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The Globalization of Natural Resources:  
How External Actors Affect Political Survival  
in Resource Rich Countries

by

Chia-yi Lee

A dissertation presented to the  
Graduate School of Arts and Sciences  
of Washington University in  
partial fulfillment of the  
requirements for the degree  
of Doctor of Philosophy

December 2013  
St. Louis, Missouri



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ABSTRACT OF THE DISSERTATION

**The Globalization of Natural Resources:  
How External Actors Affect Political Survival  
in Resource Rich Countries**

by

Lee, Chia-yi

Doctor of Philosophy in Political Science,

Washington University in St. Louis, 2013.

Professors Nathan Jensen and Andrew C. Sobel, Co-chairs

This dissertation examines the effect of external actors, including foreign investors, the home governments of foreign investors, and international organizations (IOs), on leadership survival in resource rich countries. According to the existing literature, resource rich countries care less about external reputation and have a higher level of political risks for foreign investors, so, theoretically, they would tend to nationalize the resource sectors, especially in the presence of resource nationalism. In reality, however, resource rich countries cooperate closely with foreign actors and join IOs that constrain themselves. This dissertation provides a theory to explain this puzzle, by modeling the interaction among foreign actors, the leaders of resource rich countries, and the domestic opposition. It argues that leaders of resource rich countries tend to maintain a close friendship

with powerful foreign countries, not only because resource rich countries have strategic or economic importance, but also because they by nature face a higher level of revolutionary threat. By providing support to leaders who are friends of theirs, which depresses the opposition, foreign actors help the leaders of resource rich countries to stay in power. An empirical analysis on oil ownership and leadership turnover shows that a leader is more likely to survive when the oil is foreign owned. There are several foreign policy tools that foreign actors can use to assist the leaders, including military intervention, foreign aid, and support from IOs. Membership in IOs also has a similar effect on leadership survival, because IOs can legitimize the leaders and cover their unpopular activities.



# Chapter 1

## Introduction

Oil and other natural resources, particularly strategically or economically important ones, have dramatic influence on a country's domestic politics and economy. On the one hand, resource rich countries benefit from resource booms by receiving large revenues that are not based on taxation. Because of these revenues, the governments or the leaders have less incentives to engage in globalization, including inviting foreign investors, joining international organizations (IOs), and seeking foreign aid. On the other hand, as the resource curse literature suggests, resource rich countries tend to be exposed to some adverse effects, such as slow economic growth, authoritarianism, and civil conflicts.

While most of the resource curse literature implicitly assumes that natural resources are state owned and that the profits are accumulated to the governments, the extraction and production of natural resources are rarely executed completely by a country's own efforts. Cooperation with foreign investors is commonly seen

in the resource sector, especially in the initial stage of resource exploration, when foreign investment is particularly needed. Compared to non-resource rich countries, therefore, resource rich countries may actually interact more frequently with external actors, particularly foreign investors and trade partners. How these external actors affect the domestic politics of resource rich countries, nevertheless, is an understudied question.

Moreover, when it comes to the political resource curse, scholars tend to focus on how resource abundance or dependence affects political institutions (e.g., Ross, 2001; Jensen and Wantchekon, 2004; Aslaksen, 2010), or regime survival (e.g., Smith, 2004; Ulfelder, 2007; Cuaresma, Oberhofer and Raschky, 2011; Andersen and Aslaksen, 2012; Wright, Frantz and Geddes, 2013), rather than the leader, even though their theory usually emphasizes the leader's ability to use resource revenues either to provide public goods or to repress the opposition. This dissertation fills this gap by examining how foreign actors' involvement in the resource sector influences leaders' survival prospects. Specifically, I argue that external actors, including foreign investors, the home governments of foreign investors, resource importing countries, and IOs, can help the leaders of resource rich countries to stay in power. Foreign actors can use several tools to assist the leader, including military intervention, foreign aid provision, and support from multilateral financing organizations such as the International Monetary Fund (IMF). These forms of support are provided specifically to the leaders, which not only can be directly used to target the opposition, but also signal to the opposition

foreign actors' unwillingness to support them. The resulting outcome is that the opposition refrains from challenging the leader, and the leader thus stays in power longer.

This dissertation uses a multi-method approach to present and test this theory, but the focus is on quantitative analyses. In Chapter 2, I review the literatures that this dissertation is built upon and discuss the puzzle that is drawn from these literatures. According to the literature on foreign direct investment (FDI) and foreign aid, resource rich countries have a weaker motivation to engage in globalization because they can reap the benefits from natural resource production and do not need to eagerly seek foreign money. The FDI literature also points out that resource industries have larger sunk costs and produce higher political risks. These theories, along with the resource nationalist sentiment, lead to the prediction that foreign capital is more likely to be expropriated away in the resource sector, which, however, is not what we observe in the real world. Except for the wave of nationalization in the 1970s, most of the resource rich countries cooperate closely with foreign investors and their home governments. This dissertation intends to explain why this is the case.

Chapter 3 introduces the core theory that explains the globalizing behavior of resource rich countries. I show that privatizing natural resources to foreign investors can bring in both economic and political benefits to the leader. Economically, the involvement of foreign actors enhances the efficiency of resource extractions and assures the access to the global market, generating stable revenues

for the leader. Politically, the leader builds a collusive relationship with foreign investors and their home governments, both of who have strong incentives to keep a stable resource supply, and obtain their promise of not supporting the opposition. Foreign actors also draw upon a few foreign policy tools to explicitly help the leader and implicitly depress the opposition, including military intervention, budgetary aid, and IMF assistance. The opposition who observes this tacit agreement between the leader and foreign actors will thus hesitate to stage a coup or revolt. To illustrate the theory, Chapter 3 also presents a game-theoretical model and four anecdotal cases.

Chapter 4 provides empirical analyses to test the hypotheses derived in Chapter 3. Using data on leaders and oil ownership, I show that when a country has oil owned by foreigners, the leader is less likely to be removed. Among these foreign powers, the United States may be the most significant one. I find that leadership turnover is less frequent in countries that receive the U.S. investment in the mining sector and that export oil to the United States. Additional analyses also show that countries with foreign owned oil are more likely to experience military intervention, to receive budgetary aid, and to become IMF program recipients.

Chapter 5 focuses on IOs, examining how IO membership and resource wealth jointly affect leadership survival. IOs may have a similar effect as foreign investors and their home governments when they act as the agents of these powerful countries and firms. IOs, moreover, have other functions that will help a leader's survival, including legitimizing the leader, being a scapegoat, and shielding lead-



ers' unpopular activities. These functions are particularly useful for resource rich countries since they suffer from the resource curse and a higher level of revolutionary threat. An empirical analysis of IO membership, resource rents, and leadership survival shows that IO membership has a positive effect on leadership tenure, and that this effect is stronger for resource rich countries.

This dissertation contributes to both the international relations (IR) and the comparative politics (CP) literatures. The theory developed in this dissertation is compatible with traditional IR theories. The idea that foreign governments make an effort to secure their oil interest and to support the leaders who are friends of theirs is in line with the realists' geopolitics and gunboat policy arguments. The focus on how capital-intensive countries extract raw materials in resource rich countries echos the dependency theory (Frank, 1969) and the world system theory (Wallerstein, 1974). The consideration of the role of private companies and IOs corresponds to the liberalist argument that non-state actors matter. This dissertation is also built upon the CP literature that focuses on democratization, civil conflicts, leadership survival, and resource politics. Finally, this dissertation lies at the intersection between international and comparative political economy, adding to the broad literature that examines the role of economic factors in affecting domestic politics.



## Chapter 2

# Literature Review: Resource Wealth and Foreign Actors

How do external actors affect leadership survival in resource rich countries? Before elaborating my theory, this chapter reviews the literature that is related to and leads to the research question. I first discuss the resource curse literature, with a focus on the political curse. I then point out two issues that are missing in the resource curse literature and are highly relevant to this dissertation. Next, I review the FDI literature that focuses on the resource sector, followed by a discussion on resource nationalism. Finally, I briefly review the foreign aid literature and discuss the questions that can be drawn from this literature.

## 2.1 The Natural Resource Curse Literature

Natural resources are materials or components that are naturally present in the environment, so basically they are the gifts from the earth. There are many ways to classify natural resources, and a basic way is by whether this resource is renewable or not. Resources that cannot be reproduced and will be depleted are nonrenewable resources, including energy resources (such as oil and natural gas) and mineral resources (such as gold, silver, copper, and diamonds). Resources that can be generated again are renewable resources, such as agricultural resources, water, sun, and wind. In this dissertation, I only consider nonrenewable resources, as most of the resource curse literature does.<sup>1</sup> Nonrenewable resources, especially fuel resources, have a significant role in the industrialized world and are highly profitable. Therefore, countries that are naturally endowed with natural resources should benefit since these resources are “windfalls” or “manna from the heaven” to them.

In the political science and economic literatures, however, it is largely believed that resource endowments may not be a blessing; instead, resource abundance or dependence may be a curse.<sup>2</sup> This so-called “resource curse” theory shows that natural resources may bring at least three sets of adverse effects. First, resource

---

<sup>1</sup>Collier (2010), for example, argues that only nonagricultural resources will cause the curse because they are intrinsically depletable and also because the values usually accrue to the governments.

<sup>2</sup>It should be noted that resource abundance/wealth/richness and resource dependence are two separate concepts which may carry different effects (Brunnschweiler and Bulte, 2008a, 2009). In this dissertation, I basically focus on resource abundance, but resource dependence is usually a subset of resource abundance, so I also discuss the literature that emphasizes the negative effect of resource dependence.

abundance or dependence may lead to slow economic growth or a lower level of economic development, which is an economic resource curse (Sachs and Warner, 1995; Ross, 1999; Manzano and Rigobon, 2001; Manning, 2004; Isham et al., 2005; Wick, 2008).<sup>3</sup> Second, resource dependent countries are prone to civil wars or regime instability (Collier and Hoeffler, 1998; Smith, 2004; Ross, 2004*a,b*; Fearon, 2005; Humphreys, 2005; Ross, 2006; Wick, 2008; Brunnschweiler and Bulte, 2009).<sup>4</sup> Third, resource rich countries tend to have authoritarian regimes and face difficulties democratizing (Ross, 2001; Jensen and Wantchekon, 2004; Morrison, 2007, 2009; Aslaksen, 2010; Ramsay, 2011; Tsui, 2011), which is a political resource curse.

The most relevant to this dissertation is the political resource curse, i.e, the authoritarian effect of natural resources. As detailed in Ross (2001), resource endowments can carry an anti-democratic effect through three mechanisms. The first is the “rentier state” effect,<sup>5</sup> which means that states enjoying a higher level of resource revenues can tax their people less heavily (taxation effect),<sup>6</sup> can spend more on buying patronage (spending effect), and can actively or passively use the rents to prevent the formation of social groups that are likely to demand democratization (group formation effect). The second mechanism is the repression

---

<sup>3</sup>There are multiple reasons why natural resources may slow down economic growth or impede economic development, including Dutch Disease, rent-seeking, price volatility, etc. Since this dissertation does not focus on the economic resource curse, I do not elaborate these explanations here. For nice reviews and summaries, see Ross (1999), Torvik (2009), and Van der Ploeg (2011).

<sup>4</sup>The economic literature points out that civil conflicts and low economic growth are interrelated. Civil conflicts can be one of the mechanisms through which natural resources cause the economic resource curse (Van der Ploeg, 2011); it can also be that low economic growth caused by resource dependence makes rebellions more likely to happen (Collier and Hoeffler, 2005).

<sup>5</sup>The term “rentier state” is used first in Mahdavy (1970) and well defined in Beblawi and Luciani (1987).

<sup>6</sup>A recent study by Paler (2013) provides evidence from a field experiment that taxes motivate people to engage in political activities, such as monitoring the government.

effect, which is that resource wealth allows the governments to spend more on domestic security and thus hinder population's democratic aspirations. The third is the modernization effect, meaning that resource wealth does not lead to social and cultural changes that are beneficial to democratization, such as rising education levels and increasing occupational specialization, which in turn lead to a standstill of democratization.

While most of the political resource curse literature focuses on how resource wealth or dependence affects the *level* of democracy, some scholars note that the aspect in which natural resources affect domestic politics is actually on political survival (Smith, 2004; Ulfelder, 2007; Omgba, 2009; Cuaresma, Oberhofer and Raschky, 2011; Andersen and Aslaksen, 2012; Wright, Frantz and Geddes, 2013). These scholars, therefore, are devoted to investigating the effect of natural resources, particularly oil, on political survival, although their definitions and operationalizations of political survival differ from one another. Smith (2004) finds that oil wealth reduces the probability of regime failure across different regime types. Ulfelder (2007) shows that resource rich countries are less likely to experience democratic transitions. Cuaresma, Oberhofer and Raschky (2011), Andersen and Aslaksen (2012), and Wright, Frantz and Geddes (2013) all discover a stabilizing effect of oil in authoritarian countries, and Omgba (2009) shows that this is true for African oil producers.

## 2.2 What Is Missing in the Resource Curse Literature?

While the resource curse literature is so rich and well developed, I find there are at least two issues that need to be explored more deeply. First, in the resource curse literature, the role of external actors is often missing. Scholars generally focus on how resource wealth affects the interaction between domestic players, such as two competing parties (Aslaksen and Torvik, 2006) or elites and citizens (Dunning, 2008; Morrison, 2009; Bearce and Hutnick, 2011), rather than that between domestic and international actors. As far as I know, there are only two works that explicitly take foreign actors into consideration. Jones Luong and Weinthal (2006, 2010), as one of them, argue that ownership structure plays a key role in determining whether a resource rich country is cursed. They offer a sound theory saying that state ownership provides disincentives for governments to build institutions whereas private ownership, particularly a privatization to domestic firms, encourages the formation of strong institutions. When foreign oil corporations are involved, how domestic institutions are developed depends on the international context. Specifically, they argue, facing the competition from small oil companies and the pressure from international non-governmental organizations (NGOs) and international financial institutions (IFIs), foreign oil companies are more likely to incorporate corporate social responsibility and favor a stable fiscal regime, which in turn leads to partially constraining domestic institutions. Bayulgen (2010), on the other hand, contends that FDI in the resource sector and political regimes

have reinforcing effects: Both autocracies and stable democracies perform better in attracting FDI than hybrid regimes, and FDI inflows also help consolidate the existing authoritarian/democratic rule. Except for these two works, the resource curse literature basically has the implicit assumption that natural resources are owned by the state and the revenues only accrue to the government, so that these rents can be spent by the leader to coerce or coopt people.

Second, the resource curse literature has seemingly contradictory findings that resource wealth causes regime stability as well as instability. If resource wealth helps the leader and has a stabilizing effect, how can it lead to frequent civil wars, which means regime instability? Scholars argue that some characteristics of natural resources matter, including the type of natural resources, the location, the price, and the stability of the price. The first two are related to the “lootability” of natural resources. If a natural resource requires more advanced techniques to extract or is less accessible, such as offshore oil, its profits will be less likely to finance or to be captured by oppositional groups, thus carrying little destabilizing effect. Andersen and Aslaksen (2012) show that resources that are hard to appropriate, such as oil and non-lootable diamonds, are linked to longer leadership duration, but those technically more appropriable ones, such as lootable diamonds and other mineral resources, may have a destabilizing effect. Omgba (2009) also finds that, in Africa, only oil has a stabilizing effect for leaders, but mineral resources do not. He provides two possible explanations, both of which are highly relevant to the theory in this dissertation. First, oil production requires



more investment and techniques from abroad, and therefore this pre-financing from foreign investors helps the leader stay in the position.<sup>7</sup> Second, foreign governments are more likely to intervene due to the repercussion of the global oil market, thus stabilizing the leader. Moreover, while agricultural resources are generally excluded in the resource curse literature, some scholars, such as Isham et al. (2005), argue that economic plants (such as coffee and cocoa) that are one type of the “pointy” resources have a similarly adverse effect,<sup>8</sup> because their values are more likely to be controlled by a small group of people. Humphreys (2005) also finds that oil is not associated with civil war onset, but agricultural value is.

Furthermore, many scholars believe that the volatility of resource prices, the fluctuation of resource rents, or the instability of trade in resources is one of the chief causes of the economic or political curse (Ross, 1999; Collier and Hoeffler, 2005; Dunning, 2005; Shaxson, 2005; Leong and Mohaddes, 2011). The global oil market, particularly, has “boom and bust” cycles. Oil producing countries can enjoy big profits when the oil price is high, but they may suffer during the bad times, especially if they squander the oil income without saving for the future in the good times. Therefore, a solution many scholars propose to combat the resource curse is to diversify the economy, which reduces the overly reliance on

---

<sup>7</sup>Ongba (2009, p. 432) notes “[t]o ensure the profitability of these investments, investors are tempted to give their supports to political leaders with which the contracts were initially negotiated, thereby reducing the risk of losing the property rights that may accompany a change in political leadership.”

<sup>8</sup>Pointy resources, as opposed to diffuse resources, are those that are geographically concentrated, such as oil and plantation crops.

the oil sector and the potential harm during the bust times (Katz et al., 2004; Dunning, 2005; Schubert, 2006).

Some other scholars, alternatively, explore the conditional effect of natural resources. Morrison (2012) addresses this puzzle by arguing that whether oil induces stability or conflicts is contingent on the state capacity, an argument that Smith (2013) highly agrees with. Tsui (2010), using a formal model, shows that whether resource wealth fuels conflicts depends on the counter-insurgent technology and whether resource wealth affects the costs of political entry deterrence. In addition, based on the logic of Acemoglu and Robinson (2006), Dunning (2008) argues that whether resource wealth has an authoritarian effect or democratic effect is conditional on the level of inequality, and uses this theory to explain the case of Latin America.

In addition to the lack of external actors and the contradictory findings discussed above, some scholars point out that the resource curse studies often suffer from an endogeneity problem because it is very likely that low economic development, frequent civil wars, or authoritarianism leads to the over reliance on natural resources rather than the other way around (Ross, 2006; Brunnschweiler and Bulte, 2008*a,b*; Ramsay, 2011; Tsui, 2011). Also, it is argued that estimating the treatment effect of resource reliance requires a counterfactual scenario, which is rarely seen in the literature (Herb, 2005; Haber and Menaldo, 2011). These methodological issues begin to be an important part in the resource curse literature and deserve more attention in future studies.

