member of WTO since 2006 with a population of 28 million, GDP of $600bn (in PPP, 2008 estimate, ranking 22nd in the world), and exports of $330bn (2008 estimate, ranking 15th in the world) can be considered as a relatively rich country of substantial size, and is a rentier state (CIA, 2008).

III. 2. A NOVEL APPROACH: ECONOMIC NORMS THEORY

In the literature, economic norms theory has been useful in explaining the social origins of terror (Mousseau, 2002-2003), why some societies have better human rights practices (Mousseau and Mousseau, 2008), and peace among nations (Mousseau, 2009). I believe that the theory has also the potential to account for why natural resource wealth has strong antidemocratic effects in some countries but not in others. Economic norms theory has been influenced by the cultural approach within the new institutionalist paradigm which emphasizes the role of institutions on shaping human agency through rules and norms (Hall and Taylor, 1996; Scott, 2001). The following excerpt from Hall and Taylor (1996: 939) aptly describes the role and importance of institutions on the behavior of individuals according to this approach:

> [The cultural approach] stresses the degree to which behavior is not fully strategic but bounded by an individual's worldview. That is to say, without denying that human behavior is rational or purposive, it emphasizes the extent to which individuals turn to established routines or familiar patterns of behavior to attain their purposes. It tends to see individuals as satisficers, rather than utility maximizers, and to emphasize the degree to which the choice of a course of action depends on the interpretation of a situation rather than on purely instrumental calculation. What do institutions do? From this perspective, institutions provide moral or cognitive templates for interpretation and action. The individual is seen as an entity deeply embedded in a world of institutions, composed of symbols, scripts and routines, which provide the filters for interpretation, of both the situation and oneself, out of which a course of action is constructed. Not only do institutions provide strategically-useful information, they also affect the very identities, self-images, and preferences of the actors.

The first important point that can be delineated from this excerpt is that the new institutionalist approach emphasizes the cognitive impact of the institutions on

human agency without downplaying rationality. From this perspective, it is not the fully-rational utility calculation that derives human choice but the established habits and routines that produce (or is expected to produce) an acceptable level of satisfactory outcome; Scott (2001: 57) notes that "Compliance occurs in many circumstances because other types of behavior are inconceivable; routines are followed because they are taken for granted as "the way we do these things"". Thus, the possible actions one can take, i.e. the "menu of choices", is neither unlimited nor known a priori by the decision maker, but has to be learned by observation or by other means (Denzau and North, 1994).

Second, by regarding individuals as satisficers rather than utility maximizers, the new institutionalist approach invokes the concept of 'bounded rationality' pioneered by Herbert Simon. Essentially, Simon (1955: 99) argues that the demands (or, assumptions) of the 'global rationality' regarding the computational capacities and access to information of decision makers (i.e. 'rational man') is not realistic and does not provide "…a suitable foundation on which to erect a theory". Instead, Simon (1955) points out to the need for a framework that parallels the actually observed human decision-making processes that involve significant computational simplifications (i.e. heuristics). For this purpose, two features characterize the concept of bounded rationality: limited search for alternatives and simple pay-off functions (Gigerenzer and Selten, 2002; Selten, 2002). In contrast to the assumptions of classical rationality where the range of courses of action are readily available to the decision maker, bounded rationality acknowledges that looking for and evaluating

different choice options is a costly process and a human organism cannot possibly evaluate (or be aware of) all the actions available to him.

Hence, the decision making process under bounded rationality framework is essentially a limited search for alternatives where the limits are determined by simple pay-off functions that involve the satisficing principle and aspiration adaptation (Simon, 1955; Gigerenzer and Selten, 2002; Selten, 2002). The satisficing principle posits that the decision maker is not a "universal optimizer" but has a "satisfaction threshold" above which all alternatives would be acceptable so that the benefit/cost ratio of decision making is greatly improved. Aspiration adaptation, on the other hand, refers to the idea that this threshold is not a static one but dynamically adjusted upon the observation of alternatives, i.e. if during the search process outcomes are better than expected, then the "aspiration level" of decision maker will be adjusted accordingly so that he will have a higher satisfaction threshold to stop the search process (Selten, 2002). Heuristics, i.e. simple and efficient decision rules that people employ facing complex choices, play a significant role in explaining how people determine the aspiration levels for different situations. In short, Simon (1995) argues that these two significant modifications (the satisficing principle and aspiration adaptation) to the classical rational choice theory will give us a better framework for analysis about how people behave in actual decision situations.

Against this background on new institutionalist approach and bounded rationality, it can be argued that economic norms theory's focus is on a specific domain of society that affects people's everyday lives and behaviors significantly: economic transactions. Specifically, Mousseau notes there have been two traditional

modes of economic integration in history; while in some societies contract-based interactions constitute the majority of economic interactions (i.e. contract-rich or contract-intensive societies), in others reciprocity-based interactions are much more prevalent (i.e. contract-poor societies; Mousseau and Mousseau, 2008; Mousseau, 2009).[10] In a contract-intensive economy most individuals obtain their incomes and goods by contracting on an impersonal market where strangers voluntarily and repeatedly interact with each other for their specific needs without any social obligation being attached to these interactions. In contract-poor economies, on the other hand, most individuals are economically dependent for their needs on social ties such as family, friends, clans and religious/ethnic groups. The prevalent mode of transaction is reciprocal exchange through clientelist networks where favors are returned (or withheld) in the light of prior interactions, usually among small in-groups.

At this point, it would be useful to have a rather detailed discussion about clientelism since it constitutes the most prevalent economic integration mode in developing and contract-poor societies. Roniger (2004: 353) notes that clientelism has been characterized as "an action-set built upon the principle of "take there, give here", enabling clients and patrons to benefit from mutual support as they play parallel to each other at different levels of political, social, and administrative

[10] The question of how different societies adopt different transaction modes or how a transition from a contract-poor to a contract-rich economy occurs is an exogenous factor to the present analysis and thus beyond the scope of the thesis. Mousseau (2009) points out that political factors are the primary cause of economic changes but also notes that there are many additional factors that may play a role in determining the nature of economic transactions of a nation, such as geographic factors (e.g. access to harbors) and economic structures of neighboring countries. In principle, however, we would expect a transition from a contract-poor to a contract-rich economy to occur as "the benefits of trusting strangers in the market [become] greater than the benefits of personalized ties" (Mousseau, 2009: 59).

articulation". Similarly, Güneş-Ayata (1994: 22) defines clientelism as "the reciprocal support of "one's own" for the promotion of particular interests and the satisfaction of mutual needs". A common theme in these definitions is the emphasis on the concept of mutual (or reciprocal) support between the actors involved in clientelism such that the nature of relationship is essentially *quid pro quo*, i.e. an actor receives some benefit in return for something s/he does, gives or promises. What differentiates clientelism from more universalistic modes of relationships and transactions (i.e. market-contracting) is that it entails "mediated and selective access" to resources from which people from out-groups are normally excluded (Roniger, 2004: 353-54). The criteria for inclusion/exclusion are defined by the patrons and the access to resources for the in-group members are conditioned on subordination and compliance. The clientelistic relations are also often strengthened by the patron's and client's mutual membership in primordial communities based on ethnicity, kinship and religion (Güneş-Ayata, 1994).

As the names given to the parties in clientelistic relationships (patron vs. client) suggest, although a clientelistic relationship is considered to be mutually beneficial for both parties, it is essentially an asymmetric and hierarchical one (Güneş-Ayata, 1994; Roniger, 2004). The patrons monopolize certain positions that are of vital importance for the clients and by providing selective access to goods, services, and social advancement; they basically protect their clients from social or material insecurity whereas the clients are expected to return their patrons' help politically or by other means (Eisenstadt and Roniger, 1980; Roniger, 1994). Güneş-Ayata (1994) argues that a patron's relative success depends on two factors: his

"honor" and his performance. Personal preeminence in the society and public recognition of one's ability to settle interpersonal affairs successfully comprises a patron's honor. His performance, on the other hand, has two components: First, he has to show the capacity to build and utilize networks to gain access to power and resources beyond the local level, and second, he should be willing to share the benefits acquired through such networks with his supporters.[11] In this respect, Roniger (1994) notes that even if a patron has a strong ascriptive characteristic (e.g. due to his kinship, religious significance etc.), his position is far from being secure due to the presence of social forces committed to formal, universalistic modes of social organization and exchange, competition from other patrons, and other social forces excluded from clientelistic relations so that he has to allocate significant time and effort for gaining and keeping control over clients. The clients, in turn, are expected to accept their patron's control over the access to goods and also provide him with specific resources (Roniger, 1994). Güneş-Ayata (1994) argues that this social exchange is being continually calculated by the clients (whether the patron allocates a "fair" share of the resources and services acquired) and the inherent asymmetry of a clientelistic relationship will be accepted by the client only if there exists a communitarian ideology and the patron is readily accessible.