## 2.3 FDI in Resource Rich Countries

The previous two sections review the resource curse literature, and find that foreign actors are rarely taken into consideration in this literature. This section, furthermore, will review the literature on FDI and discuss how this literature views the resource sector as a special case.

In the FDI literature, a robust and important finding is that foreign investors prefer to enter democratic countries because governments in this type of regime provide credible promises to honor contracts and avoid the infringement on property rights (Li and Resnick, 2003; Jensen, 2003, 2008). When the target of investment is limited to the resource sector, however, the attractiveness of democracy no longer exists. This is because, despite a high level of political risks, the extraordinary profitability of natural resources considerably increases foreign investors' willingness to invest in the resource sector (Kinoshita and Campos, 2003; Asiedu, 2006; Jensen and Johnston, 2011).

The classical "obsolescing bargaining model" (Vernon, 1971) predicts that the bargaining relation between multinational corporations (MNCs) and host countries favors MNCs initially and is shifted towards host governments after MNCs invest the initial amount of money that are unrecoverable (i.e., sunk costs). The sunk costs in resource extractive sectors are particularly large due to high specificity, extreme irreversibility, and high concentration of employment, so in practice it is far more likely for governments to expropriate natural resources or to renege

on natural resource contracts (Kobrin, 1980; Nellor, 1987; Engel and Fischer, 2010; Hajzler, 2010; Jensen and Johnston, 2011). In April 2012, for example, the Argentine government took control of the country's largest energy company YPF from Spain, despite the U.S. government and the European Parliament condemning the nationalization. Recent cases in Venezuela, Ecuador, and Bolivia also demonstrate the ease of expropriations in the mining or petroleum sector.

From the discussion above, we know that the resource sector is highly attractive to foreign investors, even though their investment in this sector may be expropriated more easily. Now I turn to the actor who carry out expropriations—the leader. An essential reason why leaders expropriate FDI is because they feel politically insecure and expect a shorter time horizon (Jodice, 1980; Olson, 1993; Li, 2009). By expropriating foreign owned assets, leaders obtain immediate rewards and gain political autonomy in making economic policies. This may strengthen their political power at least in the short term. For example, they can place their supporters in the positions in the resource sector controlled by the government or use the money they acquire to repress the opposition. So, theoretically, expropriations should help a leader's survival. And since assets in the resource sector are one of the easiest to expropriate from, leaders will most likely execute expropriations in the resource sector if they feel the risk of being deposed.

According to these existing theories, countries richly endowed with natural resources might lack an incentive to provide credible commitment to foreign investors or to join IOs to signal their good reputation to foreign actors; the leaders

of these countries may also tend to expropriate FDI in the resource sector in order to secure their power. Recently, a number of empirical studies confirm the expectation that resource rich countries care less about external reputation. Asiedu and Lien (2010) find that democracy contributes to FDI inflows only when this country is not resource dependent. Jensen and Johnston (2011) show that resource endowments are positively associated with political risks. Hajzler (2012) provides data revealing that expropriation acts occurred more frequently in mining/oil sectors. Voeten and Ross (2011) find that oil exporting countries are less likely to join international political institutions to attract foreign actors. All these studies indicate the uniqueness of resource-based industries and the ease with which resource rich countries can attract foreign investors, and imply that resource rich countries have a lower temptation to cooperate with foreign investors.

In reality, however, we still see resource rich countries globalized to a certain degree and cooperate intimately with foreign investors and their home governments.<sup>9</sup> Expropriations in the resource sector do occur, but they are actually rare events and can be reversed. The YPF Argentine case is currently filed at the World Bank's International Centre for Settlement of Investment Disputes (ICSID), through which Spain seeks compensation for damages. The ICSID data also show

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<sup>9</sup>For instance, as one of the world's major petroleum companies (supermajors), BP operates in all of the top 10 oil producing countries except for Iran, where the oil is 100% state owned. See <http://www.bp.com/worldwide>.

that, compared to other industries, the number of disputes taking place in energy or mining industries is relatively low.<sup>10</sup>

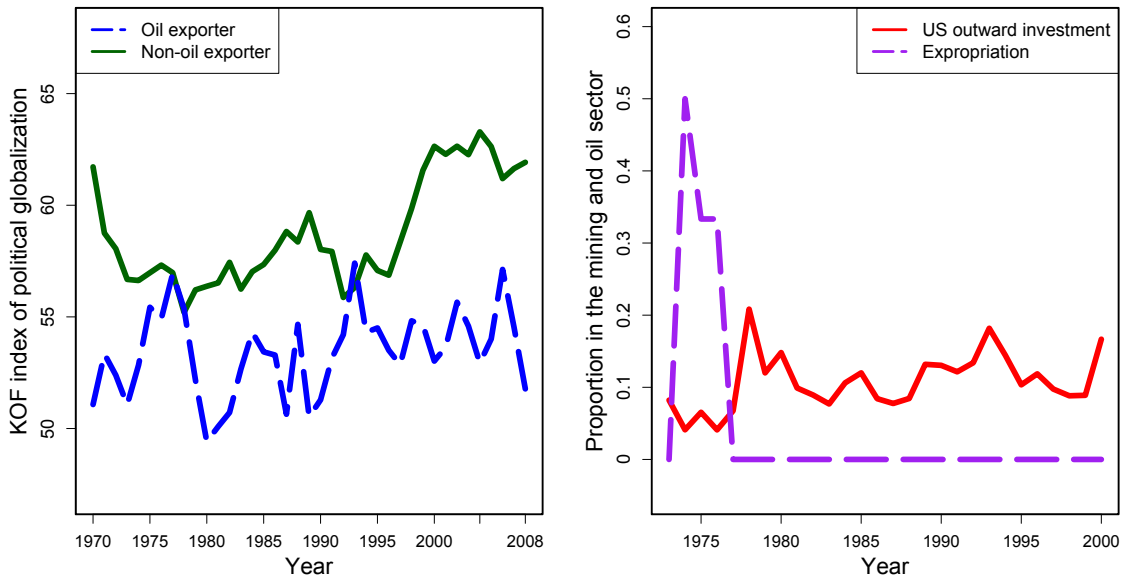


Figure 2.1.: The Globalization of Resource Rich Countries

In the left panel of Figure 2.1, I display the annual average values of the KOF political globalization index for oil exporting countries and other countries, from 1970 to 2008.<sup>11</sup> It shows that oil exporting countries (denoted by the dashed line) are generally less globalized than non-oil exporters (denoted by the solid line), but not always. The right panel presents the dynamic pattern of expropriations of FDI in the mining/oil sector from 1973 to 2000. The solid line denotes the

<sup>10</sup>Among the 178 ICSID cases from 1972 to 2007, 38 took place in the energy or mining industry, 66 took place in the construction or manufacturing industry, and 44 took place in the service industry.

<sup>11</sup>The KOF Index measures political globalization by “the number of embassies and high commissions in a country and, the number of international organizations to which the country is a member and the number of UN peace missions a country participated in” plus “the number of treaties signed between two or more states since 1945.” (Dreher, 2006a; Dreher et al., 2008) This index ranges from 0 to 100 with a higher score denoting a higher level of political globalization. I define a country as an oil exporter when its oil exports account for more than 33% of the merchandise exports in a given year, a standard used by Fearon and Laitin (2003).

proportion of the U.S. outward investments insured by the Overseas Private Investment Corporation (OPIC) in the mining/oil sector out of all sectors.<sup>12</sup> As can be seen, on average, there is around 10 U.S. investments in the mining or oil sector insured by the OPIC. The dashed line denotes the number of expropriation acts in the mining/oil sector. It shows that expropriations of extractive companies were much more frequent in the mid-1970s, but since 1976, there has been no U.S. investment in the extractive sector insured by the OPIC being expropriated, even though the number of investments significantly increased after 1980.

In sum, the evidence presented in Figure 2.1 indicates a lower level of globalization of resource rich countries, consistent with the existing theories. It also shows that, as Kobrin (1984) argues, resource extractive companies were far more likely to be expropriated before 1980.<sup>13</sup> On the other hand, it tells the story that expropriations of natural resources have been very rare since 1980, and that resource rich countries still remain integrated into the international society to a degree. Therefore, the puzzle this dissertation intends to solve is: why do resource rich countries engage in globalization and invite foreign investors even though they lack the need?

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<sup>12</sup>OPIC is a U.S. government agency which provides political risk insurance to the U.S. multinationals investing abroad. From 1973 to 2000, there is a total of 2,062 investments in 93 risky emerging market countries insured by the OPIC, and 261 out of them are in the mining or oil sector. In order to examine the pattern of expropriations, I also draw upon the OPIC data on the claims of contract disputes. From 1963 to 2005, there is a total of 67 expropriation claims, and 10 out of them are investments in the mining/oil sector. All these 10 cases, however, happened before 1977.

<sup>13</sup>Kobrin (1984) argues that the ownership of these resource extractive industries is of essential importance to developing countries so the expropriations of these industries were nearly complete by the mid-1970s (see also Minor, 1994).

## 2.4 Resource Nationalism

The previous section mentions that leaders may expropriate foreign assets when they feel politically insecure. In addition to leaders' survival concern, the expropriation of natural resources may be influenced by the public attitude. In resource rich countries, citizens tend to think that natural resources should be owned by the state or the people, because these assets are their natural endowments and they should have the right to manage these resources and to enjoy the whole revenues. Leaders that nationalize resource sectors or companies, therefore, may have a higher public support. For instance, after his inauguration in 1999, Venezuelan President Hugo Chávez started to take control of the oil industry and oil production management. His oil policy, along with an increase in the global oil price, led Venezuela to receiving high oil profits, and was highly supported by the Venezuelan people. In a face-to-face survey conducted in November 2006 in Venezuela, 66% of the respondents agreed that Chávez's oil policy brings benefits to the great majority of Venezuelans. There are also 62% of the respondents who answered that they would support the action of nationalizing private companies when it is in the national interest.<sup>14</sup> This tendency for a state to take over control of natural resources or resource sectors is called "resource nationalism."<sup>15</sup>

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<sup>14</sup>This survey was conducted by Ipsos-Public Affairs in Venezuela during November 10-18, 2006. The survey results can be found at <http://www.ipsos-na.com/news-polls/pressrelease.aspx?id=3280>.

<sup>15</sup>Stevens (2008, p.5) nicely summarizes different definitions of resource nationalism, and his definition of resource nationalism is that it should "have two components—limiting the operations



An interesting puzzle is that, although public opinion is generally in support of resource nationalism, nationalizations are actually rare events. Most of the time, the government or the leader tends to privatize the resource sector, especially to foreign companies. A plan to privatize resource sectors, however, may result in the tension between the citizens and the government. A clear example is the 2003 Bolivian gas conflict. In 2002, a consortium Pacific LNG, which consists of Repsol YPF, British Gas, and Pan-American Energy, was formed to explore the natural gas reserves in Bolivia. Pacific LNG planned to transmit natural gas through a Chilean port, a plan that was supported by the President Gonzalo Sánchez de Lozada but seriously opposed by the Bolivian society. A series of protests took place in 2002 and 2003, when Gonzalo Sánchez de Lozada finally resigned in October due to public and military pressure (Perreault, 2006). Other examples include the Iraq Oil Law passed in 2007 that granted IOCs long-term contracts and the Nigerian government's privatization of the energy sector in 2011, both of which caused protests.

So, when the public opinion is taken into account, the puzzle seems to be more striking: Why do leaders of resource rich countries choose a privatization to foreign investors, even though nationalization is politically more popular? This does not mean that leaders *never* nationalize or expropriate foreign assets in the resource sector. In fact, resource nationalizations peaked in the 1970s.<sup>16</sup> In re-  
of private international oil companies (IOCs) and asserting a greater national control over natural resource development.”

<sup>16</sup>For instance, Iraq expropriated the major oil company in 1972; Venezuela nationalized the whole oil industry in 1976; Iran cancelled its oil agreements with international companies and took control of the oil industry in 1979.

sponse to a paper that challenges the conventional resource curse theory by Haber and Menaldo (2011),<sup>17</sup> Andersen and Ross (2013) argue that the political resource curse happened basically after the 1970s, when a wave of nationalization took place. Because the governments of these oil producing countries gained absolute control over the oil rents, they were able to insulate themselves from waves of democratization by spending the oil money in buying off patronage or strengthening armed forces.<sup>18</sup>

While most of the nationalizations were completed in the 1970s, it does not mean that oil producing countries have taken full control of their oil production since then. In fact, many oil producing countries switched to foreign extraction or privatized the oil sector to foreign companies in the 1980s or 1990s.<sup>19</sup> The data provided by Guriev, Kolotilin and Sonin (2011) also indicate that there were only two nationalizations of oil companies in the 1980s and none at all from 1990 to 2005.<sup>20</sup>

Figure 2.2 shows the numbers of oil producing countries that adopted three types of development strategies—foreign ownership, state ownership with foreign participation, and domestic ownership, from 1960 to 2005.<sup>21</sup> The data are

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<sup>17</sup>Haber and Menaldo (2011) use very long-term data to re-examine the resource curse hypothesis, and find that oil not only has no harmful effect on democracy, but also may help a country become more democratic.

<sup>18</sup>In his recent book, Ross (2012) argues that the oil curse is a phenomena after the 1970s because of the joint occurrences of several events, including the tightening supplies of oil and natural gas, the end of the Bretton Woods system of fixed exchange rates that secured stable oil prices, the collusion of OPEC member countries, and, most importantly, the nationalization of oil.

<sup>19</sup>For instance, Peru privatized its oil and gas in 1996; Argentina started the privatization process in 1989, although the largest energy company YPF was nationalized again in 2012; Romania offered onshore and offshore oil concessions to IOCs in 1992.

<sup>20</sup>The two cases are Zambia in 1980 and Peru in 1985.

<sup>21</sup>For a longer time-series, see Figure 1.1 in Jones Luong and Weinthal (2010, p.8).

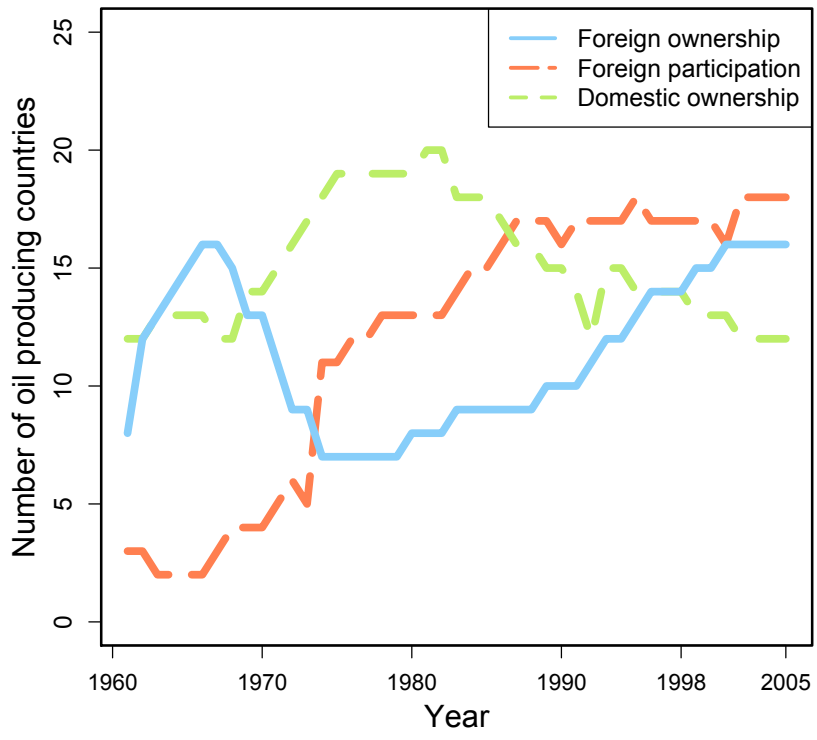


Figure 2.2.: The Dynamics of Oil Ownership Structure

taken from Jones Luong and Weinthal (2010).<sup>22</sup> It can be seen that, in the 1960s, most of the oil producing countries adopted foreign ownership, probably because they needed foreign capital in the initial stage of oil extraction. In the 1970s, due to the wave of nationalizations previously mentioned, domestic ownership became the dominant strategy, consistent with the arguments in Ross (2012) and Andersen and Ross (2013). After the mid 1980s, however, the number of oil producing countries that owned their oil sectors domestically declined, and more and more oil producing countries allowed foreign ownership or foreign participation. So, again, the puzzle still remains, not only across but also *within* resource rich countries. If resource rich countries already nationalized, why do they turn to privatization again?

## 2.5 Foreign Aid and Resource Wealth

As I mentioned previously, the role of foreign actors is often missing in the resource curse literature, and by foreign actors, I refer to foreign investors and their home governments as well as IOs. While the resource curse literature pays little

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<sup>22</sup>Jones Luong and Weinthal (2010) disaggregate oil rich countries into four development strategies based on the ownership structure and control: state ownership with control, state ownership without control (with foreign investors' participation), private domestic ownership, and private foreign ownership. Private foreign ownership is defined as the case when "private foreign companies can own the rights to develop the majority of petroleum deposits and hold the majority of shares (> 50%) in the petroleum sector, usually via concessionary contracts" (Jones Luong and Weinthal, 2010, p.7). Here, I call both state ownership and private domestic ownership "domestic ownership" and merge them. While it may not be totally reasonable to group state ownership and domestic private ownership, domestic private ownership is actually very rare because domestic capital is less abundant in these oil producing countries. In their original data, only Brazil from 1891 to 1937, Guatemala from 1949 to 1982, Romania from 1924 to 1944, Venezuela from 1904 to 1906, and Russia from 1993 to 2004 adopted private domestic ownership.

attention to foreign investment, there is another literature investigating foreign involvement through the resource curse lens, and their focus is on foreign aid. In this section I review this literature and link it to the resource curse theory.

Globalization spreads in many ways, and a country can be exposed to various forms of foreign influence. FDI is one of them, and foreign aid is another. In the literature, scholars tend to think that foreign aid and resource wealth have a similar effect on domestic politics, both of which are referred to as “unearned income” (Harford and Klein, 2005; Morrison, 2007; Smith, 2008; Morrison, 2009; Bueno de Mesquita and Smith, 2010). Unlike most of the countries where governments rely on taxation as the main source of government revenues, leaders who have access to these nontax revenues or “free resources” are less accountable to citizens and are more capable of building coercive power, therefore having a longer tenure. This unearned income literature basically assumes that foreign aid and resource rents are substitutes, rather than complements, to each other, because both of them represent labor-free resources to the leader. If a government has access to one of them, its need to quest or develop the other may be lower.

While both foreign aid and resource revenues may help the leaders in a similar way, a big difference is that the provision of aid must be conditional on certain levels of interaction between donor countries and recipient countries, whereas resources are naturally owned by the countries where resources are present. In other words, governments may face some constraints while using foreign aid, especially in bad times, but may not while using resource revenues. Wright (2011),

for example, argues and shows that foreign aid fosters democratization during economic crises, because conditions are generally imposed, whereas oil money makes democratization less likely during economic crises.

Although it appears that most of the aid is provided to meet humanitarian needs, scholars believe that in fact aid is used as an instrument by the donor countries to achieve some political objectives (Alesina and Dollar, 2000; Bueno de Mesquita and Smith, 2007, 2009*a*). Building on the selectorate theory (Bueno de Mesquita et al., 2005), Bueno de Mesquita and Smith (2009*a*) present a theory to model the “aid-for-policy” deal between donor countries and recipient countries. They show that donors are mostly countries with large winning coalitions where citizens would like to see “good policy” implemented abroad, such as democratization and improvements in human rights. To provide this type of public goods, leaders of large-winning coalition countries use aid to “buy” policy concessions from countries with small winning coalitions where leaders supply private goods to fulfill these goals. So this explains why aid not only flows to more corrupt countries (Alesina and Weder, 2002) and has little effect on economic growth (Easterly, 2002), but also seems to harm democracy (Djankov, Montalvo and Reynal-Querol, 2008) and prolong the leader’s survival (Kono and Montinola, 2009; Licht, 2010).

Due to the ineffectiveness of aid, some people suggest that donors should impose conditionalities on aid recipients, or examine the fungibility of aid (Feyzioglu, Swaroop and Zhu, 1998; Devarajan and Swaroop, 2000; Pettersson, 2007). The idea

is that, if aid is tied to some specific sectors or programs, or if subsequent aid is given only when some goals are reached, the usage of aid will be more effective because it cannot be transferred to other unproductive activities or squandered by the leader. Aid conditionalities or nonfungibility, however, seems to have little effect, at least in the post-conflict peacekeeping cases (Killick, 1997; Boyce, 2002). Girod (2012) offers a compelling theory saying that the effectiveness of post-conflict aid is conditional on the donor countries' strategic concerns and the recipient countries' access to alternative resources. If the recipient has strategic importance to the donor, the donor will have less incentives to force the recipient to comply. If the recipient has abundant resource rents, the desperation for foreign income will also be lower. Therefore, only when the recipient is not strategically important and lacks resource income, would post-conflict aid help rebuild the peace. This theory, along with the literature on unearned income, is consistent with the argument on resource wealth and reduced globalization. When resource income is available to the leader, he/she has less need or incentives to seek foreign money, including foreign capital and aid.

Indeed, leaders may have larger discretion to spend resource money than to spend aid, because the latter is usually attached with conditionalities imposed by foreign donors. What is overlooked in the literature, however, is that the necessary level of interaction with the global society may not be lower for resource rich countries than for aid recipient countries. While a country naturally has the right to exploit its natural resources, it may need foreign capital and techniques to

facilitate the resource extraction. While this country may be able to extract and manage the resources by itself after it cumulates sufficient capital, it still needs to sell the resources abroad to make earnings. In fact, Voeten and Ross (2011) show that, although oil producing countries remain politically less integrated into the global society, they have a high level of economic and social integration. So, unlike the foreign aid literature that well studies the effect of aid on domestic politics, such as democratization and leadership survival, an interesting question that is understudied in the resource curse literature is: how do the interaction with foreign actors and the level of international integration affect the domestic politics of resource rich countries?

Also, while resource rich countries may be less eager to pursue foreign aid due to another free resource they already possess, aid donors may still have an incentive to give aid to them out of strategic concern. As the above literature suggests, powerful countries often use aid as a foreign policy tool to help their strategic partners. It also suggests that aid is usually ineffective or aid conditions are hardly fulfilled for countries that have alternative resources. These two points jointly lead to the following question: If resource rich countries are considered to be strategically important, do foreign governments provide aid, or a certain type of aid, to them? This question, along with the question raised in previous sections, will be discussed and answered in the next two chapters.



## 2.6 Conclusion

To summarize, the resource curse literature basically takes state ownership for granted, or at most assumes that the government extracts revenues by taxing foreign companies and therefore face the same consequence as governments that take full control of the natural resources do. But in reality, state ownership is not the dominant strategy; many countries even privatized the resource sector that they nationalized before. This is especially puzzling when we take into account the ease of expropriating natural resources, the incentives for leaders to expropriate when their power is insecure, and the nationalist sentiment that is against foreign extraction, as suggested by the literature I review in this chapter. In the next chapter, I will answer the question as to why leaders choose to cooperate with foreign actors. Specifically, I will investigate the role foreign actors play in the domestic politics of resource rich countries, discussing not only foreign investment but also other forms of foreign influence including foreign aid.



## **Chapter 3**

# **Foreign Actors and Leadership Survival in Resource Rich Countries**

This chapter answers the question of how foreign actors affect the domestic politics, specifically leadership survival, in resource rich countries. I first discuss the economic benefits of privatizing resource sectors to foreign companies. I then present the core theory in this dissertation on how foreign actors help prolong leaders' survival in resource rich countries. I also use some illustrative cases to show the validity of the theory, followed by a game-theoretical model of the interaction among the leader, foreign actors, and the opposition. Finally I discuss a few plausible tools foreign actors may use to support the leader of a resource rich country where they have an interest in.

### 3.1 Economic Consequence of Globalizing Natural Resources

To answer the question addressed in the previous chapter, I first discuss an economic explanation. An obvious answer to why privatizing is that foreign involvement can bring economic benefits. Foreign companies generally have more advanced techniques and equipments, can bring in a huge amount of capital, and can find credible international buyers, so foreign extraction of resources secures a stable provision of resource revenues and functions as an insulator of risks (Shafer, 1983). The nationalization of natural resources may bring about short-term proceeds, but it does not guarantee a long-term payoff since the role of foreign investors as capital provider and risk buffer no longer exists. By privatizing natural resources to foreign investors who therefore have the right to own and manage these resources, a governments can simply enjoy revenues by taxing these foreign firms. If a government prefers to retain the ownership of natural resources, it can license foreign operations such as via production sharing agreements (PSAs) and also enjoy the profits split with the foreign companies without bearing the costs of exploration and operations.<sup>1</sup> Also, state ownership may foster corruption and rent-seeking behaviors (Shleifer, 1998; Perotti, 2004), which leads

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<sup>1</sup>PSAs, first implemented in Indonesia in 1966, are contracts between governments (or national oil companies) and foreign extractive companies which permit the contractor to explore and exploit natural resources, particularly oil. The foreign company can get a portion of the production which covers its costs (which is called cost oil). The remaining profits (which is called profit oil) will then be shared between the government and the contractor at an agreed rate, such as 65% and 35% (Bindemann, 1999).

to poor economic policies and performance. As a result, resource rich countries may prefer foreign ownership or at least allow foreign participation in consideration of economic prospects.

Through good economic performance, privatization of natural resources may bring about an indirect, positive effect on the government or the leader. Existing studies on the economic voting lend support to this point, showing that economic performances have significant impact on the electoral outcome or on government or leadership survival (Warwick, 1992; Lewis-Beck and Stegmaier, 2000; Gasiorowski, 1995). Economic crises, particularly, may cause major harm to the leader because citizens who are easily informed of or influenced by these shocks would blame the incumbent and ask him/her to take the responsibility (Crespo-Tenorio, Jensen and Rosas, 2013; Chwioroth and Walter, 2013). Since the presence of foreign investors is able to isolate a resource rich country from harmful fluctuations, the leader may be more secure in the position at least due to a steady economic performance.

An economic explanation, however, cannot tell the whole story. While privatizing natural resources to foreign companies ensures a stable revenue stream, nationalization can guarantee the whole returns to the government, resulting in higher profits. While an expropriation act is likely to be punished by reduced future investment, this punishment is relatively low because governments usually expropriate in boom times and induce investors by favorable contracts in bad times (Engel and Fischer, 2010). Even though a resource rich country needs for-

eign capital in the initial stage of resource extraction, after it starts to get steady revenues, it can expropriate easily, as suggested by the FDI literature. Also, a nationalization plan is usually more favored by the public, due to the resource nationalist sentiment. So, what else explains resource rich countries' cooperative behavior?

### **3.2 Political Consequence: Foreign Involvement and Political Survival**

As discussed in the previous section, foreign extraction of natural resources may bring economic benefits. In addition to the economic effect, foreign actors may have an influence on the domestic politics of resource rich countries as well. Jones Luong and Weinthal (2010) and Bayulgen (2010), as reviewed in Chapter 2, are two examples that investigate the effect of foreign ownership or foreign investment in the petroleum sector on domestic political institutions.

Similar to these two works, this dissertation examines the effect of foreign involvement on the domestic politics of resource rich countries. The difference is twofold. First, I assume natural resources are so lucrative that foreign investors tend to enter resource rich countries in spite of political risks. In other words, in resource rich countries only FDI affects domestic politics, not the other way around.<sup>2</sup> Second, I focus on the leaders' motivation not to chase away foreign

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<sup>2</sup>In fact, Jones Luong and Weinthal implicitly make this assumption in their works. They argue that governments' initial strategy to develop the resource sector is a function of the availability

investors, rather than the whole domestic political environment. In particular, I argue that the political leaders of resource rich countries strategically choose to engage in globalization because foreign actors help secure their political survival.

Why does foreign involvement help the leader? My theory begins with the motivation of foreign governments. Natural resources, especially energy resources, are of strategic or economic importance to advanced industrialized countries. The over reliance on imported resources, particularly oil, is a high-profile issue in many developed countries, especially in the United States.<sup>3</sup> A shock in the price of imported resources may also cause economic recessions (e.g., Hamilton, 1983). So, an essential point made in this dissertation is that energy resources or highly profitable resources are of critical importance to powerful countries. This makes powerful countries have a different attitude towards resource rich countries or resource industries from that towards other countries or industries. In order to ensure a sustainable energy supply, industrialized countries have to build a tight relationship with resource exporting countries or the countries where their MNCs operate. Oftentimes, this relationship is built upon a tacit agreement that the foreign government supports the incumbent and the leader never expropriates or

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of alternative sources of export revenue and the level of political contestation (Jones Luong and Weinthal, 2001, 2010). In their theory, foreign investors play no role in the initial stage. Moreover, scholars generally believe that resource rich countries have more bargaining power vis-à-vis foreign investors (Kahler, 2000; Tobin and Rose-Ackerman, 2005, p. 10), which implies that foreign capital tends to throng to resource rich countries regardless of the domestic environments. A good and special example is the increasing popularity of extracting offshore oil (Ross, 2012, p. 45); apparently foreign investors just seek to pump oil and their entry is not affected by what happens in the mainland.

<sup>3</sup>Discussion on the impact of oil dependence on national security can often be seen in the media and the reports from think tanks and NGOs. See Deutch and Schlesinger (2006), Kraemer (2006), and Crane et al. (2009) for examples.

cuts the supply of natural resources. The bilateral relationship between the United States and Saudi Arabia since 1945 is a good example (Hart, 1998; Bronson, 2006; Klare, 2002, pp. 75-78).

Indeed, resource importing countries or the home countries of resource extractive MNCs have an incentive to deter resource producing countries from expropriating, but how can they achieve this since resource rich countries are in general less vulnerable to the loss of reputation? I argue that a bargaining chip powerful countries can use is the threat of intervention in the domestic politics. In specific, by promising never to support the domestic opposition, a foreign government is guaranteed the constant provision of natural resources or the retainment of ownership from the political leader of a resource rich country. Although resource wealth may increase the incentive to rebel, citizens realize that a revolution will not be supported by powerful foreign countries and thus hesitate to revolt.

From a political leader's perspective, there is a tradeoff between direct expropriations and honoring contracts, and their decision may be determined by numerous factors, such as the immediate payoffs of expropriations, the opportunity costs of expropriations, and how they discount the future. While the leaders of host countries can get short-term benefits by expropriating FDI, they gain credibility and the promise of foreign support by never expropriating. Tomz and Wright (2010) show that political leaders are more likely to default or expropriate when the prize of honoring contracts is narrow, and one important prize is the access to future borrowing or future foreign investment. Theoretically, this prize is less



important for resource rich countries,<sup>4</sup> particularly after the initial investment is already made and they start to enjoy the windfalls.

I argue that, however, the punishment of disrespecting natural resource contracts may be strong. In particular, this punishment is imposed on the leader, instead of on the whole country, and it is implemented by foreign governments, or coalitions of foreign businesses and their home governments, not only by market actors. Recall that a regular supply of natural resources is of particular importance to industrialized countries. Once this regularity is broken or damaged, a powerful country may punish the host country or the exporting country in order to resume the supply of resources. International punishments can take many forms, including military intervention, economic sanctions, withdrawals of foreign aid, or diplomatic protests. Because foreign governments still have a strong desire for natural resources, I argue that a particular punishment levied on the leaders of resource rich countries is to support the opposition.

Why does this punishment, or the threat of this punishment, work in resource rich countries? A primary reason is that, in these countries, political leaders face a greater threat of being deposed. This threat comes up for several reasons, including the increasing value of capturing the state because of the resource rents accrued to the government, the weakened state capability due to the reliance on resources, the grievances among those who are not benefited due to an unequal distribution of resource wealth, and the feasibility of rebellions financed by re-

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<sup>4</sup>This point can be seen in Jensen and Johnston (2011) as well.

source wealth (Collier and Hoeffler, 1998; Ross, 2004*a,b*; Fearon, 2005; Humphreys, 2005; Ross, 2006). Due to these reasons, the leaders of resource rich countries are by nature more likely to face the threat of political violence.<sup>5</sup> If a powerful foreign country or a prominent IO signals or promises that it will support the opposition, a revolution or revolt will more likely be launched and carried out, thus threatening the leader.

This logic of external support is consistent with the civil war literature that looks at the effect of third parties on civil war onsets. Cetinyan (2002) suggests that the bargaining outcome between an ethnic group and the state will favor the group when the external help that the group has access to is stronger. Thyne (2006) argues that civil wars are less likely when third parties send costly signals such as building trade ties or military alliance ties with the government because both the government and the opposition can foresee the outcome of conflicts. Here, foreign involvement in the resource sector should be a costly signal since it means that foreign actors have a big stake in this host country. Even when the signals sent from external actors are cheap, such as provision of foreign aid or public statements, they may have influence on civil wars as well. Thyne (2006) argues that cheap signals that are supportive of the government will reduce the

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<sup>5</sup>It should be noted that I am not claiming resource rich countries are doomed to suffer from more civil wars or regime instability, as one of the resource curse literatures does, because political leaders may utilize resource revenues to enhance the coercive capacity or to provide public goods, which in turn strengthens themselves (Ross, 2001; Jensen and Wantchekon, 2004; Ulfelder, 2007; Morrison, 2009; Bueno de Mesquita and Smith, 2010). The point I am making here is that, in resource rich countries, there exist more incentives or possibilities for people to launch a revolution or for the opposition to revolt against the incumbent, even though these activities may be deterred or stamped out before they really start.

probability of civil war onsets while those hostile to the government will increase it. The results of an experiment conducted by Tingley and Walter (2011) also show that costless signals have a deterrent effect to challengers. So, by sending signals that are visible to both sides, foreign actors can actually intervene in the domestic politics of a resource rich country easily. For example, if a foreign government issues a statement that condemns the leader (i.e. a cheap hostile signal), the opposition may be encouraged to stage a rebellion. Contrarily, if a foreign government builds an alliance tie (i.e. a costly supportive signal) with or provides foreign aid (i.e. a cheap supportive signal) to the government, the opposition will be deterred from rebelling because of the expectation of foreign intervention.

In short, resource rich countries contrast with other countries in that the leaders suffer from a higher potential of political opposition and that powerful countries often consider them to be important strategic or economic partners. Given these characteristics, the political leaders of resource rich countries may choose to respect natural resource contracts and to remain friends with powerful foreign countries in exchange for their support.<sup>6</sup> The domestic citizens also observe this tacit relationship between the incumbent leader and foreign governments, so they are less likely to engage in mass movements even though they have an incentive

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<sup>6</sup>Bueno de Mesquita and Smith (2009b) argue that leaders in small-winning coalition countries with more resource rents are more likely to suppress public goods when revolutionary threats are present because they need to use this money to buy the loyalty of their supporters. This dissertation's theory corresponds to their argument well when we consider foreign investors and their home governments as the leader's patrons and the resource revenues as the private goods going to the patrons. As leaders anticipate a higher level of opposition strength, they are more likely to spend on private goods and keep a patronage tie with foreign investors and their home governments.

to rebel. In other words, a government of a resource rich country facing little domestic opposition does not necessarily mean it is favored by domestic citizens. It is very likely that, in equilibrium, the leader credibly commits not to expropriate and to provide stable resources, a foreign government implicitly or explicitly approves the leader, and the citizens hesitate to rebel. Once the leader breaks this equilibrium, the foreign government may turn to assisting the opposition and start a new tacit agreement with the new leader.