Although there are several kinds of arrangements that can be defined as patronage or clientelistic relations, Roniger (1994) and Eisenstadt and Roniger (1980) point out that all of these arrangements display a certain logic of social exchange and

[11] Güneş-Ayata (1994: 22-23) again reminds us of the importance of "selective access" in clientelistic relations: Whereas bureaucrats are expected to follow universalistic principles while in duty, patrons see their ability of selectively granting access as their main "stock-in-trade".

hence share a set of core analytical characteristics. These core characteristics of patron-client relations can be listed as:

- The clientelistic relations are neither fully legal nor contractual; instead, they are based on informal understanding (although they are usually tightly binding) by both parties.
- A significant element of long-range credit and obligations is an essential part of these relations: The social exchange is not only guided by the immediate needs and consideration but also involve long-term compromises based on commitments.
- The transactions are open-ended so that there must exist a sense of solidarity and interpersonal loyalty for these relations to function.
- The patron-client relations are usually particularistic (i.e. focused on the exclusive interests of one group or sect), diffuse (i.e. spread into many domains) and highly personal (Abercrombie and Hill, 1976). They involve the simultaneous exchange of different types of resources, promises and actions.
- The essence of patron-client relations is the regulation of flow of resources between social actors for mutual benefit.

Güneş-Ayata (1994: 20-21) notes that the traditional approach to clientelism in the political science and anthropology literature revolved around the opinion that clientelism was a "holdover from traditional societies" with roots in premodern times, and was associated with ritual kinship and feudalism. In line with the dominant

modernist view envisaging a general move towards Western (liberal) forms of political development and bureaucratic universalism throughout the developing societies, the expectation was that the clientelistic relationships would cease to exist upon the transition from a traditional to a modern society. In the 1970s and 1980s, however, Roniger (1994) notes that it became increasingly clear among the scholars that clientelistic structures would neither disappear nor remain at the margins of society with the establishment of modern regimes or economic development. Even if some varieties of clientelism may be abolished, new types would emerge that span a wide spectrum of level of economic development and different political regime types.[12] Especially in the regions of Latin America, the Mediterranean and Southeast Asia, clientelistic relations are deeply embedded in the social institutions.

If the clientelistic relations are there to stay (in one form or another) in developing societies, at least for a considerable period of time, then the relevant question for our purposes would be the repercussions of the existence of clientelism for democratic governance. At this point, Roniger (1994: 9) clearly argues that clientelism is detrimental for the modern notion of representation: "Whereas representation belongs to the legal order, patronage defies it, being addressed to the appropriation and manipulation of resources". Clientelism essentially requires "friends" to be placed in strategic positions (e.g. positions that distribute resources or

[12] Güneş-Ayata (1994: 24-26) argues that the tension between the public and private spheres plays an important role in the persistence of clientelism in modern and modernizing countries. She asserts that clientelism is a "form of backlash by the private – the communitarian – dominated civil society against the state- and bureaucracy-supported public". The scarcity of resources and an inefficient bureaucracy are the contributing factors to the persistence of clientelism as a backlash to "the centrally imposed, cold, impersonal, even alien political system". This view parallels that of the economic norms theory which essentially argues that it is the lack of opportunities in the market that supports clientelist relations (Mousseau, 2009).

design allocation mechanisms) which in turn render any meaningful public accountability measure irrelevant. In such an environment, the argument goes, it would be almost impossible to conduct "…politics open to generalization and participation" and to create "…a discourse aimed at the protection of individual and collective liberties and rights" (Roniger, 1994: 10). Moreover, clientelism by its definition stands at odds with the rule of law since the agents in a clientelistic relationship (i.e. patrons and clients) are not interested in the equality and legality of rules but in acquiring goods and resources. Thus, favoritism is widespread and acceptable in a clientelistic environment and the democratic mechanisms promoting universalistic rules and values would be undermined (Güneş-Ayata, 1994).

Economic norms theory connects these two literatures (new institutionalism/bounded rationality and different economic transaction modes/clientelism) by noting that "…the divergent everyday routines of individuals in clientelist and contract-intensive societies must give rise to divergent decision making heuristics" (Mousseau, 2009: 58), which should also influence the political culture and institutions of the society. Indeed, almost everyone in a society engages in some kind of economic transaction everyday, and one has to obtain, filter and interpret various information to arrive at a decision during this process: Whether one will interact with the other party again at a future time, whether the immediate transaction will have repercussions in other domains of life, whether there is some kind of a reliable arbitration mechanism available in case of a problem, etc. If the relevant environment in which the individuals make such decisions significantly differ (as it is the case between a contract-poor and contract-intensive economy), then

the factors people consider while making decisions would also diverge. As a concrete example, we have seen that economic transactions in clientelist economies often have a political/social nature so that individuals have to consider the effects of their current transaction to other domains of life. In contrast, contractual transactions are bounded by the terms of the contract by definition so that other parts of life are not affected – unless specified so by the contract. Ultimately, continuous and repeated exposure to such transactions will cause the individuals in contract-poor and contrast-intensive societies to develop different decision making heuristics in order to cope with the complexity involved.

The relevant question to ask at this point is whether such different heuristics will have any impact on the individuals' behavior other than in the sphere of economic transactions. The idea of "shared mental models" developed by Denzau and North (1994) suggests that it will have. Essentially, Denzau and North (1994) assert that while individuals with common experiences will share similar mental models (ideologies, models, or institutions to interpret the world), individuals with different learning experiences will have a different "outlook" to the world, affecting all areas of public sphere. In fact, it is "…impossible to make sense out of the diverse performance of economies and polities if one confines one's behavioral assumptions to that of substantive rationality in which agents know what is in their self-interest and act accordingly" (Denzau and North, 1994: 27). Instead, any model to interpret a society should take the belief structure of people into account which will inevitably affect the political sphere.

Applying this observation to analyze the possible impact of different economic decision making heuristics to other domains of life, economic norms theory posits that in a contract-rich economy individuals should be expected to develop "…habits of respecting the choices of individuals and the equal rights of strangers" (Mousseau and Mousseau, 2008: 340) since contracts cannot be realized unless all parties are able to assert their interests freely and agree on the terms. Moreover, given that people in such societies would seek opportunities in a market of strangers, the existence of a state that is willing and able to enforce contracts predictably and impartially among individuals regardless of their identity is essential for the proper functioning of the economy. In contrast, individuals in contract-poor economies will be primarily dependent to their in-groups for economic opportunities and since transactions are informal and based on reciprocity, the "lasting strength of the individual's relationship with the group and the fortunes of the group" are of the utmost importance (Mousseau and Mousseau, 2008: 331). Thus, individuals in contract-poor economies strongly identify themselves with their group/leader such that they will eschew rule of law if it would serve their group's perceived interests. They also display trust to their fellow group members, but there is no reason to trust to strangers and state institutions (Mousseau, 2009). Such a scheme is also compatible with the research agenda of Ronald Inglehart who argue that economic development has systematic cultural and political consequences such as increased interpersonal trust, tolerance of outgroups, subjective well-being and political activism (Inglehart, 1997; Inglehart and Baker, 2000). Indeed, Mousseau (2009: 61)

reports that nations with contract-intensive economies (after controlling for economic development) have higher levels of interpersonal trust than other nations.

III. 3. LINKING ECONOMIC NORMS THEORY TO NATURAL RESOURCE WEALTH

Given this framework, the main argument of this thesis is that economic norms theory could be useful in explaining why some countries are immune to the antidemocratic effects of natural resource wealth. Currently there are several factors considered to provide a causal link between natural resource wealth and political regime that are related to each other: Excessive rent seeking and corruption under the rentier state hypothesis, the absence of rule of law combined with illegitimate use of force by state under the repression hypothesis, and potential incumbency advantage under the weak state hypothesis. The economic norms theory, on the other hand, offers a parsimonious explanation that accounts for the implications of all these different arguments. Just as Acemoglu et al. (2008) points out that the correlation between the level of economic development and type of political regime may be spurious due to omitted variables that have causal effect both on the type of political regime and level of economic development, economic norms theory could be the underlying causal factor both for political resource curse and the proposed explanations in the literature.

Specifically, we would expect that societies with highly contract-intensive economies would be significantly less prone to the detrimental political effects of natural resource wealth primarily due to a collective interest in the rule of law and

lack of patronage opportunities. As discussed before, it is the politically-motivated distribution of natural resource rents through patronage networks that underlie the pernicious effects of natural resource wealth on political regimes. In a contract-intensive economy, however, such a scheme would be simply unacceptable both to the public and the policymakers. First, it would be completely at conflict with the mental models of decision-makers for whom politically-motivated distribution of state revenues could not be considered as an option at all. Second, from an interest-focused point of view such a move would disrupt the working of the contract-intensive economy (from which a considerable portion of the society is benefiting) by weakening the rule of law such that there would be significant opposition towards this patronage attempt purely due to collective interest. Lastly, in a contract-intensive economy there would be simply a lack of existing patronage channels where the government can divert the rents even if it would like to do so. Thus, the more contract-intensive an economy is, the more immune it would be from the detrimental effects of natural resource wealth.