The argument developed here substantially corresponds to the leader specific punishment (LSP) theory, which says that a country can punish another uncooperative country until the aberrant leader is replaced by the domestic citizens (McGillivray and Smith, 2000, 2006). Evidence shows that a removal of the leader did help resume the bilateral relationship between countries in terms of trade flows or FDI inflows (McGillivray and Smith, 2004; Jensen et al., 2012). My theory contends that a punishment specifically directed at the leader is particularly likely in resource rich countries where FDI is expropriated, because powerful countries have a stronger motivation to punish and citizens have a higher temptation to remove the leader.

On the other hand, the theory seems to contradict the finding in Albertus and Menaldo (2012), which shows that expropriations lead to longer leader tenure in Latin America. A closer look at their theory, however, indicates the compatibility of these two theories. While Albertus and Menaldo (2012) argue that expropriations help the dictatorial leader, the mechanism is that expropriating pre-existing

elites signals the new leader's loyalty to his/her winning coalition (launching organization). So, in fact, the positive effect of expropriations on leadership survival is present only when *domestically owned assets* are expropriated. Their empirical results also show that expropriations of land and domestic banks reduce the likelihood of leader exits, but expropriations of foreign banks and resource firms do not.

Finally, one question people may be curious of is whether the theory is applied to all types of regime or only authoritarian regimes. This issue is critical because in democracies leaders are in general elected by the mass public, rather than a small winning coalition, and secured by fixed terms, which may make them less subject to foreign imposition of leader change. Indeed, the theory presented above looks more like a story happening in authoritarian countries, where foreign actors assist or collude with the opposition to overthrow the leader. In fact, most of the resource rich countries, particularly those in the developing world, are authoritarian countries. This theory, however, can work for democratic regimes as well, and the logic is similar. Like authoritarian regimes in which foreign actors can punish the leader by supporting the rebellions, in democracies, foreign actors can help the opposition party to vote the incumbent out of the office, as long as the expected benefits are large enough. As Omgba (2009, p. 432) notes, "regardless of the type of political regime, the international community is tempted to exert fewer pressures for change in political leadership when considering oil-producing

states.” So, while I focus more on authoritarian countries, some of the empirical analyses will include democratic countries as well.

### **3.3 Illustrative Cases**

In this section, I provide four anecdotal cases to show that the theory described above can explain real world events, at least partially. Botswana represents a case in which the presence of a powerful foreign company can bring in huge economic benefits and stabilize the regime. The Libyan case indicates the importance of the international community’s attitude on motivating civil revolutions. The Gabonese case shows that foreign governments have an incentive to intervene a country where their interest is at stake. Finally, the Nigerian case illustrates the situation in which foreign actors are absent and leadership turnover is frequent.

#### **3.3.1 Botswana**

Unlike the three countries discussed below, Botswana is not rich in oil. It is abundant in mineral resources, especially diamonds. Botswana is the largest diamond producing country in the world, and diamond production accounts for 75% of the export income, 50% of the government revenues, and 40% of the GDP in 2011.<sup>7</sup> In the literature, Botswana is often considered as a successful case that escapes the resource curse and has a well-developed economy and competitive

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<sup>7</sup>See the USGS 2011 Minerals Yearbook for Botswana <http://minerals.usgs.gov/minerals/pubs/country/2011/myb3-2011-bc.pdf>.

democracy.<sup>8</sup> The literature suggests several explanations of Botswana's success, including its ability to diversify the economy, the limited influence of British colonization, stable diamond revenues that enhance the opportunity costs of rent-seeking or changing the status quo, and clever leaders (Acemoglu, Johnson and Robinson, 2002; Dunning, 2005).

One important point that is addressed in the studies is the dominant role of MNCs, particularly the diamond cartel De Beers. De Beers and the government of Botswana have maintained a long-term partnership since 1969, jointly owning the largest mining company in Botswana—Debswana, which produced 22.8 million carats in 2011. De Beers basically controls the global diamond market, and is able to maintain a high diamond price (Acemoglu, Johnson and Robinson, 2002) and stabilize the diamond income (Dunning, 2005), which benefits Botswana enormously. In 2011, De Beers even signed a milestone agreement with Botswana to move its headquarter from London to the capital of Botswana, Gaborone.<sup>9</sup> Unlike many other African diamond producing countries which rely on artisanal mining and are notorious for their “blood diamonds,” Botswana gains not only economic profits but also political stability from foreign extraction.<sup>10</sup> As noted

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<sup>8</sup>In addition to Botswana, other countries mentioned in the literature that are able to dodge the resource curse include Norway, Malaysia, Indonesia, Chile, Peru, etc. Among these countries, however, only Norway is a stable advanced democracy.

<sup>9</sup>See their media release [http://www.debeersgroup.com/ImageVaultFiles/id.1366/cf.5/Botswana\\_De\\_Beers\\_Sales\\_Agreement\\_Press\\_Release\\_-.PDF](http://www.debeersgroup.com/ImageVaultFiles/id.1366/cf.5/Botswana_De_Beers_Sales_Agreement_Press_Release_-.PDF).

<sup>10</sup>The African countries in which diamonds were traded to fund civil conflicts include Angola, the Democratic Republic of Congo, Liberia, and Sierra Leon. Other African diamond producing countries, such as Central African Republic, Namibia, and Tanzania, are members of the Kimberly Process, which was founded in 2003 to prevent conflict diamonds from flowing to the market, and therefore are not blood diamonds exporters. See [http://www.worlddiamondcouncil.org/download/resources/documents/Fact%20Sheet%20\(Diamond%20Mining%20in%20Africa\).pdf](http://www.worlddiamondcouncil.org/download/resources/documents/Fact%20Sheet%20(Diamond%20Mining%20in%20Africa).pdf).

in Dunning (2008, p.264), the dominant party in Botswana, Botswana Democratic Party, which was formed by the traditional ruling elites, did face electoral challenge in the 1980s and 1990s, but the government responded by increasing social welfare provision, which was subsidized by the diamond rents. So despite the existence of fair elections and opposition parties, Botswana Democratic Party has been the governing party since the independence in 1966, and its dominance is partly attributed to its long-term cooperative action on diamond production with De Beers.

### **3.3.2 Libya**

Libya has abundant hydrocarbons, including oil and natural gas. At the end of 2011, Libya has 47.1 thousand million barrels of proved crude oil reserves, which accounts for 2.9% of the world's total and is ranked number one in Africa and number nine in the world.<sup>11</sup> Its proved natural gas reserves at the end of 2011 are estimated to be 58.2 trillion cubic feet, which accounts for 0.7% of the world's total and is the third ranked in Africa, after Nigeria, Algeria, and Egypt.<sup>12</sup>

In 1969, a coup led by Muammar Gaddafi overthrew the monarchy, starting Gaddafi's 42-year rule. After the revolution, the Libyan government made a series of steps to take control of oil, including establishing the National Oil Corporation

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<sup>11</sup>The first eight countries are Venezuela, Saudi Arabia, Canada, Iran, Iraq, Kuwait, United Arab Emirates, and Russia.

<sup>12</sup>See BP Statistical Review of World Energy 2012 <http://bp.com/statisticalreview>.



(NOC) in 1970,<sup>13</sup> nationalizing the holdings of British Petroleum in Libya in 1971, and nationalizing 51% of all other oil companies' assets in 1973.<sup>14</sup> However, due to their lack of expertise and techniques, the Libyan government was unable to carry out an outright nationalization (ElWarfally, 1988). IOCs were operating in Libya under exploration and production-sharing agreements with NOC.<sup>15</sup>

In 2009, Gaddafi planned to take further control over oil. A decree issued by the Libyan government required the IOCs operating in Libya to appoint Libyan citizens as chiefs of local operations.<sup>16</sup> In a speech via satellite to students at Georgetown University, Gaddafi revealed his plan to nationalize oil because of declining prices. In his words: "Oil maybe should be owned by national companies or the public sector at this point, in order to control the oil prices, the oil production or maybe to stop it."<sup>17</sup>

In 2011, a wave of revolutions occurred in the Arab world, which is the so-called "Arab Spring." In some of the countries, civil uprisings or protests escalated into civil wars, resulting in the downfall of leaders, whereas in others the leaders survived. And international reactions seemed to play a critical role. In the revolution in Libya, domestic protests broke out in mid February, and the United

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<sup>13</sup>See [http://en.noclibya.com.ly/index.php?option=com\\_content&task=view&id=167&Itemid=55](http://en.noclibya.com.ly/index.php?option=com_content&task=view&id=167&Itemid=55).

<sup>14</sup>See <http://countrystudies.us/libya/31.htm>.

<sup>15</sup>See USGS International Minerals Yearbook: <http://minerals.usgs.gov/minerals/pubs/country/2010/myb3-2010-ly.pdf>.

<sup>16</sup>See the USGS 2009 Minerals Yearbook for Libya: <http://minerals.usgs.gov/minerals/pubs/country/2009/myb3-2009-ly.pdf>.

<sup>17</sup>See Sue Fleming. "Gaddafi says looking at oil firm nationalization." *Reuters* January 21, 2009. Available at <http://uk.reuters.com/article/2009/01/21/businessproind-us-libya-gaddafi-oil-idUKTRE50K61F20090121>.

Nations Security Council shortly passed a resolution to freeze Gaddafi's foreign assets and to limit his travel. The international community seemed to be on the opposition's side, and this stimulated the protests to escalate into a civil war, which ended in late October with Gaddafi being killed (Cottle, 2011). While some journalists believe that oil might have played a role behind the no-fly zone and the U.S. and NATO attacks on Libya,<sup>18</sup> I am not claiming that oil is the direct cause of U.S. and NATO reactions to the Libyan revolution. The point I am making here, instead, is that the international society's attitude towards the civil unrest can be decisive. If foreign governments or IOs signal their support to the opposition, or provide assistance to the opposition by directly targeting the leader, like the Libyan case, the leader is far more likely to collapse.

### 3.3.3 Gabon

The economy of Gabon is heavily dependent on its mineral resources, particularly oil and manganese. From 2008 to 2011, oil accounted for 50% of the GDP and 80% of the exports. Although petroleum production provides about 60% of the tax revenues, Gabon did not have a state-owned oil company from 1987 to 2011, when the Gabon Oil Company was established by the Gabonese government.<sup>19</sup> The largest oil company in Gabon is Total S.A. of France, whose

<sup>18</sup>For example, see <http://www.infowars.com/in-2009-gaddafi-proposed-nationalizing-libyas-oil/>, <http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=gadhafi8217s-plans-for-nationalizing-oil-could-have-role-in-military-intervention-experts-say-2011-03-30>, and [http://english.pravda.ru/hotspots/crimes/25-03-2011/117336-reason\\_for\\_war\\_oil-0/](http://english.pravda.ru/hotspots/crimes/25-03-2011/117336-reason_for_war_oil-0/).

<sup>19</sup>See the USGS 2011 Minerals Yearbook for Gabon <http://minerals.usgs.gov/minerals/pubs/country/2011/myb3-2011-gb.pdf>.

operation is through its subsidiary Total Gabon. The long-term cooperative relationship between Total and Gabon was partly the French colonial heritage.

The former Gabonese president, Omar Bongo, who had been in power for 42 years, received strong support from France. A few years after he became president in 1967, oil boom brought Gabon bonanza, making Bongo a big spender who not only amassed wealth for his family but also used some of the oil money for the population such as building infrastructure (Shaxson, 2007). While oil wealth helped Bongo stay in power with little mass unrest, foreign assistance played a key role in some critical events. In 1990, a wave of demonstrations and riots burst, forcing Bongo to dissolve the ruling party (Gray, 1998). France sent military troops to Gabon to intervene, changing the situation that would have overthrown the Bongo regime. Although France claimed that the goal was only to protect French citizens (Gray, 1998), scholars believe that this had something to do with French oil interest in Gabon (Yates, 1996; Basedau and Lacher, 2006; Omgba, 2009).<sup>20</sup> Because of this affinity to France, Bongo was able to maintain a long-term leadership and survive domestic unrest.

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<sup>20</sup>Even Bongo himself once said that “Gabon without France, it’s a car with no driver. France without Gabon, it’s a car with no gas.” to describe the bond between Gabon and France. See <http://www.wsws.org/en/articles/2009/09/bong-s05.html>.

### 3.3.4 Nigeria

Nigeria is another big African oil producer, who produced 28% of the African and 2.9% of the world crude oil in 2011.<sup>21</sup> The difference is that the Nigerian oil has been owned by the state since 1971, when the Nigerian National Petroleum Corporation was established. Unlike the oil money in Gabon that is allowed to trickle down to the population, oil revenues in Nigeria have largely accrued to the government and not benefited the people, which result in the frequent civil conflicts and political instability (Omeje, 2006). From 1971 to 2004, Nigeria had experienced 10 leader changes, and six of them exited in irregular ways, including being deposed, assassinated, and died in office.

While it is generally believed that oil *per se* is the cause of fragility and instability in Nigeria, the fact is ignored that there are some other African oil producers that have long-term stability like Gabon. I argue instead that state ownership of oil may be the key. State ownership not only enables the Nigerian government to amass huge oil money, which in turn incentivizes civil unrest or coups, but also prevents foreign actors from taking part in the resource sector, who may function as a stabilizer. Had Nigeria had oil owned by foreign companies initially and cooperated with them persistently, foreigners may have intervened when civil riots or coups occurred. Of course showing this counterfactual requires a more in-depth and comprehensive case study, which is beyond the scope of this disser-

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<sup>21</sup>See the USGS 2011 Minerals Yearbook for Nigeria <http://minerals.usgs.gov/minerals/pubs/country/2011/myb3-2011-ni.pdf>.

tation, but from the comparison between Gabon and Nigeria we know that the presence of foreign actors may affect the outcome of civil riots and therefore the leader's fate.

### 3.4 A Model of Expropriation, Punishment, and Challenge

In this section, I use a simplified game to illustrate the interaction among political leaders ( $L$ ), foreign governments ( $F$ ), and domestic opposition ( $O$ ). The game tree is shown in Figure 3.1. In this one-shot game, a basic assumption is that foreign investors always want to enter the resource sector and host governments always welcome foreign investors in the initial stage of mineral extraction because of economic consideration. So this game begins with  $L$  choosing whether to expropriate foreign assets ( $E$  or  $\neg E$ ) in the resource sector and the proportion of expropriation ( $0 < p < 1$ ). It should be noted that an expropriation of foreign assets may not be an outright expropriation. Oftentimes it is a partial expropriation, and there are many forms of partial expropriations, such as bribe, extortion, an increase in sectoral tax (Engel and Fischer, 2010), or a rewriting of contracts. Bolivia, for example, rewrote the oil and gas contracts, leading to an increase in the revenues accruing to the government (Jensen and Johnston, 2011).

$\omega \in \mathbb{R}$  is the value of expropriated assets;  $\gamma \in \mathbb{R}$  is the value of not expropriating, such as tax from foreign investors, and I assume that a leader gains more by

expropriating (i.e.,  $\omega > \gamma$ ). Moreover,  $\alpha \in \mathbb{R}$  is the value of staying in power, and  $r \in [\frac{1}{2}, 1]$  is the proportion  $L$  distributes  $\alpha$  to himself/herself.<sup>22</sup> If  $O$  challenges and loses, the proportion becomes  $r_p \geq r$ , which means the opposition gets punished.

$F$  has a default value  $\rho \in \mathbb{R}$ , and  $\beta \in \mathbb{R}$  is the value of non-expropriated assets for  $F$ .<sup>23</sup> After observing  $L$ 's move,  $F$  chooses whether or not to support the opposition ( $S$  or  $\neg S$ ). Here, "support" can be broadly defined, including not only material support, but also sending some signal, such as not being around to discourage or suppress the opposition.  $q_s \in (0, 1)$  is the probability that  $O$  successfully challenges  $L$  with the support of  $F$ ;  $q_{\neg s} \in (0, q_s]$  is the probability that  $O$  successfully challenges without  $F$ 's support.<sup>24</sup>  $\delta \in \mathbb{R}$  is the cost imposed on  $F$  if  $F$  supports  $O$  and  $O$  fails.<sup>25</sup> If  $O$  succeeds,  $O$  can determine a proportion  $\sigma \in [0, p]$  of  $\beta$  that is given back to  $F$ . In other words,  $F$  gets  $\rho + (1 - p)\beta$  when not supporting  $O$  or when supporting  $O$  but  $O$  chooses not to challenge and  $q_s[\rho + \sigma\beta + (1 - p)\beta] + (1 - q_s)[\rho + (1 - p)\beta - \delta]$  when supporting  $O$  and  $O$  challenges.

After observing  $L$ 's and  $F$ 's choices,  $O$  decides whether or not to challenge ( $C$  or  $\neg C$ ). The cost of challenge is  $c \in \mathbb{R}$  for both  $L$  and  $O$ . For  $L$ , if  $O$  does not challenge, the payoff is  $r\alpha + p\omega + (1 - p)\gamma$ . If  $O$  challenges and gets foreign

<sup>22</sup>Here I assume the opposition can be anyone among the whole population, so the value distributed to the people is equal to the value distributed to the opposition, i.e.,  $(1 - r)\alpha$ .

<sup>23</sup> $\beta$  may or may not be equal to  $\omega$ . Some reasons may result in an inequality. For example, foreign investors may be able to sell natural resources at a higher price in the international market, so in this case  $\beta > \omega$ .

<sup>24</sup>I assume the probability of success without foreign support is less than or at most equal to the probability of success with foreign support, based on the argument in the civil war literature.

<sup>25</sup>Because the support can be informal or immaterial, such as an official denouncement, I assume there is no cost for  $F$  to support  $O$ . But if  $F$  supports  $O$  and  $O$  fails,  $F$  may face costs such as embarrassment. This cost is assumed to be  $< \beta$ .