In a contract-poor economy, on the other hand, the sudden arrival of natural resource rents would just strengthen the already-established patronage networks, or cause the development of new ones. The receipt of substantial rents would transform the state into the greatest patron in the society and the extreme centralization of political and economic power by the government would pave the way to an authoritarian regime. Moreover, for people living in a predominantly contract-poor economy such behavior would be in line with their mental models: Given that an individual would prefer his own group to be privileged over others (Mousseau and

Mousseau, 2008), he would be satisfied if his group is close to the government and has direct access to rents. Groups without a direct access to rents could be placated via side payments by the state or simply oppressed. Therefore, we would expect the detrimental effects of natural resource wealth to be observed only in a contract-poor economy while contract-intensive societies should not be subject to the political resource curse even in the presence of significant natural resource rents. The next section will present the data and methodology that will be used to test the hypothesis discussed so far.

CHAPTER IV

DATA AND METHODOLOGY

In order to test the proposed hypothesis, this study will employ a quantitative analysis by constructing a time-series cross-sectional (TSCS) dataset and following the general modeling approach in the literature. As it was discussed in the previous chapter, the models in the relevant literature take a measure of political regime type as the dependent variable and a measure of a state's natural resource wealth as the independent variable to test the impact of the latter on the former. The models also include some control variables that are thought to be associated with the political regime of a state. The independent and control variables are always used with some temporal lag (either one- or five-year lags) in order to ensure the direction of causality. In this analysis we will employ a five-year lag for the independent and control variables since scholars have noted some methodological problems with using a one-year lag.[13]

For the selection of control variables, this study will largely build on the standard model presented by Ross (2001). The advantage of such an approach is that by building on an established model we will be able to utilize prior knowledge in the

[13] Achen (2000) and Ross (2001) note that with one-year lag the estimation of a country's current regime type is dominated by its regime type in the previous year, and as a result the influence of other variables is artificially reduced.

literature and observe the effects when a new variable to the model is introduced. The selection of the model of Ross (2001) is due the observation that the paper is widely recognized by studies in the same area as a "pathbreaking contribution" (Herb, 2005; Ramsay, 2007) and had more impact on the natural resource wealth vs. democratization literature than any other study.[14] Although the model of Ross (2001) will be followed, other sources in the literature will also be utilized for a more up-to-date and comprehensive dataset.

Following the advice of Beck and Katz (1995), the model is tested using ordinary least-squares (OLS) with panel corrected standard errors (PCSEs).[15] In addition, in order to deal with the problem of autocorrelation displayed in such datasets it has been suggested to include a lagged dependent variable to the right-hand side of the model (Beck and Katz, 1995; Ross, 2001; Herb, 2005). For this purpose, our model will include a five-year lagged dependent variable (regime type) to control for temporal dependence in addition to the control variables. The inclusion of a lagged dependent variable also transforms the model into a change model where we actually estimate the change in a country's political regime over time which is more appropriate given the research question. In the following, a discussion of the dependent variable, independent variable and control variables will be presented.

[14] As of January 2009, the paper of Ross (2001) had 114 citations according to the ISI Web of Knowledge. No other paper in this area has received more than 10 citations to the best of my knowledge.

[15] Actually Ross (2001) uses a feasible generalized least-squares method (GLS) to estimate his model, but Beck and Katz (1995: 635) point out that the GLS estimator often results in "extreme overconfidence" in calculating the standard errors in a TSCS dataset, and therefore prefer OLS with PCSEs. Several studies with similar research designs to this study have also used OLS with PCSEs (e.g. Jensen and Wantchekon, 2004; Herb, 2005; Mousseau, 2003).

IV. 1. DEPENDENT VARIABLE

Since the primary interest of the current study is to explain the variability in political regimes, the dependent variable has to be a measure of regime type. For this purpose, I will use the Polity IV dataset constructed by Marshall and Jaggers (2007) which is the most widely used quantitative measure of political regimes in the relevant literature (e.g. Ross, 2001; Smith, 2004; Jensen and Wantchekon, 2004; Herb, 2005; Ulfelder, 2007). The Polity project codes general institutionalized authority traits that characterize a distinct polity. Its scheme consists of six component measures that record key qualities of competitiveness of political participation, the openness and competitiveness of executive recruitment, the regulation of political participation, and constraints on the chief executive. Specifically, an institutionalized democracy is characterized by three related elements: (i) the presence of institutions through which citizens can express their preferences over different policies, (ii) the existence of institutionalized constraints on the power of the executive branch, and (iii) the guarantee of civil liberties to all citizens. In contrast, an institutionalized autocracy is characterized by the restriction of competitive political participation and exercise of power by chief executives with few institutionalized constraints (Marshall and Jaggers, 2007).

Guided by this framework, the Polity IV dataset includes two separate variables of "Institutionalized Democracy – DEMOC" and "Institutionalized Autocracy – AUTOC", each having an eleven-point scale (0-10) and differentiating between states that are relatively democratic and authoritarian, respectively. The rationale for having measures for both institutionalized democracy and autocracy is

the observation that many polities exhibit mixed qualities of both of these authority patterns (Marshall and Jaggers, 2007). Given that the scales for the variables DEMOC and AUTOC do not share any categories in common and following Ross (2001) and many other studies, I combine these two separate variables into a single measure by subtracting the AUTOC score from the DEMOC score. The resulting unified polity variable (POLITY) ranges from -10 to +10 and captures a wide spectrum that goes from fully institutionalized autocracies to fully institutionalized democracies via a 21-point scale. It is this variable that will be used as the dependent variable of the study (named as *PolRegime*). The current Polity dataset covers all major, independent states in the global system (states with a total population of 500,000 or more – 162 countries in total) over the period of 1800-2007.

As a robustness check, the Freedom House's (a U.S. based international NGO) democracy score will also be used as the dependent variable in the study. Checking the results of the study with an alternative measure of the dependent variable is useful since the Freedom House's scoring index is also widely used among scholars working on democratization. The Freedom House's "Freedom in the World" survey provides an annual evaluation of the state of global freedom (defined as "the opportunity to act spontaneously in a variety of fields outside the control of the government and other centers of potential domination") according to two categories of political rights and civil liberties. The category of political rights includes measures for electoral process, political pluralism and participation, and functioning of the government. The category of civil liberties, on the other hand, consists of measures for freedom of expression and belief, associational and

organizational rights, rule of law, and personal autonomy and individual rights. Both categories are assigned a numerical rating between 1 and 7 for each country-year where 1 represents the most free and 7 the least free situation in each category.[16] Following the convention suggested in Herb (2005) I will combine the scores for political freedom and civil liberties into a single measure with a thirteen point scale from 2 to 14. Then the combined single measure will be rescaled into a 0-12 variable (called as *FHRegime*), with 12 representing the most free situation.

IV. 2. INDEPENDENT VARIABLES

In order to assess the impact of natural resource wealth on political regimes, Ross (2001) employs two independent variables in his analysis, *Oil* and *Minerals*, to measure the export value of mineral-based fuels (oil, natural gas and coal) and the export value of nonfuel ores and metals as fractions of GDP, respectively. Ross (2001: 338) justifies the selection of these variables by arguing that they "…capture both the importance of fuels and minerals as sources of export revenue and their relative importance in the domestic economy". Indeed, several papers investigating the same question have also used the same (or very similar) measures to gauge the importance of natural resource wealth (e.g. Smith, 2004; Herb, 2005; Jensen and Wantchekon, 2004; Wantchekon, 2002). A problem with this measure, however, is that it does not take the domestic (i.e. non-export) value of natural resource wealth so that the export data gives only an indirect (and incomplete) picture of a state's yearly natural resource rents. It is known that in many oil-rich countries (e.g. Saudi Arabia,

[16] The dataset is available for download at http://www.freedomhouse.org.

Iran) gasoline is subsidized by the government such that it is sold at unusually low prices in the domestic market. Such a situation should be also considered as a form of utilization of natural resource rent (which is distributed to the public in general) by the government but is not reflected in data if we consider exports only.

This study will use a different and arguably superior measure of natural resource wealth that is recently gaining popularity among scholars interested in measuring the effects of natural resource wealth (e.g. de Soysa and Neumayer, 2007; Ulfelder, 2007). Specifically, a dataset will be used that is produced by the World Bank and measures the extent to which countries' income is derived from natural-resource extraction (Bolt, Matete, and Clemens, 2002). This value of natural resource depletion is calculated as the net profit per unit of natural resource (sales price minus extraction cost) times the amount of resource extracted. Next, this value is expressed as the percentage of Gross National Income (GNI) annually. De Soysa and Neumayer (2007: 206) argue that "the dataset represents the most ambitious and comprehensive attempt yet at estimating the value of natural resource extraction". The advantage of the dataset is that it gives a more comprehensive picture of the importance of natural resource wealth within a country's economy compared to other measures related to exports. The data covers a total of 149 countries over the period of 1970 to 2007.

Although the original data source includes variables that indicate the share of a country's GNI derived from the depletion of energy sources (crude oil, natural gas, and coal) as well as from other mineral resources (e.g. copper, gold, iron, silver, nickel etc.), in the current model we will use the energy rents component only for several reasons. First, from a theoretical perspective it has been noted that while

"petro-states" (major oil-exporting states) have many characteristics in common with mineral-exporting states, the nature of oil rents make them unique: "[Petro-states] are rentier states *par excellence*: not only does petroleum provide exceptionally high levels of rents over a long period of time, but it also facilitates international borrowing, thereby perpetuating the capacity to live beyond their means" (Karl, 1999: 36). Thus, petroleum rents are of significant importance for the rentier state hypothesis and they dominate the overall energy rents with an average share of 64%.[17] Second, from an empirical point of view previous research suggests that energy resources are "the major driver of the link between resource wealth and the persistence of autocracy" (Ulfelder, 2007: 1005) so that focusing on energy rents is in line with previous findings. Last, from a practical point of view the dataset for mineral rents has a significant number of missing data points as well as many country-years with a value of "0", rendering statistical analysis more difficult. Considering these points, the present study will use the energy rents (comprising of crude oil, natural gas, and coal rents) as a percentage of GNI to gauge for the natural resource wealth of a country. Given the prevalence of extreme values within this measure (see the Figure 1 below), however, the natural logarithm of the measure (after multiplying with 100) will be used in the model and the resulting variable will be called *EnergyRents*.

[17] Given the growing importance of natural gas in terms of increased worldwide usage and revenue source for exporting countries (D'Amica, 2008), natural gas rents also constitute a significant part of energy rents.

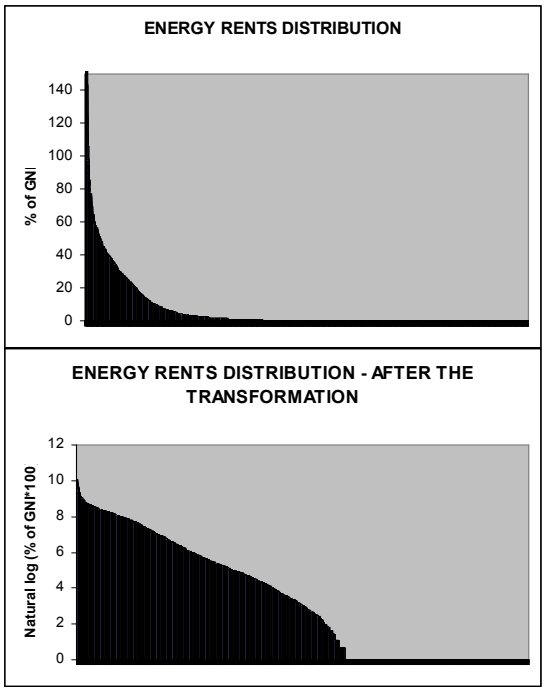

Figure 1. The distribution of the *EnergyRents* variable before and after the transformation

It is important to note that the independent variable of *EnergyRents* is used only to confirm the findings of previous researchers, i.e. natural resource rents are detrimental for political regimes. The primary interest of this study, on the other hand, is the relationship between contract-intensity, natural resource rents and political regimes. Thus, in order to analyze the effects of contract-intensive economy on the relationship between natural resource rents and political regimes, a new binary term *ContractPoor* and a new interactive term *–EnergyRents*ContractPoor* – are constructed. The construction and logic of these variables is discussed in the following subsection.

IV. 2.1. Measuring Contract-Intensity

The binary variable *ContractPoor* is used to determine whether a country is contract-poor or contract-rich for a given year, and takes the value of 1 if the country in question is contract-poor and 0 if the country is contract-rich.[18] The variable is constructed using the Contract Intensity of Nations (CIN) v2.1 dataset[19] which estimates the contract-intensity of most nations with populations greater than 500,000 from 1960 to 2000 (Mousseau, 2009). The primary source of the dataset is life insurance data compiled by the World Bank (Beck and Webb, 2003) and the justification for this source is that the prevalence of economic securities such as life insurance should be a good indicator of contract-intensity of a society. Mousseau (2009) points out that while economic security is an essential need for individuals living both in contract-rich and contract-poor societies, these two divergent economic conditions present different incentives with regards to how to satisfy this need. In contract-poor societies individuals have strong ties with their extended families or primordial groups so that presumably one can be confident that his family will be taken care of in the event of his death. Combined with a lack of trust to strangers and formal institutions in general, the implication is that the demand for life insurance policies in contract-poor societies should be low. In contrast, the demand for life insurance policies in contract-rich societies should be higher since in such societies "comparatively few [individuals] will have the personalized ties that are sufficiently

[18] The measurement of contract-intensity with a binary variable (instead of a continuous one) is due to the construction of the original dataset (CIN v2.1) where contract-intensity data is obtained. A binary measurement of contract-intensity is also compatible with the logic of a nation's transition from a contract-poor to a contract-intensive economy where a feedback loop would accelerate the transition once a critical threshold is passed, a process similar to the "tipping point" mechanisms proposed by Schelling (1978). For further details, see Mousseau (2009).

[19] The CIN dataset and its codebook can be reached at http://portal.ku.edu.tr/~mmousseau/.

strong and reliable that they will place their family's security in them" (Mousseau, 2009: 65). Thus we can reasonably expect the variations in prevalence of life insurance contracts to follow variations in contract-intensity of a society.

Operationally, the CIN dataset identifies a country's economy as contract-rich for any given year if the per capita life insurance premium (in constant US dollars) for the country-year is at least half a decile above the median value for the period of 1979-2000 (approximately above $59). Equivalently, a country's economy is identified as contract-poor if the per capita life insurance premium is at least half a decile below the median value (approximately below $24). The remaining country-years (inside the decile surrounding the median value) are identified as being "in transition", reflecting the observation that the country's economy is neither predominantly contract-rich nor predominantly contract-poor so that no theoretical conclusions can be drawn in these cases.[20] If the life insurance data is missing, the Penn World Table is utilized as a secondary source by using private consumption and investment data to determine whether a country's economy is contract-poor or contract-rich[21]. The original CIN dataset identifies contract-rich economies by assigning the value of 1 to a binary variable called *Contract Intensive Economy* (CIE); however, in this study we will use the reverse of this measure by constructing the *ContractPoor* variable (i.e. *ContractPoor* = 1 if CIE = 0 and vice versa). While the dataset covers the period of 1960 to 2000, Mousseau (2009) notes that it is

[20] Mousseau (2009) points out that only a very small part of the total country-years (around 3%) is identified as "in transition".
[21] Readers are referred to the CIN codebook available at http://portal.ku.edu.tr/~mmousseau/ for a complete set of rules about the construction of the dataset.

possible to extrapolate the data a few years ahead for countries not in transition and so the data is extended up to 2006 for analysis.

The binary variable of *ContractPoor* is in turn used to construct the interactive term *EnergyRents*ContractPoor* which is a crucial variable for the purpose of this analysis. For contract-poor economies (*ContractPoor* = 1), this variable indicates the rents' relative importance compared to overall economic activities. For contract-rich economies (*ContractPoor* = 0), on the other hand, the interactive term *EnergyRents*ContractPoor* gets the value of zero regardless of the amount of natural resource rents in a contract-rich economy, and in this case the constituent term *EnergyRents* indicates the relative importance of natural resource rents within the overall economy. The variable *ContractPoor* is assigned the value of one if the economy is contract-poor and hence the interactive term gets a larger value for larger resource rents and a lower value for smaller resource rents. In this form, we expect this independent variable to negatively and significantly correlate with the dependent variable since the hypothesis of this study asserts that in order to observe the detrimental political effects of natural resource wealth we should have both a contract-poor economy (*ContractPoor* = 1) and significant rents (*EnergyRents* being large) so that the interactive terms *EnergyRents*ContractPoor* gets a large value. In contrast, in the presence of a contract-intensive economy or a contract-poor economy with negligible natural resource rents (cases where there should be no detrimental effects for political regime) the interactive variable will take the value of zero or very small values.

IV. 3. CONTROL VARIABLES

The control variables employed in the multivariate models of different studies in the natural resource wealth vs. democratization literature greatly overlap, and in line with the objective of paralleling the model of Ross (2001), this study will consider five control variables that were used in that study: economic development (*Income)*, the Muslim percentage of a state's population (*Islam*), membership in the Organization for Economic Cooperation and Development (*OECD*), and two dummy variables indicating whether the country resides in the Middle East *(MidEast*) or sub-Saharan Africa (*SSAfrica*). A more detailed treatment of each of these control variables will be delivered in the following; however, given the importance of selecting appropriate control variables for any multivariate model (Blalock, 1979; King, Keohane and Verba, 1994; Ray, 2003, 2005), a critical discussion about how to utilize these control variables will be presented first.

At this point it should be noted that although several scholars include the variables of *Islam, OECD, MidEast* and *SSAfrica* as control variables in their models, they do not offer a theoretical argument about how these variables are causally connected to the dependent variable (political regime), i.e. they are not theoretically-motivated. Indeed, Ross (2001: 338) justifies the inclusion of the *Islam* variable by stating that "previous studies have suggested that states with large Muslim populations tend to be less democratic than non-Muslim states". Similarly, Herb (2005: 305) notes that "previous studies have found Islam to be correlated with democracy" and "previous studies of democracy have found that regional dummy variables or other controls for region are significantly correlated with democracy

scores" to justify his selection of control variables. Thus, we can argue that these four control variables are in fact atheoretical and are justified only on the basis of correlations in previous studies.