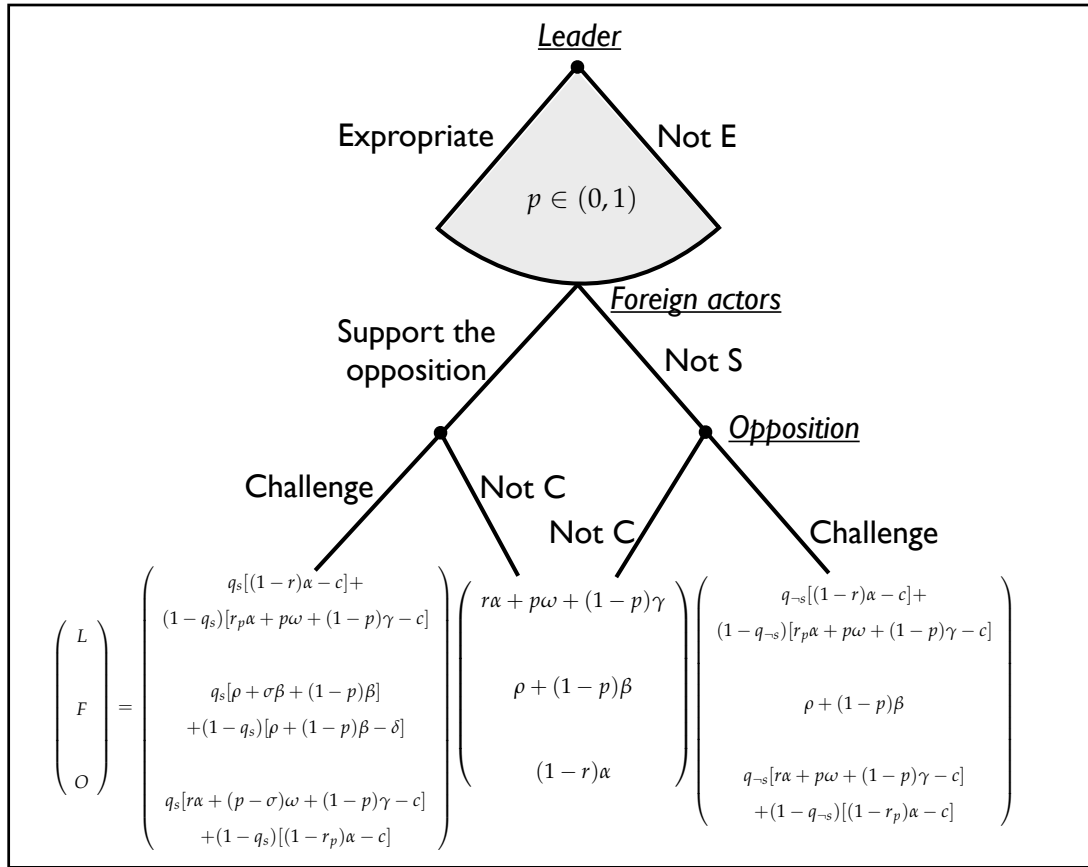


Figure 3.1.: A Three-player Extensive-form Game

support, the payoff for  $L$  is  $q_s[(1-r)\alpha - c] + (1-q_s)[r_p\alpha + p\omega + (1-p)\gamma - c]$ . If  $O$  challenges without foreign support, the payoff is  $q_{-s}[(1-r)\alpha - c] + (1-q_{-s})[r_p\alpha + p\omega + (1-p)\gamma - c]$ ; the only difference is in  $q_{-s}$ .

For  $O$ , the payoff of not challenging is simply  $(1-r)\alpha$ . If  $F$  supports and  $O$  challenges,  $O$ 's payoff is  $q_s[r\alpha + (p-\sigma)\omega + (1-p)\gamma - c] + (1-q_s)[(1-r_p)\alpha - c]$ . If  $F$  does not support  $O$  and  $O$  still challenges, the payoff is  $q_{-s}[r\alpha + p\omega + (1-p)\gamma - c] + (1-q_{-s})[(1-r_p)\alpha - c]$ . The payoffs for three players are displayed in Figure 3.1.

Solving this extensive-form game by backward induction, I find one subgame perfect equilibrium that is very likely and relevant to this study as follows:<sup>26</sup>

*Proposition:* There exists a subgame perfect equilibrium in which  $L$  plays  $p^*$ ,  $F$  plays  $\neg S$  when  $p = p^*$ , and  $O$  plays  $\neg C$  or  $C$  (depending on the payoffs) when  $p = p^*$  and  $\neg S$ , when the following conditions hold:

- (1)  $q_{\neg S} \leq \frac{\alpha(r_p - r) + c}{\alpha(r_p + r - 1) + \gamma + p^*(\omega - \gamma)}$ ;
- (2)  $q_S \geq \frac{\alpha(r_p - r) + c}{\alpha(r_p + r - 1) + \omega + p^*(\omega - \gamma) - \omega\sigma}$ ;
- (3)  $p^* = \sigma \leq \frac{\delta(1 - q_S)}{\beta q_S}$ .

The observed outcome from this subgame perfect equilibrium is that  $L$  expropriates only up to  $p^*$ ,  $F$  never supports  $O$ , and  $O$  never challenges or carries out ineffectual challenges (without foreign support) whenever the three conditions are true. Notice that  $p^*$  should be a very small value, since the denominator is much larger than the numerator (Condition 3). In words,  $F$  can withstand  $L$  expropriating only a very small portion of their assets, which can be considered as bribe or any payment under the table, but  $p > p^*$  will trigger  $F$  to support  $O$ . Condition 3 also requires the opposition to give back all the expropriated assets to foreign actors after they win (i.e.,  $p^* = \sigma$ ). Besides, if the probability of successful challenge without foreign support is below a threshold, the opposition will fear

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<sup>26</sup>See the appendix to this chapter for proof.



to challenge (Condition 1). The probability of challenge success with foreign support should be high enough to motivate the foreign government to support the opposition and to deter the leader from expropriating (Condition 2).

For other parameter values, the optimal action for the leader is to carry out outright expropriation ( $p = 1$ ). In this situation, foreign actors would encourage the opposition to challenge, and the challenge would be more effective since  $q_s$  is higher than or at least equal to  $q_{-s}$ . In other words, the cases in which we observe foreign participation tend to be those in which a more effective challenge, hence leader failure, is less likely.

In short, using this game-theoretical approach, I show that there exists such an equilibrium that foreign actors can deter a leader from cheating by the threat of supporting the opposition. This explains the political stability as well as the close cooperation with foreign investors or foreign governments in many resource rich countries. In the case without foreign participation, which in this game means that expropriation has occurred, an effective challenge is more likely to follow, resulting in a replacement of the leader. This leads to the following hypothesis:

***Hypothesis 1:** Political leaders of resource rich countries where foreign actors are more deeply involved in the resource sector are more likely to have longer political tenure.*

## **3.5 Forms of Support**

So far, I have argued that the level of foreign involvement in the resource sector has a positive effect on leadership survival and provided the theoretical reasoning. It makes sense that foreign companies along with their home governments have an incentive to remain friends with the leaders, but we also know that in these resource rich countries leaders are more prone to civil revolutions. So, a question that follows is: what exactly do these foreign actors do to keep the leader in office? In Section 3.2, I show how foreign actors support the leader by not supporting the opposition, and note that the support can be material or verbal. But the question remains as to what kind of support foreign actors can provide in practice. In other words, what are the mechanisms through which foreign involvement in the resource sector leads to a longer leader tenure? In this section, I discuss a few tools foreign actors may use to assist the leaders who are friends of theirs and how they work, including military intervention, the provision of foreign aid, and IMF lending.

### **3.5.1 Military Intervention**

As discussed in the Gabonese case in Section 3.3.3, when a powerful foreign country has its interest at stake in another country, the government is more likely to send military troops to intervene. The literature also suggests that military intervention is one of the foreign policy tools that powerful countries, especially

the United States, use to secure their national interests, such as the supply of oil and other natural resources (Gibbs, 1991; Fordham, 2008). Gibbs (1991), particularly, shows that private business interests can affect foreign policy and facilitate foreign intervention.

In a recent study, Choi (2013) finds that the United States intervene primarily because of humanitarian concerns, not because of security concerns such as oil supply. He uses two variables—dummies for oil exporters and primary commodity exports—to proxy for national interests, and finds no statistically significant results. The null result, however, cannot be interpreted as an insignificant role of natural resources. As I argue, a resource rich country is important to foreign governments only when both sides have a cooperative relationship in terms of investment or trade. Therefore, we may not find a positive relationship between oil production and military intervention, but we may see this relationship when we consider the level of foreign involvement in this resource rich country. For instance, the U.S. government may not be interested in intervening in an oil rich country that is not exporting oil to the United States, such as the Republic of Congo, but may intervene in a country where the U.S. oil companies make huge investment, like Kuwait. Thus, the first mechanism that will be empirically tested is the following:

*Hypothesis 2: Resource rich countries where foreign actors are more deeply involved in the resource sector are more likely to experience military intervention.*

### 3.5.2 Foreign Aid

A second possible form of support is the provision of foreign aid. As discussed in Section 2.5, the aid literature shows that foreign aid is often used strategically by donor countries to help their political partners (Alesina and Dollar, 2000; Bueno de Mesquita and Smith, 2007, 2009a), so a theoretical expectation is that a country will receive a higher level of aid from foreign governments if it has a close partnership with them in the resource sector. Countries richly endowed with natural resources, however, have a weaker motivation to seek foreign aid since they have another source of revenues, as the unearned income literature suggests. Moreover, much of the aid literature assumes that aid flows to the government and can only empower the leader. In reality, however, the provision of aid is often attached with some conditionalities or tied to certain fields, which prevents the leader from spending aid arbitrarily. For instance, humanitarian aid may be spent on food or medical assistance that can directly help the people. The World Bank development aid often imposes economic policy conditionalities, such as the privatization of some public sectors. Therefore, even if foreign governments are willing to supply aid, the governments of resource rich countries may be less desperate for aid, especially aid with conditionalities.

Unlike most of the IR literature which assumes that states are unitary actors, one important feature of the theory in this dissertation is the separation of the leader and the opposition (or citizens). This feature provides a framework in which we can analyze the political effect of natural resources by considering the

role of foreign actors. This feature can also be taken into account when we think about the process during which aid is given and distributed. While resource rich countries in general have a lower incentive to quest for aid, their foreign partners may want to supply aid that can help the leader and depress the opposition. A specific type of aid that can be directly spent by the leader with a high degree of discretion is budgetary aid. Budgetary aid is provided to finance the recipient country's budget and goes directly to the state coffer.<sup>27</sup> Oftentimes, the recipient government has freedom to decide how to allocate this money. So theoretically this type of aid, compared to other sectoral aid that may be tied to certain issues, will more likely empower the leader. Foreign actors that would like to help the leader, therefore, are more likely to supply budgetary aid.

In fact, because of data availability, the aid literature in recent years has paid increasing attention to disaggregated aid, and examines the effectiveness of aid that is tied to different fields (e.g., Bapat, 2011; Young and Findley, 2011). Instead of using aggregated aid data, this dissertation adds to this literature by looking at a specific type of aid—budgetary aid, and investigating whether its provision is related to foreign interests, particularly oil interest. A testable hypothesis is therefore the following:

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<sup>27</sup>Koeberle and Stavreski (2005) define budgetary aid, or budget support, as “financial assistance that supports a medium-term program and is provided directly to a recipient country's budget on a regular base, using the country's own financial management systems and budget procedures.”

*Hypothesis 3: Resource rich countries where foreign actors are more deeply involved in the resource sector are more likely to receive budgetary aid.*

### **3.5.3 IMF Assistance**

Another foreign policy tool that powerful countries can use to pressure or assist another country is to mobilize IOs that they have big influence on. The IMF, particularly, provides loans to countries under crises and is the most influential IFI. Ideally, the IMF acts as an international lender of last resort, and its loans should be offered to countries that have economic needs. Scholars find that, however, because the decision-making rule of the IMF is not based on sovereignty equality, but on quotas instead, IMF lending and other activities often reflect the preferences and foreign policy objectives of its major shareholders, particularly the United States (Stone, 2004, 2008; Dreher and Jensen, 2007; Dreher, Marchesi and Vreeland, 2008; Copelovitch, 2010). IMF lending and conditions may also be influenced by private companies since the IMF needs them to provide supplementary financing (Gould, 2003; Broz and Hawes, 2006).

On the other hand, both IMF lending and conditions may significantly affect the recipient country's economic prospect and domestic politics. Vreeland (2003), for instance, argues that the IMF conditions can be utilized as a *raison d'état* by the leader to carry out undesirable reform, and rejecting its assistance is costly for other domestic players. This point, of course, does not mean that the IMF assistance is always welcome to a country. Egypt, for example, recently stopped

the negotiation with the IMF for a \$4.8 billion loan, partly because the domestic opposition pressured the government to reject the loan.<sup>28</sup> But based on the IMF literature that shows that allies with powerful countries, especially in terms of UN voting affinity, are more likely to receive IMF support, we will expect that IMF loans are more likely to go to countries where powerful countries have a stake in. Applying this logic to the issue of natural resources, I argue that resource rich countries where foreign actors are involved are more likely to receive IMF assistance, which leads to the next hypothesis:

*Hypothesis 4: Resource rich countries where foreign actors are more deeply involved in the resource sector are more likely to receive IMF assistance.*

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<sup>28</sup>See <http://www.egyptindependent.com/news/egyptian-government-temporarily-halts-imf-loan-negotiations>, and <http://www.aljazeera.com/news/middleeast/2013/04/2013430174148753997.html>.

## 3.6 Appendix

### Proof of Proposition

This game is solved by backward induction. First, assume that  $p = p^*$ . We start from  $O$ 's choice. To let  $O$  prefer  $\neg C$  to  $C$  when  $F$  chooses  $\neg S$ ,  $(1 - r)\alpha \geq q_{\neg S}[r\alpha + p^*\omega + (1 - p^*)\gamma - c] + (1 - q_{\neg S})[(1 - r_p)\alpha - c]$ . Solve this inequality, we get  $q_{\neg S} \leq \frac{\alpha(r_p - r) + c}{\alpha(r_p + r - 1) + \gamma + p^*(\omega - \gamma)}$ . This is the first condition.

Second, to let  $O$  prefer  $C$  to  $\neg C$  when  $F$  plays  $S$ ,  $q_s[r\alpha + (p^* - \sigma)\omega + (1 - p^*)\gamma - c] + (1 - q_s)[(1 - r_p)\alpha - c] \geq (1 - r)\alpha$ . Solve this inequality, we get  $q_s \geq \frac{\alpha(r_p - r) + c}{\alpha(r_p + r - 1) + \omega + p^*(\omega - \gamma) - \omega\sigma}$ , which is the second condition.

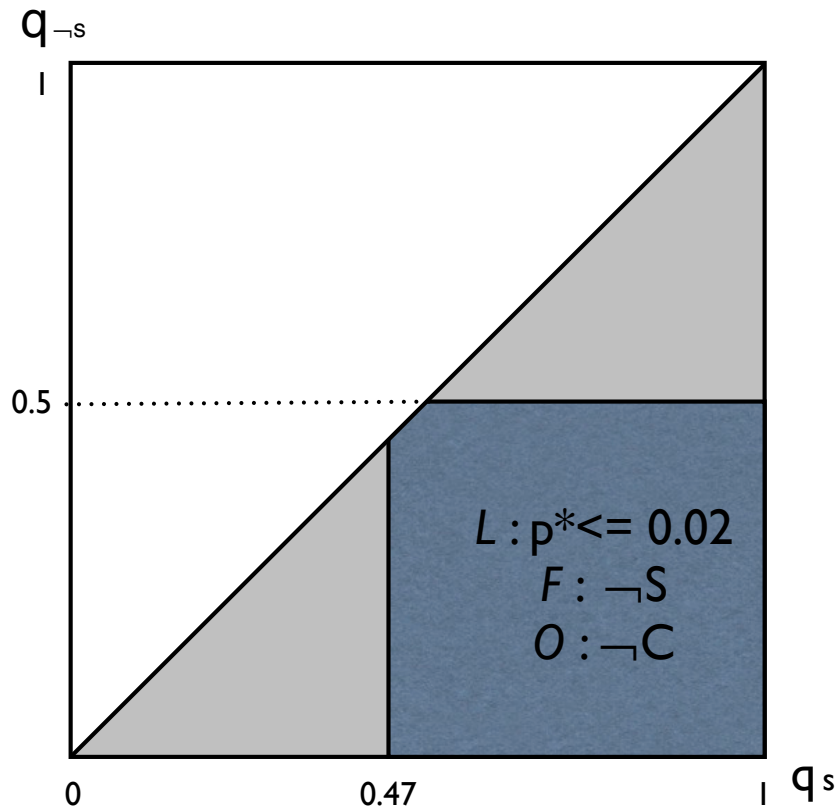
Third, to let  $F$  prefer  $\neg S$  to  $S$ ,  $\rho + (1 - p^*)\beta \geq q_s[\rho + \sigma\beta + (1 - p^*)\beta] + (1 - q_s)[\rho + (1 - p^*)\beta - \delta]$ . Solve this inequality, we get  $\delta \geq q_s(\sigma\beta + \delta)$ . Let  $p^* = \sigma$ , then  $p^* \leq \frac{\delta(1 - q_s)}{\beta q_s}$ , which is the third condition.

Lastly, to let  $L$  prefer  $\neg S$  and  $\neg C$  to  $S$  and  $C$ ,  $r\alpha + p^*\omega + (1 - p^*)\gamma \geq q_s[(1 - r)\alpha - c] + (1 - q_s)[r_p^*\alpha + p^*\omega + (1 - p^*)\gamma - c]$ . Solve this inequality, we get  $q_s \geq \frac{\alpha(r_p - r) - c}{\alpha(r_p + r - 1) + \omega + p^*(\omega - \gamma)}$ , which is always less than  $\frac{\alpha(r_p - r) + c}{\alpha(r_p + r - 1) + \omega + p^*(\omega - \gamma) - \omega\sigma}$ . So this condition always holds as long as Condition 2 holds.

To show that these conditions are practically very likely, I set the parameters at certain reasonable values and calculate the probabilities of  $q_{\neg S}$ ,  $q_s$ , and  $p^*$  that make the above conditions satisfied. As shown in Figure 3.2, when the probability of successful challenge without foreign support is less than 0.5 and the probability of successful challenge with foreign support is greater than 0.47, the leader will



play  $p^* \leq 0.02$ , the foreign government will not support the opposition because the expropriated amount is low, and the opposition will not challenge. This is very likely to occur because foreign support should largely increase the probability of a revolution's success. Different values of these parameters still yield similar results.



$$r_p = 0.9 > r = 0.6; c = \frac{\alpha}{20}; \beta = \frac{3\alpha}{10} > \omega = \frac{\alpha}{4} > \gamma = \frac{\alpha}{5} > \delta = \frac{\alpha}{40}; \sigma = p^*$$

Figure 3.2.: The Probabilities of  $q_s$  and  $q_{-s}$  for the Subgame Perfect Equilibrium



# Chapter 4

## Empirical Analyses

In this chapter, I empirically test the hypotheses discussed in Chapter 3. I first describe the data and statistical models, and then present the results of the empirical analyses. I also use alternative data only on the U.S. interests and report the results in Section 4.3. Finally I test the mechanisms that are discussed in Section 3.5.

### 4.1 Research Design

This section proposes a research design to test the hypothesis. I discuss the data and variables, and then introduce the statistical model.

#### 4.1.1 Variables and data

The focus of this dissertation is the political survival of leaders in resource rich countries, so in the main analysis, the outcome variable is whether there was

a leadership change in a country in a given year. The data are from the Archigos data on political leaders (Goemans, Gleditsch and Chiozza, 2009). Archigos contains the exact dates of entry and exit of government leaders in 188 countries from 1875 to 2004. Theoretically, the survival of leadership is a continuous variable since a leadership turnover can occur in any time, but given that all the data for the covariates are yearly, I treat the outcome variable as discrete-time and create an indicator of whether there was a leadership turnover in a country-year. Due to the time coverage of other variables, the period under investigation is from 1975 to 1999, and the sample includes 121 developing countries.<sup>1</sup>

The left panel of Figure 4.1 presents the frequency of leadership survival.<sup>2</sup> As it shows, a large number of leaders could not survive the first year in office. Many leaders also failed in the third or fourth year in power. If we divide the countries by regime type, into democracies and non-democracies, as shown in the right panel of Figure 4.1, we can see that democratic leaders in general have shorter survival than non-democratic leaders.

To measure the level of foreign involvement in the resource sector, I use a variable indicating whether the oil sector is foreign owned. The data are from Jones Luong and Weinthal (2010), in which they disaggregate oil rich countries into four development strategies based on the ownership structure and control:

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<sup>1</sup>I remove countries that no longer exist and that have data completely missing on at least two variables. A list of countries that are included in the analysis can be seen in Table 4.9 in the appendix.

<sup>2</sup>Figure 4.1 includes all countries in the Archigos dataset, not only countries in my sample, so it can be seen that it has a larger number of countries and years. Following the literature, I define a country as a democracy when its Polity score is greater than or equal to six in that year.

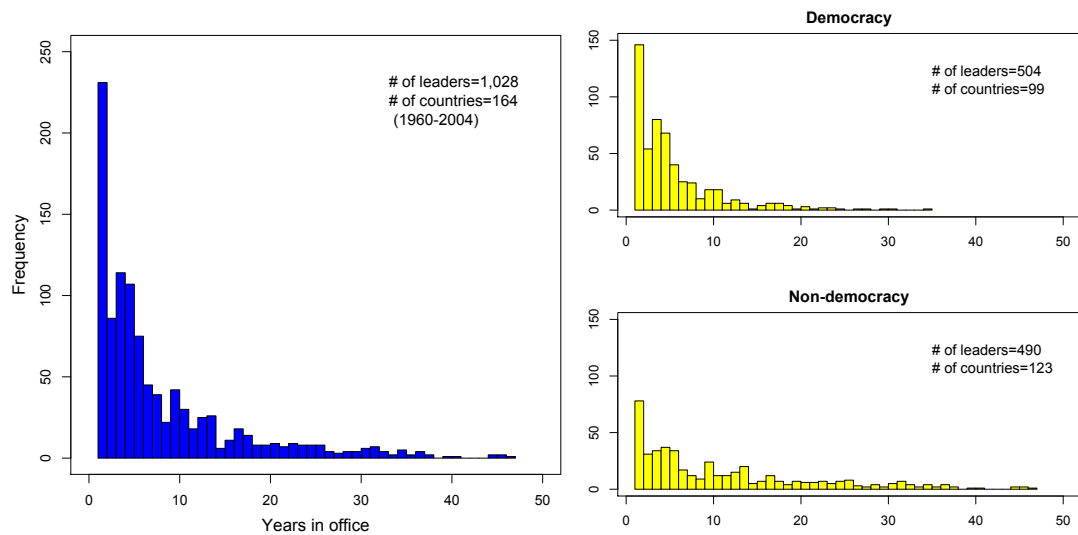


Figure 4.1.: Distributions of Leader Survival, by Regime Type

state ownership with control, state ownership without control (with foreign investors' participation), private domestic ownership, and private foreign ownership. This dissertation focuses only on the role of foreign investors, so I transform this information into a dichotomous variable equal to 1 when the development strategy is private foreign ownership and 0 otherwise. Table 4.7 in the appendix presents country-years that are under foreign ownership. This variable is lagged one year behind the outcome variable to avoid the reverse causality or simultaneity.

One may argue that the dichotomized measure of foreign owned oil is insufficient because in reality foreign participation can be in different forms, such as joint ventures or the PSA system, so I also create an ordinal measure of foreign involvement, which takes values from 0 to 2 with 0 indicating state or domestic ownership of oil, 1 indicating state control of oil with foreign investors' participa-

tion, and 2 indicating foreign ownership of oil. To examine whether it is oil *per se* or oil ownership that affects political survival, I also include a dummy variable indicating oil producers.<sup>3</sup>

I include a battery of control variables that may affect political survival or leadership turnover. The first set of control variables are related to a country's economic condition. The logged value of GDP PER CAPITA is used to test whether economic development helps a leader's survival prospect. ECONOMIC GROWTH is the growth rate of annual GDP, which measures the short term economic performance. TRADE OPENNESS is trade export plus import divided by GDP, which tests the effect of openness on leadership turnover. GOVERNMENT SPENDING is the total government expenditures as a percentage of GDP. Leaders may gain support and secure their power by spending more on social welfares or public service. All the data are from the World Bank's World Development Indicators (WDI), and I lag these variables for one year since we do not expect the effect of economic performance on leadership change to be immediate.

The second set of control variables are political institutions that may largely determine the term of leadership. POLITICAL REGIME is the level of democracy, measured by the standard Polity score. FINITE TERM is a dichotomous variable denoting whether there is a finite term for the chief executive, and the data are from the Database of Political Institutions (DPI) (Beck et al., 2001; Keefer, 2010).

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<sup>3</sup>The original data from Jones Luong and Weinthal (2010) contain only oil producing countries, so I consider these countries as oil producers. I also use data from Ross (2012), who defines a country as an oil producer when the oil/gas income per capita is more than or equal to 100 dollars. The result remains robust when the Ross data are used.

ELECTED LEGISLATIVE is an ordinal variable equal to 0 if there is no legislature, 1 if the legislature is not elected, and 2 if the legislature is elected. The data are taken from Bueno de Mesquita et al. (2005), who originally gathered them from the Cross-National Time-Series Data Archive.<sup>4</sup>

INTERNAL THREAT is the total number of riots, revolutions, general strikes, anti-government demonstrations, and coups in a country-year. This variable is very important since a leader's survival can be in serious danger when such anti-government activities prevail. POPULATION is the logarithm of total population; a larger population size may be more able to depose the leader. A leader's AGE is also controlled because it is very likely that a leader leaves the office due to death, immaturity, or other health issues. Lastly, a time period indicator POST-COLD WAR is included because during the Cold War superpowers may grow or support certain country leaders due to geopolitical concerns.<sup>5</sup> Table 4.8 in the appendix provides the summary statistics.

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<sup>4</sup>In Bueno de Mesquita et al. (2005), they develop two inclusive variables, the size of winning coalition ( $W$ ) and the size of selectorate ( $S$ ), to measure political institutions. These two variables are coded from the Polity indices and the legislature variable. I also use  $W$  and  $S$  to replace POLITICAL REGIME and ELECTED LEGISLATIVE, and the results are similar. The size of winning coalition is positively associated with leadership turnover while the size of selectorate is negatively related to leadership turnover, consistent with Bueno de Mesquita and colleagues' argument that a political leader is most likely to survive when the size of winning coalition is small and the size of selectorate is large (Bueno de Mesquita et al., 2005).

<sup>5</sup>A variable one may argue should be included is whether this country has a colonial history since the foreign oil owner may be the former colonizer, like the Gabonese case. The colonial history, however, can actually be part of the story, and it is a pre-treatment variable. While I do not think there is good reason to control the colonial history, when this variable is included in the model, the results remain unchanged.

### 4.1.2 Statistical Models

The focus of this dissertation is leadership survival, and therefore a survival analysis is conducted. A survival model is also called a duration model, a hazard model, or an event history model, which deals with the duration a subject spent in a status and can properly model the dynamics of the process until the end of the status (Box-Steffensmeier and Jones, 1997; Yamaguchi, 1999). A survival model has three basic components: the hazard rate ( $h(t)$ ), the density function ( $f(t)$ ), and the survival function ( $S(t)$ ), and their relationship is as follows:

$$h(t) = \frac{f(t)}{S(t)} \quad (4.1)$$

In words, the hazard rate is the probability that a subject fails at time  $t$  given that it has survived until time  $t$ . There are some variants of survival models, and they have different assumptions imposed on the baseline hazard ( $h_0(t)$ ).<sup>6</sup> For instance, in an exponential model, the baseline hazard is flat; in a Weibull model, the baseline hazard is monotonically decreasing or increasing across time; and in a Cox proportional hazard model, the hazard rate is proportional to the baseline hazard (Cox, 1972).

Unlike those models which basically assume that the duration process is continuous, one form of survival models that is commonly used in the social science literature is the discrete-time survival model. In a discrete-time survival model,

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<sup>6</sup>A baseline hazard is the hazard rate when all the covariates are zero.



the outcome variable is a series of binary data indicating whether an event occurred at a discrete time point. This model has the advantages that data can be structured easily and that time-varying covariates can be incorporated handily. It is particularly useful and practical for political scientists because most of the available data are structured as discrete-time. Also, in a seminal paper, Beck, Katz and Tucker (1998) argue that a grouped survival model can be performed easily by specifying a logit or probit model with dummy variables or smoothing spline functions for time to model temporal dependence.<sup>7</sup> So, in this dissertation, I utilize a discrete-time survival model.

The outcome variable is a dichotomous indicator of leadership change, and the data structure is time-series cross-sectional (TSCS), which is a multilevel structure with a country-year nested within a country, so the model I perform is a multi-level logit model. The intercepts are allowed to vary across countries to control for country heterogeneity. To model temporal dependence and make this model equivalent to a discrete-time survival model, I include the dummies indicating the number of previous years in office ( $K = 1, \dots, k$ ).<sup>8</sup> To deal with missing data, I multiply impute missing values using AMELIA (Honaker, King and Blackwell, 2011). The results are estimated from 10 datasets I generate, and the standard errors are adjusted upward (Little and Rubins, 1987).

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<sup>7</sup>Beck, Katz and Tucker (1998) point out that the inclusion of temporal dummy variables assumes the baseline hazard is a jump from year to year, and the spline function allows the baseline hazard to move slowly.

<sup>8</sup>Carter and Signorino (2010) suggest to use cubic polynomials as an alternative, which they argue are more efficient than the dummy variables and can avoid the separation issue in the spline function setup. I also try the spline function and cubic polynomials, and both provide similar results.

Simply put, in the multilevel logit model, the probability that a country  $j$  in year  $t$  when the leader has been in power for  $k$  years experiences a leader change can be expressed as follows:

$$\Pr(y_{jt} = 1) = \text{logit}^{-1}(\alpha_j + \gamma_k + \mathbf{X}_{jt}\beta) \quad (4.2)$$

$$\alpha_j \sim N(\mu_\alpha, \sigma_\alpha^2) \quad (4.3)$$

where  $\mathbf{X}_{jt}$  is the covariates indexed by country-year,  $\gamma_k$  is the temporal effect, and  $\alpha_j$  is the country-specific effect, which is distributed normal with mean  $\mu_\alpha$  and variance  $\sigma_\alpha^2$ .

## 4.2 Results

Table 4.1 presents the results. The first column reports the result of a multilevel logit model that includes a dichotomous measure of oil ownership. As can be seen, the coefficient of OIL PRODUCER is positive, but it does not reach statistical significance, meaning that the effect of oil on political survival is ambiguous. Instead, what matters is the ownership of oil. The effect of foreign owned oil on leadership turnover is negative and statistically significant at the 95% level, suggesting that the leader of a country where the oil sector is owned by foreign investors is less likely to be removed. This finding supports the first hypothesis.

Table 4.1: Foreign Ownership of Oil and Leadership Turnover (1975–1999)

Outcome variable: leadership change	<b>Model 1</b> (All countries)	<b>Model 2</b>	<b>Model 3</b> (Oil producers)	<b>Model 4</b>
Foreign ownership of oil	−0.725 (0.329)		−0.875 (0.437)	
Foreign involvement in the oil sector		−0.422 (0.176)		−0.399 (0.230)
Oil producer	0.301 (0.251)	0.474 (0.285)		
Development	0.003 (0.092)	0.000 (0.092)	−0.012 (0.183)	−0.001 (0.181)
Growth	−0.017 (0.009)	−0.017 (0.009)	−0.042 (0.022)	−0.042 (0.022)
Trade openness	−0.001 (0.003)	−0.001 (0.003)	−0.013 (0.007)	−0.011 (0.007)
Government spending	−0.006 (0.013)	−0.004 (0.013)	−0.047 (0.028)	−0.045 (0.028)
Political regime	0.153 (0.015)	0.152 (0.015)	0.200 (0.031)	0.195 (0.030)
Elected legislature	−0.616 (0.113)	−0.619 (0.113)	−0.825 (0.240)	−0.829 (0.237)
Finite term	−0.161 (0.212)	−0.157 (0.212)	−0.709 (0.445)	−0.660 (0.445)
Internal threat	0.082 (0.018)	0.082 (0.018)	0.063 (0.031)	0.062 (0.031)
Population	0.055 (0.077)	0.050 (0.076)	0.089 (0.165)	0.113 (0.162)
Leader's age	−0.047 (0.007)	−0.047 (0.007)	−0.054 (0.013)	−0.054 (0.013)
Post Cold War	0.192 (0.142)	0.201 (0.143)	−0.019 (0.284)	−0.048 (0.284)
Number of observations	2,740	2,740	908	908
Number of countries	121	121	40	40
Log likelihood	−948	−948	−274	−275
AIC	2,018	2,017	641	642
BIC	2,379	2,378	862	863

*Notes.* Standard errors are in parentheses.

In Model 2, I use the ordinal measure of foreign participation in the oil sector. The result shows that foreign involvement has a negative effect on leadership turnover. This means that, as the level of foreign involvement increases (from no participation, participation, to full ownership), the probability of leadership turnover decreases. In other words, the more deeply foreign countries get involved in the oil sector, a stronger incentive they have to secure their interests, and thus the more efforts they will make to support the leader. These findings not only confirm the importance of the ownership structure of oil but also show that the level of foreign participation matters.

The first two models include all developing countries since the theory focuses on countries that are resource rich *and* involve foreign participation, and the interpretation should be that countries with foreign owned oil are more likely to have long-tenured leaders compared to all other developing countries, including both oil producing countries and non-oil producing countries.<sup>9</sup> However, the theory should also work when the comparison is made within oil producing countries, i.e., when we compare resource rich countries with foreign involvement to those without foreign involvement. To do this, I restrict the sample to only oil producing countries and perform the same analysis.<sup>10</sup>

The last two columns in Table 4.1 report the results when only oil rich countries are included. As can be seen in Model 3, the effect of foreign owned oil is negative

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<sup>9</sup>Of course, there is also within-country/between-time comparison since the data are time-serial, but here I just focus on between-country comparison for the sake of simplicity.

<sup>10</sup>The final sample includes 40 oil rich countries, which are marked in Table 4.9 in the appendix.

and statistically significant, suggesting that the leaders of oil rich countries which privatized their oil to foreigners are less likely to fail than the leaders of other oil rich countries. In Model 4, an ordinal measure of foreign involvement is used. As shown, the effect of foreign involvement on leadership turnover is negative and statistically significant as well. Leaders of oil producing countries where foreign investors are more involved are less likely to lose their power than leaders of oil producing countries where oil is domestically owned; leaders of oil producing countries which allow foreign investors to own the oil are even less likely to fail. Basically, the finding that foreign involvement has a positive effect on leaders' survival is robust whether the sample includes or excludes non-oil rich countries.

Based on Model 1, I calculate the predicted probabilities that a leader is removed from power when the oil is foreign owned against when the oil is domestically owned.<sup>11</sup> The predicted probabilities are presented in Figure 4.2, which includes probabilities up to 10 years because only a small portion of leaders survive 10 years. As Figure 4.2 shows, the probability of leaving power is not a monotonic function of time in power, supporting the use of a discrete-time survival model. A leader is least likely to be removed in the second year in power, after that the risk increases as time goes by. If a leader survives six years, the probability that he/she will be replaced decreases as time goes by.

More importantly, if a country has oil owned by foreign investors, the probability that the leader is removed is lower than if the country has oil owned by

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<sup>11</sup>I set all the continuous covariates at the mean values, the time period to be the post-Cold War period, the finite term variable to be 0, and the legislature variable to be 0.

the state or domestic investors. The difference is not constant across time but is about 10%. For example, for leaders who have been in power for four years, the probability of being replaced is 23.1% when oil is foreign owned while that is 37.9% when oil is domestically owned.