This situation is problematic for at least two reasons. Although it can be argued that the inclusion of several intuitive control variables may help to avoid the omitted variable bias, Ray (2003: 15) notes that:

> Any set of control variables added to multivariate models merely to reduce the risk of omitted variable bias constitute, *in the absence of a fully specified theory*, a random and arbitrary portion of those variables whose omission might potentially bias the results. And they are likely to make the results of the multivariate analysis uninterpretable or confusing [emphasis added].

Similarly, King et al. (1994: 174) also warns us that "without a theoretical model, we cannot decide which potential explanatory variables should be included in our analysis". Thus, for a sound analysis we should not include factors to our model as control variables simply because they have an impact on the dependent variable since it may distort the results of the analysis (Ray, 2003).

A second problem associated with atheoretical control variables is that they may be in fact intervening variables since variations in these control variables could be due to variations in key explanatory factor, and hence correlate with it. Including intervening variables as control variables into a multivariate model, in turn, "can eliminate the correlation between key causal factors and the outcome phenomenon, creating the impression that the key, hypothesized causal factor is in fact not related to the dependent variable in question" (Ray, 2005: 284) and produce misleading results. Thus, we should not control for intervening variables in a multivariate model

(Blalock, 1979; Ray, 2003) and there is always the possibility that atheoretical control variables included into the model just because they correlate with the dependent variable could in fact be intervening variables.

A similar problem also exists with the inclusion of the economic development variable (*Income*) as a control variable, at least for our analysis. Here the problem is not that the economic development variable is atheoretical, but it is an intervening variable since we consider the contract-intensity of an economy as the key explanatory variable in our analysis. Mousseau (2009: 72) notes that "economic norms theory identifies contract norms as a cause of economic development" so that economic development is (at least partly) a consequence of contract-intensity. At this point, King et al. (1994: 173) asserts that "in general, we should not control for any explanatory variable that is in part a consequence of our key causal variable" while Ray (2003: 5) similarly agrees that "one should not control for a factor that is (1) a consequence of a key causal variable and which then in turn (2) has an impact on the outcome variable". This situation describes exactly the relationship between economic development, contract-intensity and democracy where economic development is in part a consequence of contract-intensity and which in turn has an impact on the level of democracy. Indeed, as Blalock (1979:474) aptly notes, if contract-intensity is actually a cause of economic development, how would it be possible to try to hold the level of economic development constant while still varying the level of contract-intensity? Thus, the inclusion of a measure of economic development as a control variable into our model where contract-intensity is the key explanatory variable would distort the results of the analysis.

In the face of the problems mentioned above that are "rather consistently overlooked" in the literature (Ray, 2003: 5), this study will employ a two-stage approach. In the first stage of the analysis, the primary goal will be to confirm or disconfirm the main hypothesis of the thesis so the selection of the control variables will be theoretically-driven. For this purpose, at this stage all the atheoretical variables (*Islam, OECD, SSAfrica, MidEast)* and the intervening variable of *Income* will be excluded from the analysis to see the effects of the introduction of the new contracting-related variables (*ContractPoor,* and *EnergyRents*ContractPoor*) on the dependent variable. In the second stage, on the other hand, we will leave the theoretically-driven approach in order to see how the model performs if we include the most frequently used control variables in the relevant literature. To this end, all of the control variables mentioned above will be included into the model. It should be noted at this point that such an approach cannot be considered as a test of the hypothesis of the study since we will not construct a theoretically-motivated model (King et al., 1994; Mousseau, 2009). Having discussed the implications of selecting appropriate control variables and how the current study will approach this issue, now we will have a brief overview of the proposed control variables.

IV. 3.1. Control Variables - *Income*

The first control variable is related to the hypothesized relationship between economic development and democratization that is discussed in the previous chapter. In order to control for the effects of economic development one of the standard measures of economic development in the literature, the natural log of per capita

GDP (in current USD) will be used. This variable is labeled as *Income*. A control variable for economic development is used in all of the quantitative studies of natural resource wealth vs. democratization and the logged per capita GDP is the most widely used measure. Two exceptions are the studies of Herb (2005) and Ulfelder (2007) where the former uses counterfactual per capita GDP figures and the latter uses a country's infant mortality rate as a proxy for economic development.[22] The source of the dataset is the World Bank (2008) and it spans the period of 1970 to 2006.

IV. 3.2. Control Variables - *Islam*

The Muslim percentage of a state's population will constitute the third control variable of the study and will be denoted as *Islam*. Ross (2001) reminds us of previous studies that indicate that a large Muslim population can be detrimental for democratic governance; Herb (2005) includes the same variable in his model for the same reason. Similarly, Barro (1999) reports that of all the religion variables in his model, Islam had the largest and most significant effect on a political regime. Given these statistical regularities, however, scholars do not offer a theoretical argument about why Islam should have a negative effect on democracy; only Herb (2005: 305) reluctantly adds that "while I do not think that there is an immutable authoritarian or democratic "essence" to Islam, the ideological and cultural currents that are common to Islamic world may well have an effect on democracy scores". Thus, as discussed

[22] Herb (2005) employs counterfactual per capita GDP figures by comparing rentier states to otherwise similar countries that lack abundant rents. Ulfelder (2007), on the other hand, states that he uses infant mortality rate instead of GDP per capita because it is less correlated with his measure of resource rents, thereby reducing multicollinearity.

before, it is essentially an atheoretical control variable. The source of the data is Barrett (1982) and the variable reflects the percentage of the population whose professed religious in 1970 was Islam. Since this percentage does not change considerably over the time period, the same value will be used for all the country-years of a specific country (Ross, 2001).

IV. 3.3. Control Variables - *OECD*

The fourth control variable to be employed in the study is membership in the Organization for Economic Cooperation and Development (OECD). The variable *OECD* takes the value of 1 for members of OECD and the value of 0 for other countries. Again, Ross (2001: 339) refers to previous studies which indicated that "…the advanced industrialized states of the OECD are significantly more likely to be democratic in the post-World War II era than the states of the developing world, even after the influence of income and other factors are accounted for", but suggests no coherent theory about why membership in the OECD should have a causal effect on regime type.

IV. 3.4. Control Variables – *MidEast* and *SSAfrica*

Lastly, two dummy control variables aim to account for the possible impact of regional factors on democratization. Especially the Middle Eastern and sub-Saharan African states are reported to be more prone to regime failure (Smith 2004) and there is a heavy concentration of natural resource wealth in these two regions. This observation has led many scholars in the democratization literature to include control

variables for these regions although there is not a theory that suggests why these regions should be different from other parts of the world about the issue of democratization. In order to keep in line with the literature and to investigate this possibility of regional effect, two dummy variables for the regions of the Middle East and Sub-Saharan Africa will be included in the model, named as *MidEast* and *SSAfrica*. These variables will be coded "1" for countries that are classified by the World Bank (2008) as residing in these regions and "0" otherwise.

CHAPTER V

RESULTS

The resulting dataset includes all sovereign states with available data between 1975 and 2006[23] and yields 3810 possible observations when the Polity measure is used as the dependent variable and 3662 possible observations when the Freedom House measure is used as the dependent variable. After accounting for missing data, there are at most 3536 observations when the Polity measure is the dependent variable (3407 when the Freedom House measure is the dependent variable) for 156 countries.

V. 1. POLITY REGIME MEASURE AS THE DEPENDENT VARIABLE

The results of the analysis for the Polity regime measure as the dependent variable are reported in Table 1 below.[24] As it was discussed in the preceding chapter, in order to deal with various problems associated with atheoretical control variables and intervening variables, this analysis will take a two-stage approach. The Model 1 and Model 2 below comprise the first stage of this approach where we are theoretically-driven to confirm or disconfirm the hypothesis of this study and exclude all the atheoretical and intervening variables from the analysis. In Models 3 and 4, on the

[23] In the models where the Freedom House Democracy Index is the dependent variable (*FHRegime*) the time period considered is 1977 to 2006 since Freedom House rankings began in 1972 and we are using five-year lags for independent and control variables.

[24] I would like to thank to Michael Mousseau for his help to analyze the data using Stata 9.0.

other hand, we are moving to the second stage of the analysis where we leave the theoretically-driven approach and include all of the control variables in order to see how the model performs when we use the most frequently used variables in the literature.

Table 1. The Results of the Analysis for the Polity Regime Measure as the Dependent Variable

I. THE IMPACT OF RESOURCE WEALTH AND CONTRACT-POOR ECONOMY ON REGIME (*PolRegime*)†

	1	2	3	4
Energy Rents	-.05***	.03	.05**	.04*
	(.023)	(.026)	(.024)	(.025)
Energy Rents *Contract-Poor	-	-.10***	-.18***	-.13***
		(.041)	(.038)	(.040)
Contract-Poor	-	-.85**	.24	.79***
		(.366)	(.267)	(.316)
Regime	.84***	.81***	.80***	.73***
	(.024)	(.032)	(.033)	(.038)
Income	-	-	.34***	.41***
			(.107)	(.112)
SSAfrica	-	-	-	-.65**
				(.331)
MidEast	-	-	-	-1.81***
				(.428)
Islam	-	-	-	-.02***
				(.003)
OECD	-	-	-	.52
				(.519)
R-squared	0.75	0.75	0.75	0.76
Observations	3536	3536	3530	3472

*significant at the 0.1 level; **significant at the 0.05 level; ***significant at the 0.01 level

†The dependent variable is Polity index. OLS regressions with panel corrected standard errors, all independent and control variables are entered with five-year lags, standard errors in parantheses. Significance levels reflect one-tailed tests.

The first model (Column 1) is a simple model constructed in order to confirm the general wisdom in the comparative politics literature – natural resource rents hurt democracy. Indeed, the results indicate that rents in general are detrimental for democratic governance since the coefficient of the *EnergyRents* variable (-0.05) is negative and highly significant. As expected, the regime history of a country is also positively and significantly correlated with its current regime, reflected by the coefficient (0.84) of the *Regime* variable which is the dependent variable with a five-year lag.[25] Thus, if we do not account for the socio-economic setting (i.e. contract-poor vs. contract-intensive) in which the natural resource rents accrue as the entire previous research does, then we can acknowledge the political resource curse.

The second model (column 2) is crucial for the hypothesis of this study since it introduces the new variables *ContractPoor* and *EnergyRents*ContractPoor* into the model while the variables *EnergyRents* and *Regime* are retained. In this way, we are able to account for the socio-economic setting in which the natural resource rents accrue and observe whether the general detrimental political effect of rents –as confirmed by the first model– still holds if we account for rents in a contract-poor economy. As it can be seen from the results table, the coefficient for the interactive term *EnergyRents*ContractPoor* is negative and significant (-0.10). This result suggests that natural resource rents in a setting of contract-poor economy are detrimental for democracy, as expected by our hypothesis. What is more interesting in this model, however, is that after accounting for resource rents in a contract-poor economy via the interactive term, the coefficient of the original explanatory variable

[25] Actually the coefficient of the *Regime* variable is positive and significant throughout all the models considered here in line with expectations, so it will not be discussed further to avoid repetition.

EnergyRents becomes insignificant. Mousseau (2009: 69) notes that coefficients of constituent terms in interactive models are interpretable only for cases where the other constituent term equals zero so that in our case, the insignificance of the coefficient of the constituent term *EnergyRents* indicates that when *ContractPoor* equals zero (i.e. in the case of a contract-rich economy) natural resource rents are not detrimental for democracy. In other words, once we account for the presence of a contract-poor economy, the model indicates that rents itself do not have a negative effect on regime score. This result provides strong support for the main hypothesis of this study: Natural resource wealth should have a negative effect on polity only in the presence of a contract-poor economy. Once we account for this factor, the political negative effect of resource wealth disappears, as predicted by the economic norms theory. Moreover, the coefficient of the other constituent term *ContractPoor* is also negative and significant (-0.85). This is in line with the theoretical expectation that the presence of a contract-poor economy should hinder political development, even in the absence of significant natural resource rents.

With the third and fourth models, we move to the second stage of our analysis where we depart from a theoretically-motivated perspective and include the intervening and atheoretical variables into the models. In Model 3 we include the variable of *Income* into the analysis. From the perspective of economic norms theory, this variable is actually an intervening variable because economic norms theory predicts economic development to be partially caused by contract-intensity (Mousseau, 2009). Compared with the second model, four important observations can be recorded regarding the results of the third model. First, the coefficient of the

interactive term *EnergyRents*ContractPoor* is again negative and significant (-0.18), consistent with the hypothesis of the study. This shows that even after the consideration of economic development via *Income*, the detrimental political effects of rents in a contract-poor environment still holds, i.e. they are independent of the level of economic development.

Second, the coefficient of the constituent term *EnergyRents* is now positive and significant (0.05) whereas previously (Model 2) it was insignificant. This is actually an interesting result since it suggests that after controlling for economic development natural resource rents actually *promote* democratization in contract-rich countries (i.e. *ContractPoor* = 0). Although we cannot state that such an outcome is predicted by the economic norms theory, it is reasonably compatible with it: Contract-rich societies with significant natural resource rents may be utilizing this financial leverage to create and support economic institutions that are favorable to the growth of market opportunities. Such an approach, in turn, would further enhance democratic governance since "the same things that cause sustained economic development, such as good economic institutions (secure property rights, a level playing field, equality before the law, etc.), also influence whether a country is democratic" (Robinson, 2006: 516).

The third observation that can be made regarding Model 3 is that the constituent term *ContractPoor* is now insignificant. We can argue that this result reflects the issue of the variable *Income* being an intervening variable in Model 3; indeed, the correlation between the two variables (*ContractPoor* and *Income*) is quite high and negative (r = -0.71). As we have discussed in the preceding chapter,

including intervening variables as control variables into a model can eliminate the correlation between key causal factors and the dependent variable (Blalock, 1979; King et al., 1994; Ray, 2005). Fourth and lastly, the coefficient of the *Income* variable is positive and highly significant (0.34). This suggests that economic development has a positive impact on democracy even after accounting for contract-intensity. This observation is in line with the general democratization literature, indicating that beyond contract-intensity, some other factors associated with economic development may actually have a causal impact on democratization, such as increased education and a larger middle class (Lipset, 1959).

The fourth model incorporates all of the atheoretical control variables (*SSAfrica, MidEast, Islam,* and *OECD*) into the model, which are widely used in the relevant literature and considered to be correlated with democracy. Again, *EnergyRents*ContractPoor* is significant and negatively associated (-0.13) with regime score while *EnergyRents* alone is positive and significant (0.04), albeit weakly (only at $p < 0.1$ level). A rather unexpected result in this model is the significant and positive coefficient (0.79) of the constituent term *ContractPoor* indicating that in the absence of energy rents (*EnergyRents* = 0), actually a contract-poor environment is associated with democratization. This unexpected result is most likely a function of the inclusion of the *OECD* variable into the model which highly correlates with *ContractPoor* (-0.86).[26] In effect, these two measures are reflecting

[26] The correlation matrix for all the variables in Model 4 is presented in the appendix. As it can be seen from the table, there are only two correlation coefficients that are above 0.80. The first one is the correlation (-0.86) between *OECD* and *ContractPoor* as discussed above, and the other one is between *EnergyRents*ContractPoor* and *EnergyRents* (0.88). The latter correlation, however, should not pose a problem for the analysis since it is between an interaction term and its constituent term (Friedrich, 1982).

the same underlying dimension and with both of them being in the model, they cancel each other out. Since we have no theory that tells us how being a member of the OECD has a causal relationship with democracy, however, the coefficient of *OECD* is essentially uninterpretable (Ray, 2003). The best explanation available is thus derived from economic norms theory which asserts that contract-intensity causes both democratization and membership in the OECD. In short, the odd results for both *ContractPoor* and *OECD* are most likely statistical artifacts caused by endogeneity. Supporting this interpretation, we can see that all the other atheoretical control variables, none of which can be explained by contract norms, are significant and have the expected signs suggested by previous research: Residing in the Middle East or Sub-Saharan Africa, or having a large Muslim population are all negatively correlated with democratic governance.[27]

V. 2. FREEDOM HOUSE MEASURE AS THE DEPENDENT VARIABLE

The results of the analysis for the Freedom House regime measure as the dependent variable are reported in Table 2 below. It can be seen that the results of the Model 1, Model 2 and Model 3 are identical with the case where the Polity regime measure was the dependent variable so no further discussion will be presented here regarding these models. In Model 4, on the other hand, there are two rather minor differences: In the case of Freedom House regime measure, the coefficient for the constituent term *ContractPoor* is insignificant and the coefficient of *OECD* is positive and significant (0.40). That only the results of these two variables are different with the

[27] Additional tests with the inclusion of variables for the ethnic heterogeneity of countries and their democracy level at the starting year of the dataset, unreported, indicate that the addition of these variables does not change the results significantly.

Freedom House measure compared with Polity measure confirms our previous assertion that any results associated with both *OECD* and *ContractPoor* in the model are simply statistical artifacts due to the high collinearity of these variables. For models 1 through 3, the fact that we obtain identical results by using two different measures of the dependent variable should give us more confidence about the reliability of the analyses.

Table 2. The Results of the Analysis for the Freedom House Regime Measure as the Dependent Variable

II. THE IMPACT OF RESOURCE WEALTH AND CONTRACT-POOR ECONOMY ON REGIME (*FHRegime*)†

	1	2	3	4
Energy Rents	-.03***	.02	.04**	.04**
	(.011)	(.020)	(.019)	(.018)
Energy Rents	-	-.06**	-.12***	-.11***
***Contract-Poor**		(.031)	(.029)	(.028)
Contract-Poor	-	-.87***	-.19	.17
		(.205)	(.147)	(.145)
Regime	.87***	.80***	.78***	.70***
	(.022)	(.033)	(.037)	(.043)
Income	-	-	.24***	.29***
			(.062)	(.061)
SSAfrica	-	-	-	-.37**
				(.169)
MidEast	-	-	-	-.75***
				(.184)
Islam	-	-	-	-.01***
				(.002)
OECD	-	-	-	.40**
				(.202)
R-squared	0.78	0.78	0.79	0.80
Observations	3407	3407	3401	3331

*significant at the 0.1 level; **significant at the 0.05 level; ***significant at the 0.01 level

†The dependent variable is Freedom House index. OLS regressions with panel corrected standard errors, all independent and control variables are entered with five-year lags, standard errors in parantheses. Significance levels reflect one-tailed tests.