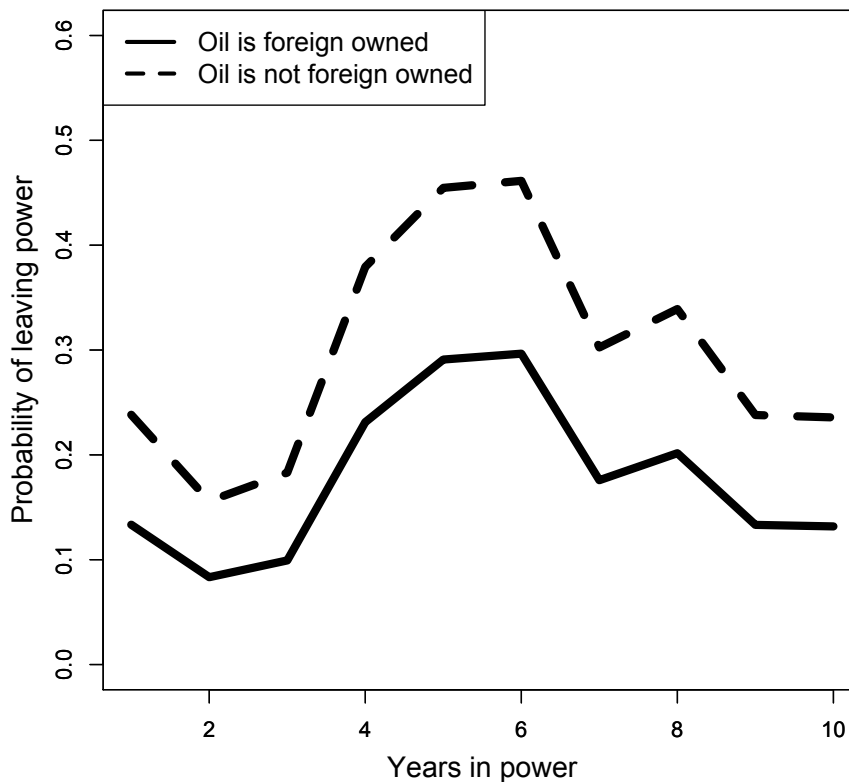


Figure 4.2.: Predicted Probabilities of Leaving Power across Years

In addition to the impact of oil ownership, Table 4.1 shows that economic growth and political institutions are important determinants of leadership turnover. Leaders of fast growing countries are less likely to be replaced. The level of democracy has a positive effect, meaning that leadership turnover is more fre-

quent in democratic regimes than in authoritarian regimes. Whether there is elected legislature, contrarily, has a negative effect on leadership turnover. This is probably because the sample includes more authoritarian countries where the leaders establish the legislature to accommodate political opposition, which in turn secures their survival (Gandhi and Przeworski, 2007).

Furthermore, the level of internal threat is positively related to leadership turnover, which makes a lot of sense since leaders are much more likely to be deposed when domestic political discontent is strong.<sup>12</sup> The leader's age has a negative effect, meaning that a senior or experienced leader is more likely to survive.

While the effects of these factors persist when the sample includes only oil producing countries, oil producers have a somewhat different pattern. The result in Model 3 shows that oil producers that are more open to trade are less likely to experience leadership turnover, indicating their dependence on oil export revenues. Oil producers that have a bigger government are also less likely to have leadership turnover, consistent with the "rentier states" argument.

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<sup>12</sup>One may argue that INTERNAL THREAT is a post-treatment variable that would bias the result because foreign control of oil may cause social unrest, which in turn endangers leaders' survival. This argument, however, implies that foreign owned oil has a negative effect on leadership survival, working through a higher level of internal threat. While the results remain unchanged after the variable INTERNAL THREAT is dropped, the post-treatment bias, if any, will only bias the coefficient towards the other direction. So, if the bias exists, the actual beneficial effect of foreign owned oil on leaders will only be stronger than what I find here.

## Endogeneity Issue

The results in Table 4.1 show that foreign involvement in the oil sector has a positive effect on leadership tenure, a finding that is robust across two measures of foreign involvement and two samples. Skeptics, however, may ask whether this finding is driven by a reverse causality. That is, it may be that foreign investors enter a resource rich country where the leader is expected to stay in power longer and thus the political environment is more stable, rather than the other way around. I believe that this is not the case for two reasons. First, theoretically, resource rich countries are highly attractive to foreign investors even if they are risky, which is well established in the FDI literature and supported by real world observations. For instance, a handful of African oil producing countries, including Democratic Republic of Congo, Sudan, Chad, and Nigeria, receive large amounts of FDI even though they are viewed as fragile and risky countries. So, when it comes to natural resources, political stability of the host country is actually not a main concern for foreign investors. Second, if the result is driven by endogeneity, then a positive effect of leadership tenure on foreign ownership of oil should be discovered. However, I do not find any effect when I re-run the model using oil ownership as the outcome variable and the number of years a leader staying in power as the explanatory variable, suggesting that a reverse relationship is not present.

While a reverse causality may not be an issue here, I conduct a two-stage instrumental variable analysis to address this bias, if any. The result is presented



in the appendix to this chapter, and it shows that foreign involvement in the oil sector, instrumented by an interaction between proved oil reserves and economic development, has a negative effect on leadership turnover, consistent with the main finding.

### **4.3 Alternative Analyses**

In addition to the oil ownership, in this section I use two alternative datasets, the U.S. outward investment in the mining sector and the U.S. oil import, to operationalize the level of foreign involvement in the resource sector. Although my theory is on how powerful foreign countries support the leaders who are friends of theirs and the United States is not the single powerful country in the world, using only data on the United States provides a conservative test and represents the case of the most powerful country dedicated to the protection of national interests.

#### **4.3.1 U.S. FDI in the Mining Sector**

While I draw upon data on oil ownership, the theory applies to not only oil but also other natural resources, especially strategically or economically important ones. While I operationalize the level of foreign involvement by ownership structure, foreign investors may get involved in different forms. Ideally if I have data on FDI in the mining/oil sector across countries and years, the level of for-

foreign involvement can be better measured. Unfortunately, there is no comprehensive data on FDI across sectors or industries. Alternatively, I employ another measure of foreign involvement in the resource sector—the U.S. direct investment abroad in the mining industry. The data are from the U.S. Bureau of Economic Analysis,<sup>13</sup> and I log transform them.<sup>14</sup> One problem with this dataset is that it contains many missing values, which I deal with by assigning zeros or imputing new data depending on the sources of missingness.<sup>15</sup> This variable is lagged one year.

Although this dataset suffers from a missing value problem, it provides three advantages. First, based on the theory, powerful foreign governments are more capable of strengthening the leader. The United States is the most influential country in the international society, and thus using the U.S. outward investment in the mining sector can test whether the U.S. government makes an effort to protect their investors and to support the leader abroad. Second, the data on the U.S. investment cover a different, shorter time period, from 2000 to 2004. This enables us to examine the validity of the theory in a different time period.<sup>16</sup> Third, the U.S.

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<sup>13</sup>Available at <http://www.bea.gov/international/index.htm>

<sup>14</sup>A good thing of the dataset is that it includes negative values, which means divestment. But a log transformation can only handle positive values, so for negative values, I log the absolute values and then multiply them by  $-1$ . By doing so, I have information on both investment and divestment.

<sup>15</sup>I deal with missing data in three ways. In the raw data, some values are not shown because the amount of investment is very small. For this type of missingness, I code the values as zeros, assuming the amount is negligible. Second, some values are not shown to avoid disclosure of data of individual companies. For this type and other types of missingness, I generate missing values using multiple imputation. Finally, for countries that are not included in the raw data, I code their values as zeros, simply assuming there is no U.S. investment in the mining sector in these countries.

<sup>16</sup>However, two variables, INTERNAL THREAT and ELECTED LEGISLATURE, are missing because of the lack of data after 2000.

Table 4.2: Top 15 Countries Receiving U.S. FDI and Exporting Oil to the U.S.

U.S. FDI recipients	FDI in mining (in million dollars)	U.S. oil importing partners	Oil export (in thousand barrels)
Canada	30,243	Canada	13,519,995
Australia	22,167	Saudi Arabia	9,980,490
United Kingdom	7,319	Venezuela	9,752,153
Russia	6,421	Mexico	9,431,463
Chile	5,813	Nigeria	5,892,360
Norway	5,290	Iraq	2,806,057
Brazil	4,740	Angola	2,745,741
Mexico	4,672	Algeria	2,593,611
Colombia	4,516	United Kingdom	2,253,287
Netherlands	3,728	Colombia	1,799,365
Peru	3,679	Russia	1,664,392
Argentina	3,212	Kuwait	1,654,569
Egypt	2,672	Norway	1,590,423
China	2,245	Ecuador	1,110,499
Indonesia	2,214	Gabon	919,982

*Notes.* The data on U.S. outward FDI in mining are the cumulative amounts from 1999 to 2010. The data on U.S. oil import are the cumulative values from 1993 to 2011.

investment flows more to democratic countries than to non-democracies.<sup>17</sup> As discussed in Chapter 3, while most of the resource rich countries are autocracies, the theory works for democracies as well. Drawing upon this dataset therefore can test whether the theory can be applied to democratic countries. Columns 1 and 2 in Table 4.2 report the top 15 recipient countries of U.S. mining investment. We can see that most of the U.S. capital in mining has been flowing to developed countries.

<sup>17</sup>The sample includes 54 U.S. investment recipient countries. In 2004, 47 out of 54 countries are democracies (Polity score greater than or equal to six). See Table 4.10 in the appendix for a list of these 54 countries.

Table 4.3: U.S. Investment in Mining and Leadership Turnover (2000–2004)

	<b>Model 1</b> (All countries)	<b>Model 2</b> (Recipient countries)
U.S. FDI in mining (logged)	−0.030 (0.016)	−0.047 (0.023)
Development	0.135 (0.181)	−0.355 (0.594)
Growth	−0.055 (0.033)	−0.068 (0.091)
Trade openness	−0.004 (0.006)	−0.015 (0.014)
Government spending	−0.115 (0.047)	−0.143 (0.111)
Political regime	0.232 (0.063)	0.221 (0.215)
Finite term	−0.454 (0.893)	
Presidential system		−0.157 (1.243)
Population	−0.075 (0.179)	0.058 (0.469)
Leader's age	−0.105 (0.020)	−0.188 (0.046)
Number of observations	773	270
Number of countries	155	54
Log likelihood	−279	−103
AIC	658	274
BIC	891	396

*Notes.* Standard errors are in parentheses.

Table 4.3 reports the results when the U.S. investment in the mining sector is used as the key explanatory variable. Model 1 includes all countries. As its result shows, the U.S. investment in the mining sector has a negative and statistically significant effect on leadership turnover. This means that the more U.S. investment flows to the mining sector in a country, the less likely that the leader will be removed. Since the sample includes countries that U.S. investors do not enter, the result can be interpreted as that the leaders of recipient countries of U.S. mining investment are more likely to survive than the leaders of non-recipient countries.

Model 2 includes only the recipient countries of U.S. mining investment. Because most of these countries are democracies, I remove the variable `FINITE TERM` and replace it with a dichotomous variable indicating presidential systems. As can be seen, neither political regime nor the government system has an effect on leadership turnover. The effects of economic growth and government spending turn statistically insignificant either, suggesting that in democracies leadership tenure is basically regulated by institutions rather than determined by governments' behavior. The effect of U.S. FDI in the mining sector, nevertheless, remains negative and statistically significant, confirming the role of the United States in the domestic politics in mineral rich countries where the U.S. investors enter.

### **4.3.2 Oil Export to the United States**

So far, I have described foreign involvement in terms of foreign ownership of oil and foreign investment in the mining sector. One may question why I

only focus on the case in which foreign actors already entered and remain in the territory of a country, not also the case in which the cooperative relationship is built upon trade or other types of remote relationships. In fact, I consider both foreign companies and their home governments because, when both have overlapping interests, their tendency and ability to support the leader of the host country will be higher and stronger. For instance, multinational oil companies may lobby their home governments to implement foreign policy that will help the stability of the countries where they operate. The oil companies can also directly provide assistance, such as donations, to the leader of the host country, which in turn help the leader to strengthen the power. Also, when foreign investors are directly involved and physically present in a country, their home governments may have a stronger motivation to intervene, since powerful countries like the United States usually claim that they are concerned about the security of their citizens and their assets abroad.

This having been said, it is certainly likely that powerful countries will see a country as an important strategic partner and help the leader if they have oil-specific trade relationships. For instance, building on an oil-for-security relationship, the United States helped Saudi Arabia not only survive internal turmoil, but also resist external threat from Iran and Yemen (Quandt, 1981; Hart, 1998). So, even though this dissertation focuses more on foreign investment, as an additional test, I examine the effect of oil export to powerful countries on leadership survival. Due to data availability, here I only use data on oil export to the United

States.<sup>18</sup> The data are from the U.S. Energy Information Administration (EIA),<sup>19</sup> and this variable is lagged one year behind the outcome variable. The third and fourth columns in Table 4.2 report the top 15 countries that have cumulatively exported the most oil to the United States. We can see that geographical proximity may play an important role in determining the U.S. oil import. A large portion of oil is shipped from the United States' neighboring countries, such as Canada and Mexico.

Table 4.4 reports the results when the U.S. oil import is used as the main explanatory variable. In Model 1, I include 121 countries in the sample. As can be seen, the variable OIL EXPORT TO THE U.S. has a negative sign, as expected, but it does not achieve statistical significance, probably because this sample includes non-oil reporting countries that may have other factors affecting leadership survival. In Model 2, I restrict the sample to 65 countries that are included in the EIA database, i.e., countries that have a history of exporting oil to the United States.<sup>20</sup> The results show that oil export to the United States has a negative and statistically significant effect on leader turnover. The more oil the United States imports from a country, the more likely that the U.S. government will make an effort to secure the leader of this country.

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<sup>18</sup>There are data on oil export to OECD countries, provided by the International Energy Agency. Unfortunately, this dataset is not freely accessible to the public. While considering only U.S. oil import may be conservative, including all OECD countries may be problematic since OECD members include some newly industrialized countries that may not have sufficiently large foreign power.

<sup>19</sup>Available at [http://www.eia.gov/dnav/pet/pet\\_move\\_impqus\\_a2\\_nus\\_ep00\\_im0\\_mbb1\\_m.htm](http://www.eia.gov/dnav/pet/pet_move_impqus_a2_nus_ep00_im0_mbb1_m.htm)

<sup>20</sup>See Table 4.10 in the appendix for a list of these 65 countries.

Table 4.4: Oil Export and Leadership Turnover (1995-2004)

	<b>Model 1</b> (All countries)	<b>Model 2</b> (Exporting countries)
<b>Oil export to the U.S.</b>	-2.952	-5.238
(in thousand barrels)	(2.269)	(2.055)
Development	0.171	0.261
Growth	0.139	(0.207)
Trade openness	0.023	0.004
Government spending	(0.020)	(0.031)
Political regime	-0.005	-0.003
Finite term	(0.004)	(0.005)
Population	-0.025	-0.013
Leader's age	(0.025)	(0.035)
	0.152	0.227
	(0.029)	(0.045)
	-0.167	0.724
	(0.466)	(0.799)
	0.071	0.354
	(0.116)	(0.125)
	-0.062	-0.102
	(0.012)	(0.017)
Number of countries	121	65
Number of observations	1,142	606
Log likelihood	-425	-189
AIC	965	473
BIC	1,252	685

*Note.* Standard errors are in parentheses.



## 4.4 Testing the Mechanisms

While the theory assumes that foreign governments support the leaders of resource rich countries by not supporting the opposition, the support can be in different forms. As I discuss in Section 3.5, there are a few theoretically plausible pathways through which foreign involvement in the resource sector would lead to longer leader tenure, including military intervention, increasing foreign aid to the leader, and IMF agreements. In this section, I empirically test these causal mechanisms, examining whether foreign ownership of oil has an effect on these forms of foreign support.

First, to test Hypothesis 2 that foreign ownership of oil leads to more military interventions, the outcome variable is the number of military interventions a country experienced in a given year. The data on military interventions are from the International Military Intervention Dataset (Pickering and Kisangani, 2009), which details every military intervention from 1946 to 2005. I transformed the data into a country-year format which lists the number of military interventions a country experienced in a year. Since the outcome variable is a nonnegative count of military interventions, I use a multilevel Poisson model and control for country heterogeneity. I also include the same set of control variables except for growth and trade openness because we do not expect these two factors would affect military intervention.

Second, Hypotheses 3 concerns the level of foreign aid that a country received. As I argue, if a country has oil owned by foreign actors, this country will be more likely to receive budgetary aid that is flowing the leader. To test this hypothesis, I use data on budgetary aid that are from the *AidData* (Tierney et al., 2011), which is a comprehensive dataset of foreign aid and includes information on donors, recipients, and purposes. I consider aid data whose purposes are labelled as “general budget support,” and sum up the budget aid a country received in each year. In this model, I use the logged amount of budget aid a country received in a given year as the outcome variable. A multilevel linear model with country-varying intercepts is employed since aid data are continuous. The same set of control variables are also included.

Lastly, to test Hypothesis 4 regarding IMF programs, I use data on the IMF assistance that are from Dreher (2006b), which provides information about four IMF arrangements.<sup>21</sup> Following the literature, I code this variable as 1 when a country is under at least one of these arrangements for at least 5 months in a particular year and 0 otherwise. The outcome variable is a binary indicator of whether a country received IMF support in a given year, so the model I use is a multilevel logit model with varying intercepts across countries to control for country specific effects. I also include the same set of control variables.

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<sup>21</sup>These four arrangements are IMF Standby Arrangement, IMF Extended Fund Facility Arrangement, IMF Structural Adjustment Facility Arrangement, and IMF Poverty Reduction and Growth Facility Arrangement.