CHAPTER VI

IMPLICATIONS AND CONCLUSION

VI. 1. Review of the Study and Implications

The starting point of this study has been the following observation: Although possessing significant natural resource wealth seems to have a causal relation with political decay in general, a number of countries –both historically and today– has not experienced this negative effect. This variation, however, cannot be explained with the existing theories linking natural resource wealth and authoritarianism since the proposed causal mechanisms (i.e. taxation and spending effects) should work universally, that is, they should have an effect on all countries. In order to address this discrepancy between reality and theory, some scholars have added specifications to the causal mechanisms. Ross (2001:343-344), for example, suggested that "…large oil discoveries appear to have no discernible antidemocratic effects in advanced industrialized states, such as Norway, Britain, and the U.S., but may harm or destabilize democracy in poorer countries", implying a certain income threshold beyond which the negative effects of natural resource wealth disappears. Such an approach, however, is not justified since "the mechanisms adduced to explain the correlation are independent of income and therefore ought to still be at work" (Goldberg et al., 2008: 479). Similarly, Friedman (2006:31) argues that the

detrimental political effects of resource wealth do not apply to "well-established stated" while Wantchekon (2002) considers "weak state capacity" as the main culprit for political resource curse. Again the problem with these propositions is that they are not operationalized and tested in a systematic fashion. Thus, we can argue that there is room for improvement in the literature.

In the face of this theoretical puzzle, the argument of this thesis has been that we have to account for the socio-economic setting in which the resource rents accrue in order to explain the variation in the effects of natural resource wealth on political regimes. The socio-economic structure of Norway is quite different from that of Saudi Arabia, and that variance may be the crucial factor explaining why the effects of resource wealth on polity (operationalized as the *change* in the regime score) are radically different. Previous research has neglected to make such a distinction, most probably because until recently there was no coherent theory that could be used for distinguishing and measuring different socio-economic conditions on a global scale. The newly emerging economic norms theory, on the other hand, makes such a distinction possible and thus it has been employed in this study.

The economic norms theory distinguishes between two modes of socio-economic structure based on the prevalence of contract-based exchange in a society, namely contract-rich vs. contract-poor societies (Mousseau, 2009). The hallmark of a contract-rich society is that most people in such societies interact with strangers regularly and voluntarily for their income and goods, and the relationship is based on contracts without any social obligation beyond the terms explicitly stated in the contract. In contract-poor societies, however, the prevalent mode of transaction is

reciprocal exchange through clientelist networks where different social obligations depending on where one stands in the network (i.e. patron or client) are essentially embedded in economic transactions. Such a structure also implies that most individuals in contract-poor societies are economically dependent for their needs on family, friends, clans or religious/ethnic groups.

The significance of this distinction for our purposes stems from the proposition that different everyday routines of individuals due to a different socio-economic structure (contract-rich vs. contract-poor) should result in divergent decision making heuristics which in turn should also cause a divergence in the political culture and institutions (Mousseau, 2000, 2009). This is compatible with the assertion of Denzau and North (1994) who also argue that individuals with different learning experiences will have a different "mental model" to interpret the world, affecting all areas of public sphere. In this respect, the economic norms theory suggests that individuals in contract-rich societies should develop habits of valuing the rights of strangers as well as expanding the opportunities of contracting so that the existence of a state that impartially enforces contracts is eagerly sought (Mousseau and Mousseau, 2008; Mousseau, 2009). In contrast, since the individuals in contract-poor societies strongly identify themselves with their in-group it is more probably that they will eschew the rule of law if they think it would serve the interest of their group. Individuals in contract-poor societies are also dependent to their in-groups for economic opportunities so that while they display a relatively high trust to their fellow group members, there is no reason to trust to strangers and state institutions (Mousseau, 2009).

As stated before, the economic norms theory in this form enables us to account for the socio-economic setting in which the resource rents accrue and thus helps to explain why some countries are immune to the negative political effects of natural resource wealth. The core argument of this thesis is that societies with contract-intensive economies should be significantly less prone to the detrimental political effects of natural resource wealth primarily due to a collective interest in the rule of law and lack of patronage opportunities. The politically-motivated distribution of resource rents would disrupt the working of an economy that is based on contracts and since in a contract-rich society a significant portion of the population benefits from market-contracting, we would expect strong opposition towards this patronage attempt due to collective interest. Moreover, such a scheme would be at odds with the mental models of policy makers and the lack of patronage channels where rents could be diverted in a contract-rich society would also render the politically-motivated distribution of resource rents impossible. In a contract-poor economy, on the other hand, the arrival of resource rents would just strengthen the already-established patronage networks or cause the development of new ones. The receipt of substantial rents would transform the state into the greatest patron in the society and the resulting centralization of political and economic power would eventually lead the way to an authoritarian regime. In sum, we would expect the detrimental effects of natural resource wealth to be observed only in contract-poor societies while contract-intensive societies should not be negatively affected.

The empirical investigation of the study's hypothesis involves constructing a quantitative model that mirrors the established models in the relevant literature and

then adding new variables that reflect contract-intensity in order to observe the proposed effects. The general logic of the model depends on tracking the change in a country's regime type to observe how it correlates with changes in natural resource rents while controlling for other factors that may potentially affect regime type. For this purpose the dependent variable of the study has been the Polity regime score (*PolRegime*) while the Freedom House democracy score (*FHRegime*) has also been employed to provide a robustness check. In order to confirm the findings of previous research, the first independent variable of the study has been *EnergyRents* which denotes the share of a country's GNI derived from the depletion of energy sources. The second and crucial independent variable of the model, however, is the interactive term *EnergyRents*ContractPoor* which allows us to account for resource rents in a contract-poor society and thus to test our hypothesis. The control variables of the study are borrowed from Ross (2001) and include economic development (*Income)*, the Muslim percentage of a state's population (*Islam*), membership in the Organization for Economic Cooperation and Development (*OECD*), and two dummy variables indicating whether the country resides in the Middle East *(MidEast*) or sub-Saharan Africa (*SSAfrica*). At this point a caveat about using these control variables has also been noted since all of these control variables that are widely used in the literature lack a coherent theory except the economic development variable. Lastly, in order to make sure that we are predicting the change in country's regime type and not the regime type itself, we have added the dependent variable lagged by five years to the right-hand side of the model.

This model is tested using a dataset spanning 156 countries between 1975 and 2006, and the results of the analysis largely support the hypothesis of this study. First we are able to confirm the general wisdom in the literature that if we do not account for the socio-economic setting in which resource rents accrue, natural resource wealth is indeed detrimental for democratic governance. This effect, however, disappears once we include variables into the model that are derived from the economic norms theory and account for rents that accrue in a contract-poor environment. Specifically, while the presence of significant resource rents in a contract-poor society is negatively associated with regime score, no such effect can be discerned in contract-rich societies. Moreover, in some models we have seen that resource rents in a contract-rich society actually promotes democratic governance, an observation that is compatible with economic norms theory and the core hypothesis of this study. The results are identical when we include several control variables and in the case where the Freedom House regime score is employed as the dependent variable, except few dissimilarities that are most likely statistical artifacts.

King et al. (1994: 15) note that "though precise rules for choosing a [research] topic do not exist, there are ways of determining the likely value of a research enterprise to the scholarly community". For this purpose, they argue that any research project should satisfy two criteria:

> First, *a research project should pose a question that is "important" in the real world*. The topic should be consequential for political, social, or economic life, for understanding something that significantly affects many people's lives, or for understanding and predicting events that might be harmful or beneficial. Second, *a research project should make a specific contribution to an identifiable scholarly literature by increasing our collective ability to construct*

> *verified scientific explanations of some aspect of the world* [Emphases in original] (King et al., 1994: 15).

Evaluating the current study from this perspective, I believe that it satisfies both criteria proposed by King et al. (1994). First, understanding the factors that promote or harm democratic governance is extremely important for the efforts of spreading democracy to authoritarian regimes and improving the quality of democracy in the already democratic regimes. Obviously, this issue is of paramount importance for the lives of ordinary people around the globe. In this respect, the current wisdom in the literature holds that possessing significant natural resource wealth is harmful for democratic governance. The results of this study, however, suggest that this is not true; resource rents have a negative effect on democratic governance only in contract-poor societies while contract-rich societies are not negatively affected. Thus, the primary factor that hurts democracy is a contract-poor socio-economic environment and possessing significant natural resource wealth just exacerbates this situation.

This observation has also direct policy implications especially related to the politics of the Middle East. The abundance of natural resource wealth in the region has been considered as the main culprit for the isolation of the Middle East from the general democratization trend in the world (Huntington, 1991; Bellin, 2004), and such a view implies that there is little policymakers can do until the resources are depleted. This study, however, suggests that policies aimed at increasing the contract-intensity of the Middle Eastern societies can be an effective tool to promote democracy in the region since natural resource wealth does not appear to have a

detrimental effect on democratic governance in contract-rich societies. An effective step in this direction would be implementing policies to increase market-based employment[28] in contract-poor societies. Jobs would provide people with economic freedom and choice, which in turn should decrease dependency on personalized ties, family and in-groups. In contrast, high unemployment rates in a society would cause a significant portion of the population to seek patrons for economic security, thereby fostering clientelist ties and hindering the development of contract-based relations. Mousseau (2009) notes that the U.S. had subsidized market-based employment in Germany and Japan after the Second World War and helped the development of a liberal political culture in these societies; we can argue that a similar strategy can also be effective for today's contract-poor societies.

The second criterion of King et al. (1994) demands a successful research project to make a specific contribution to an identifiable scholarly literature. This concern is vital for the current study since the starting point of this thesis has been to fill in a void in comparative politics literature. As stated before, the current leading theories (e.g. rentier state hypothesis) on the relationship between natural resource wealth and political regimes cannot account for the observation that some countries are immune to the political resource curse. In this respect, the contribution of this thesis to the literature has been to show empirically that the negative effects of natural resource wealth on political regimes are not universal and they are observable only in the context of a contract-poor society. This means that the current theory is

[28] We have to stress here that employment opportunities should be market-based, not dependent on the state or public agencies. Jobs that are distributed by the state are prone to clientelist relations and are extensively observed in contract-poor societies; thus they are not likely to increase the contract-intensity of a nation.

underspecified and we have to pay attention to the socio-economic environment in which the natural resource rents accrue.

This thesis has also provided an important testing avenue for the newly emerging economic norms theory since the issues considered are closely related with the theory's observable implications. Goldberg et al. (2008: 480) note that "the most powerful test of any hypothesis is on a dataset other than the one used in its original construction" and the economic norms theory was originally constructed to explain peace among some nations by imposing economic conditionality on the so-called "democratic peace" (Mousseau, 2000). Thus this study is ideal for testing economic norms theory since while the dataset constructed here is "new" to the theory, the hypothesis tested is crucial for the observable implications of it. If economic norms theory has predictive power, we would expect that contract-rich societies should not be subject to the detrimental political effects of natural resource wealth. Indeed, the results of the empirical analysis suggest strongly in this direction which present an important support for the validity of the economic norms theory in general. Therefore, while this study addresses an important gap in an established literature, it also provides support for a newly emerging theory by putting it into test in a new empirical setting.

VI. 2. Limitations of the Study and Future Research

The main limitation of the current study is related to the time period considered for the empirical analysis (1975-2006) which, according to some scholars, is also a problem for the broader natural resource wealth vs. democratization literature due to

two reasons (Goldberg et al., 2008). First, the cross-national time series consists of 31 annual observations which may be considered to be a very short time period for the development of democratic institutions. The relative shortness of the time period could also prevent us from observing different business cycles and "various trends in resource dependence across time within states" (Goldberg et al., 2008: 480). Thus, the data may be inadequate to draw generalizations about the relationship between natural resource wealth and political regime. Second, it has been noted that the period considered for the analysis represents "an anomalous period in the international commodity markets" due to the influence of the Organization of the Petroleum Exporting Countries (OPEC) and the widespread government ownership of resource wealth (Goldberg et al., 2008: 482-483). Again, this may raise doubts about the ability of the analysis to produce generalizable results. However, as stated before, this concern applies not only to this study but to the general literature where it is fairly standard to use a post-1970 dataset.

Another limitation of this thesis is that we have considered only energy rents (consisting of crude oil, natural gas, and coal rents) as the measure of natural resource rents. Although energy rents are arguably the most important source of natural resource income, the analysis in this fashion excludes rents that accrue from metals, minerals, diamond and timber. Some countries are highly dependent on rents from such sources (e.g. diamonds in the case of Botswana) and this situation may affect the results by missing this aspect of natural resource wealth. Lastly, we have tested the hypothesis of the study only with a large-N, cross-national dataset. The absence

of a case study that illustrates the working of the causal mechanism is another limitation of the current analysis.

Suggestions for future work are naturally shaped by the preceding discussion of the limitations of the current study. First, the hypothesis could be tested using a new dataset that spans a longer time period. In this way, we would be able to observe different business cycles of the international commodity market and allow more time for the effects of natural resource rents on political regimes to realize. The recent work of Goldberg et al. (2008) is a move in this direction where the authors use a new dataset for the U.S. states spanning 73 years and report that natural resource wealth contributes to less competitive politics. A major task in our case, however, would be constructing a dataset for measuring contract-intensity of countries before 1970s. Also data about natural resource revenues of countries before 1970s is not available in current datasets, so expanding the time horizon of the study is not a straightforward task.

Second, the study can be enhanced by considering natural resource rents other than energy rents only. This task is relatively easier compared to expanding the time horizon due to better data availability. By including revenues from commodities like metals, minerals, and diamond into the analysis we can see whether the proposed effects of natural resource wealth on political regimes also exist for commodities besides oil, natural gas, and coal. Lastly, case studies that illustrate how the key causal mechanisms proposed in this study are working would be a major agenda for future research. Obviously the cases of Norway and Botswana would be interesting to analyze, but the case of Russia would also be a potential candidate for case study to

illustrate how the combination of a contract-poor economy and significant resource rents affects political regime. Such case studies would complement the large-N analysis presented in this thesis.

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APPENDIX

Summary Statistics - Polity Regime Score as the dependent variable

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
PolRegime	3810	1.32	7.46	-10	10
EnergyRents	3810	3.21	3.16	0	10.04
EnergyRents*ContractPoor	3536	2.56	3.20	0	9.99
ContractPoor	3536	0.80	0.40	0	1
Income	3803	7.14	1.54	4.04	10.69
SSAfrica	3749	0.32	0.47	0	1
MidEast	3749	0.08	0.28	0	1
Islam	3721	26.43	37.54	0	99.7
OECD	3749	0.17	0.38	0	1

Summary Statistics - Freedom House Regime Score as the dependent variable

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
FHRegime	3662	6.26	3.92	0	12
EnergyRents	3662	3.23	3.17	0	10.04
EnergyRents*ContractPoor	3407	2.58	3.22	0	9.99
ContractPoor	3407	0.80	0.40	0	1
Income	3656	7.19	1.54	4.11	10.69
SSAfrica	3599	0.32	0.47	0	1
MidEast	3599	0.09	0.28	0	1
Islam	3563	26.74	37.57	0	99.7
OECD	3599	0.17	0.37	0	1

Correlations

		lrnts5	lrntsCP5	CP5	dm5	dv5	ssafrica	mideast	islam	oecd
lrnts5	Pearson Correlation	1	.881**	.026	-.111**	.290**	-.275**	.319**	.246**	-.037*
	Sig. (1-tailed)		.000	.063	.000	.000	.000	.000	.000	.011
	N	3892	3594	3594	3827	3880	3818	3818	3782	3818
lrntsCP5	Pearson Correlation	.881**	1	.384**	-.295**	.031*	-.207**	.345**	.330**	-.345**
	Sig. (1-tailed)	.000		.000	.000	.030	.000	.000	.000	.000
	N	3594	3594	3594	3540	3582	3555	3555	3523	3555
CP5	Pearson Correlation	.026	.384**	1	-.563**	-.709**	.282**	.063**	.311**	-.863**
	Sig. (1-tailed)	.063	.000		.000	.000	.000	.000	.000	.000
	N	3594	3594	3934	3853	3638	3873	3873	3838	3873
dm5	Pearson Correlation	-.111**	-.295**	-.563**	1	.471**	-.287**	-.241**	-.444**	.547**
	Sig. (1-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
	N	3827	3540	3853	4204	3892	4118	4118	4087	4118
dv5	Pearson Correlation	.290**	.031*	-.709**	.471**	1	-.513**	.250**	-.136**	.638**
	Sig. (1-tailed)	.000	.030	.000	.000		.000	.000	.000	.000
	N	3880	3582	3638	3892	3957	3883	3883	3844	3883
ssafrica	Pearson Correlation	-.275**	-.207**	.282**	-.287**	-.513**	1	-.210**	.070**	-.290**
	Sig. (1-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
	N	3818	3555	3873	4118	3883	4985	4985	4904	4985
mideast	Pearson Correlation	.319**	.345**	.063**	-.241**	.250**	-.210**	1	.450**	-.128**
	Sig. (1-tailed)	.000	.000	.000	.000	.000	.000		.000	.000
	N	3818	3555	3873	4118	3883	4985	4985	4904	4985
islam	Pearson Correlation	.246**	.330**	.311**	-.444**	-.136**	.070**	.450**	1	-.304**
	Sig. (1-tailed)	.000	.000	.000	.000	.000	.000	.000		.000
	N	3782	3523	3838	4087	3844	4904	4904	4904	4904
oecd	Pearson Correlation	-.037*	-.345**	-.863**	.547**	.638**	-.290**	-.128**	-.304**	1
	Sig. (1-tailed)	.011	.000	.000	.000	.000	.000	.000	.000	
	N	3818	3555	3873	4118	3883	4985	4985	4904	4985

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).