Table 4.5 presents the results of these three analyses. Below, I will first look at the effect of oil on these three forms of support, and then turn to the effect of foreign owned oil, so that we can have a sense of whether it is oil *per se* or oil ownership that leads to foreign support. In Model 1, the outcome variable is the number of military interventions in a country-year. As can be seen, oil *per se* does not have any particular effect on military intervention, indicated by the statistically insignificant coefficient for the variable OIL PRODUCER. The coefficient for FOREIGN OWNERSHIP OF OIL, instead, is positive and statistically significant at the 90% level, which supports Hypothesis 2. Other things being equal, a country in a year when the oil sector is owned by foreign actors will experience two more military interventions than when the oil sector is domestically owned.<sup>22</sup> This finding is an addition to Choi (2013), who indicates little effect of oil supply on U.S. humanitarian intervention. In fact, powerful countries do not simply intervene in oil producing or exporting countries; they should intervene in oil producing or exporting countries that are strategic partners of theirs. In addition to the oil interest, foreign countries are more likely to send military troops to democratic countries, countries experiencing internal unrest, and poor countries.

In Model 2, the outcome variable is the logged amount of budgetary aid. As its result shows, oil producing countries are less likely to receive budgetary aid, which is consistent with the argument in the unearned income literature that resource rich countries have a lower incentive to seek foreign aid. When the oil is

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<sup>22</sup>Exp(0.782)=2.19.

Table 4.5: Foreign Owned Oil and Different Types of Foreign Support (1975–1999)

Outcome variable	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
	Military interventions	Budgetary aid	IMF recipient
Foreign ownership of oil	0.782 (0.456)	5.435 (1.221)	1.777 (0.445)
Oil producer	-0.330 (0.359)	-4.119 (1.081)	-1.698 (0.388)
Development	-0.282 (0.111)	-1.487 (0.364)	-0.386 (0.126)
Growth		-0.100 (0.024)	-0.009 (0.007)
Trade openness		-0.009 (0.009)	0.005 (0.003)
Political regime	0.035 (0.013)	0.240 (0.038)	0.041 (0.012)
Internal threat	0.045 (0.012)	-0.032 (0.052)	0.018 (0.017)
Population	0.044 (0.094)	1.216 (0.319)	0.408 (0.111)
Post-Cold War	-0.177 (0.129)	1.237 (0.395)	0.394 (0.129)
Number of observations	2,011	2,288	2,263
Number of countries	98	117	116
Log likelihood	-760	-7,971	-1,263
AIC	1,538	15,966	2,547
BIC	1,588	16,035	2,610

*Notes.* Standard errors are in parentheses.

foreign owned, however, a country receives a higher level of budgetary aid, shown by the positive and statistically significant coefficient for FOREIGN OWNERSHIP OF OIL. This supports Hypothesis 3 and suggests that, even though oil producing countries have their own sources of income, foreign actors that have a stake in these countries will assist the leaders by supplying aid that can be freely used by the leader. Other than oil wealth and oil ownership, Model 2 shows that budgetary aid is more likely to be given to democratic countries, countries in large size, and countries with a lower level of economic development and economic growth, and the amount has significantly increased after the end of the Cold War.

In Model 3, I include a binary indicator for IMF assistance recipients as the outcome variable. As the result shows, OIL PRODUCER has a negative and statistically significant effect on IMF assistance, meaning that oil producing countries are less likely to receive IMF loans. This makes sense since oil money can finance a country with economic difficulties and reduce its need to resort to multilevel lending institutions. Oil producing countries that privatized their oil to foreign actors, however, are more likely to receive IMF assistance, as shown by the positive and statistically significant coefficient for FOREIGN OWNERSHIP OF OIL. Since the oil revenues should be more stable in the presence of foreign actors, we cannot interpret this result as a higher tendency of oil producing countries with foreign involvement to seek IMF support. Instead, it should be that foreign governments are more likely to mobilize the IMF to provide assistance to those countries where

they have an interest in. This foreign assistance, in turn, may help the leader to further consolidate the power.

In short, in this section, I empirically test the causal mechanisms through which foreign ownership of oil leads to longer leader tenure. I show that countries with foreign owned oil are more likely to receive foreign assistance in different forms, including military intervention, budgetary aid, and IMF loans. An interesting finding is that oil and oil ownership may have competing effects, at least on foreign economic support such as foreign aid and IMF loans. This suggests that the external actors who consider a country as strategic assets may supply aid or IMF lending to help the leader, even though in general resource rich countries are less likely to quest for foreign aid and IMF support. These findings also provide evidence that foreign actors not only have the *incentive* to remain friends with the leader, but also use some actual foreign policy tools to help the leader.

## 4.5 Appendix

### Instrumental Variable Analysis

The instrumental variable I use is an interaction between proven oil reserves (in billion barrels) and GDP per capita (logged). Unlike oil production or oil export which may be endogenous to political and economic development,<sup>23</sup> oil reserves are naturally present in the ground, so this variable is exogenous and is often used to measure oil wealth (e.g., Humphreys, 2005; Jensen and Johnston, 2011; Ramsay, 2011) or to be an instrument (Haber and Menaldo, 2011) in the literature.<sup>24</sup> Countries naturally endowed with oil are not necessarily capable of extracting oil, and those lacking in capital are especially in need of foreign investment. Therefore, I expect that countries with a higher level of oil reserves and a lower level of economic development are more likely to adopt foreign ownership as an initial development strategy, and use an interaction term between oil reserves and logged GDP per capita to proxy for the level of foreign involvement in the oil sector. The data on proved oil reserves are from the BP Statistical Review.<sup>25</sup>

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<sup>23</sup>Some scholars argue that the resource curse literature suffers from an endogeneity problem because countries that are economically or politically less developed or that are plagued by civil conflicts are more likely to depend on oil or resource extraction. See Ramsay (2011) and Tsui (2011) for the endogenous relationship between oil and democracy, Brunnschweiler and Bulte (2008a) for the endogenous relationship between oil and economic growth, and Brunnschweiler and Bulte (2009) for the endogenous relationship between oil and conflicts.

<sup>24</sup>Granted, these are *proven* oil reserves, whose discovery should be highly related to techniques, so it is hardly 100% exogenous. The estimation of these proven oil reserves, however, was mostly conducted by IOCs, or by the colonizer countries before a country's independence. So we still have good reason to believe that it is not endogenous to a country's domestic economic or political development.

<sup>25</sup>Available at <http://www.bp.com/statisticalreview>.

Table 4.6 reports the results of the instrumental variable two-stage analysis. The first column presents the first-stage OLS result, where oil reserves and economic development interact to explain the level of foreign involvement in the oil sector. As can be seen, the coefficient on oil reserves is positive and statistically significant, which makes intuitive sense since countries having more oil are more likely to allow foreign investors to participate in the oil sector. The coefficient on the interaction term, moreover, is negative and achieves statistical significance at the 1% level, suggesting that it is a strong predictor. The tendency for oil rich countries to invite foreign investors decreases as the level of economic development increases, meaning that oil rich and capital poor countries are more likely to receive foreign capital in the oil sector. The *F*-test of the excluded instrumental variable is 10.84, which exceeds the conventional threshold for weak instruments of 10 (Sovey and Green, 2011; Staiger and Stock, 1997). Model 4 presents the result of a model specification in which leadership turnover is regressed on the interaction between oil reserves and GDP per capita and its two constitutive terms, and it indicates no direct effect of the instrumental variable.

The second and third columns of Table 4.6 present the second-stage analyses in which the instrumented explanatory variable enters to predict leadership turnover. As the result of Model 2 shows, instrumented foreign involvement in the oil sector has a negative effect on leadership turnover, consistent with the finding in Table 4.1. Model 3 uses a sample restricted to only oil producers, and



the result remains robust. These instrumental variable results suggest that the previous finding is not driven by a reverse relationship.

Table 4.6: Instrumental Variable Two-stage Regression Results

Outcome variable	Model 1	Model 2	Model 3	Model 4
	Foreign involvement	Leadership turnover		
Oil reserves × Development	−0.001 (0.000)			0.001 (0.004)
Oil reserves	0.014 (0.003)			−0.002 (0.038)
Development	0.001 (0.011)			0.019 (0.095)
Foreign involvement in the oil sector (instrumented)		−0.416 (0.219)	−0.488 (0.287)	
Oil producer		0.473 (0.280)		
All other control variables	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Country effects	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Number of observations	2,740	2,740	908	2,740
Number of countries	121	121	40	121
Log likelihood		−975	−287	−976
AIC		2,001	625	2,007
BIC		2,156	745	2,173
Excluded instrument <i>F</i> -test	10.84			
Adjusted <i>R</i> -squared	0.899			

*Notes.* Standard errors are in parentheses.

Table 4.7: Countries and Years under Foreign Ownership (1950–2005)

<b>Country</b>	<b>Years</b>
Algeria	1963–1970, 2005
Argentina	1989–2005
Bolivia	1953–1958, 1996–2005
Cameroon	1964–2005
Chad	1962–2005
Colombia	1999–2005
Congo Brazzaville	1965–2005
Ecuador	1950–1971
Egypt	1952–1960
Equatorial Guinea	1980–2005
Gabon	1962–2005
Guatemala	1983–2005
India	1953–1960
Indonesia	2001–2005
Iran	before 1951
Iraq	1952–1960, 1964–1971
Kazakhstan	1995–2004
Kuwait	1961–1973
Libya	1955–1970
Malaysia	1966–1973
Nigeria	1962–1968
North Yemen	1974–1989
Peru	1950–1967, 1993–2005
Romania	1992–2005
Russia	1950–1973
Sudan	1975–2005
Syria	1954–1963
Trinidad and Tobago	1962–2005
Venezuela	1950–1974
Yemen	1990–2005

*Notes.* Data are from Jones Luong and Weinthal (2010).

Table 4.8: Descriptive Statistics (before imputation) for the Sample in Table 4.1

	N	Mean	Median	Std. Dev.	Minimum	Maximum
Leadership turnover	2,656	0.145	0	0.349	0	1
Foreign ownership of oil	2,647	0.085	0	0.278	0	1
Foreign involvement in the oil sector	2,647	0.272	0	0.606	0	2
GDP per capita (logged)	2,409	6.784	6.747	1.195	4.057	9.962
Economic growth	2,445	3.062	3.865	7.419	-51.030	106.300
Trade/GDP	2,443	67.900	58.620	38.458	1.466	280.361
Government spending/GDP	2,348	15.823	14.175	7.523	2.976	76.220
Democracy (Polity score)	2,635	-1.485	-5	6.941	-10	10
Elected legislature	2,610	1.640	2	0.766	0	2
Finite term	2,587	0.699	1	0.744	0	1
Internal threat	2,607	1.502	0	3.462	0	49
Population (logged)	2,653	15.803	15.737	1.562	12.279	20.940
Leader's age	2,656	56.202	56	12.050	18	92
Leadership turnover	878	0.142	0	0.350	0	1
Foreign ownership of oil	869	0.258	0	0.438	0	1
Foreign involvement in the oil sector	869	0.827	1	0.812	0	2
GDP per capita (logged)	827	7.300	7.310	1.675	4.915	9.962
Economic growth	839	3.784	4.361	7.220	-24.700	71.188
Trade/GDP	834	61.956	52.318	39.390	9.012	275.232
Government spending/GDP	794	14.967	14.175	7.083	2.976	76.220
Democracy (Polity score)	877	-2.301	-6	6.864	-10	10
Elected legislature	850	1.565	2	0.804	0	2
Finite term	877	0.708	1	0.455	0	1
Internal threat	850	1.908	0	4.142	0	43
Population (logged)	875	16.514	16.526	1.820	12.279	20.940
Leader's age	878	57.772	57	11.045	35	92

Notes. The upper block includes the whole sample; the lower block includes oil producers.

Table 4.9: List of Countries Included in the Empirical Analysis in Table 4.1

Albania	<i>Algeria</i>	<i>Angola</i>	<i>Argentina</i>
<i>Azerbaijan</i>	<i>Bahrain</i>	Bangladesh	Belarus
Benin	Bhutan	<i>Bolivia</i>	Botswana
<i>Brazil</i>	Bulgaria	Burkina Faso	Burundi
Cambodia	<i>Cameroon</i>	Central African Republic	<i>Chad</i>
<i>Chile</i>	<i>China</i>	<i>Colombia</i>	Comoros
<i>Congo Brazzaville</i>	Congo Kinshasa	Costa Rica	Croatia
Cuba	Cyprus	Djibouti	Dominican Republic
<i>Ecuador</i>	<i>Egypt</i>	El Salvador	<i>Equatorial Guinea</i>
Eritrea	Estonia	Ethiopia	Fiji
<i>Gabon</i>	Gambia	Georgia	Ghana
<i>Guatemala</i>	Guinea	Guinea-Bissau	Guyana
Haiti	Honduras	<i>India</i>	<i>Indonesia</i>
<i>Iran</i>	Ivory Coast	Jamaica	Jordan
<i>Kazakhstan</i>	Kenya	<i>Kuwait</i>	Kyrgyzstan
Laos	Latvia	Lebanon	Lesotho
Liberia	Lithuania	Macedonia	Madagascar
Malawi	<i>Malaysia</i>	Mali	Mauritania
Mauritius	<i>Mexico</i>	Moldova	Mongolia
Morocco	Mozambique	Myanmar	Namibia
Nepal	Nicaragua	Niger	<i>Nigeria</i>
<i>Oman</i>	Pakistan	Panama	Papua New Guinea
Paraguay	<i>Peru</i>	Philippines	<i>Romania</i>
<i>Russia</i>	Rwanda	<i>Saudi Arabia</i>	Senegal
Sierra Leone	Slovak Republic	Slovenia	Somalia
South Africa	Sri Lanka	<i>Sudan</i>	Swaziland
<i>Syria</i>	Tajikistan	Tanzania	Thailand
Togo	<i>Trinidad and Tobago</i>	<i>Tunisia</i>	<i>Turkmenistan</i>
Uganda	Ukraine	Uruguay	<i>Uzbekistan</i>
<i>Venezuela</i>	<i>Vietnam</i>	<i>Yemen</i>	Zambia
Zimbabwe			

Notes. Countries with names in italic are oil producers.

Table 4.10: List of Countries in Models 2 in Table 4.3 and Table 4.4

Argentina	Australia	Austria	Belgium
Brazil	Canada	Chile	China
Colombia	Costa Rica	Czech Republic	Denmark
Dominican Republic	Ecuador	Egypt	Finland
France	Germany	Greece	Guatemala
Honduras	Hungary	India	Indonesia
Ireland	Israel	Italy	Jamaica
Japan	Malaysia	Mexico	Netherlands
New Zealand	Nigeria	Norway	Panama
Peru	Philippines	Poland	Portugal
Russia	Saudi Arabia	Singapore	South Africa
Spain	Sweden	Switzerland	Taiwan
Thailand	Trinidad and Tobago	Turkey	UAE
United Kingdom	Venezuela		
Albania	Algeria	Angola	Argentina
Azerbaijan	Bahrain	Belarus	Benin
Bolivia	Brazil	Bulgaria	Cameroon
Chad	Chile	China	Colombia
Croatia	Cyprus	Ecuador	Egypt
Estonia	Gabon	Georgia	Ghana
Guatemala	Guinea	India	Indonesia
Israel	Jamaica	Kazakhstan	Kuwait
Kyrgyzstan	Latvia	Liberia	Libya
Lithuania	Malaysia	Mauritania	Mexico
Morocco	Namibia	Oman	Pakistan
Panama	Peru	Philippines	Qatar
Romania	Russia	Senegal	Swaziland
Syria	Thailand	Togo	Trinidad and Tobago
Tunisia	Turkmenistan	UAE	Ukraine
Uruguay	Uzbekistan	Venezuela	Vietnam
Yemen			

*Notes.* The upper block includes 54 countries that have received the U.S. investment in the mining sector. The lower block includes 65 countries exporting oil to the United States.



## Chapter 5

# The Role of International Organizations

Recent decades have witnessed an increasing number of IOs that were formed by resource rich countries or established to overcome the adverse effect of resource windfalls. Indeed, these IOs may bring about economic advantages to resource rich countries, but they also constrain the governments. If this is the case, what explains resource rich countries' behavior to join IOs? Does participation in IOs provide any political benefits to the leader?

Political science scholarship has shown that membership in IOs, especially in international intergovernmental organizations (IGOs), does generate positive benefits, such as a higher level of democracy and less frequent intrastate conflicts. While most of the IO literature focuses on the country as the level of analysis, this dissertation argues that we should take into account the individual leader's

motivation to join IOs. As a self-interested actor, leaders would not choose to enter into IOs that may hurt their political survival. Instead, they may select to join IOs that help their political life, such as those privileging their supporters.

Based on this logic, this chapter specifically focuses on the role of IOs, hypothesizing that IO membership has a positive effect on leaders' political tenure. This effect, moreover, is more salient for leaders of resource rich countries for two reasons. First, natural resource production often generates political or economic problems; so can it influence the global economy. By engaging in IOs, leaders of resource rich countries not only gain visibility and legitimacy, but also can dodge the responsibility for any negative outcome caused by natural resources. Second, leaders of resource rich countries are more able to and more inclined to repress domestic opposition, and IOs can be a channel through which they signal their intention to consolidate the power. In other words, the globalization of resource rich countries may be a blessing for the leader since he/she can maximize the political tenure, but may be a curse for the citizens not only because the resource curse cannot be eliminated, but also because political repression may be higher.

Using data on leadership turnover, IGO membership, and resource rents, I find that IGO membership has a negative effect on leadership turnover across countries, which means that the joining of IGOs helps political leaders survive. Moreover, the effect of IGO membership on leadership turnover is stronger for resource rich countries, as indicated by a negative sign of an interaction between



IGO membership and resource rents. The results are robust to the use of a dichotomous measure of resource wealth and an alternative statistical estimator.

In what follows, I first review existing literature and present evidence showing that resource rich countries are less, but still globalized. Then I provide my theory on the effect of IGO membership on political survival, with an emphasis on resource rich countries. Section 5.3 proposes a research design to test the hypotheses. The empirical results are presented in Section 5.4. The final section concludes.

## **5.1 Prior Literature and Evidence**

As I review in Chapter 2, the resource curse literature suggests that natural resources are not always a manna from heaven, but can be a curse for resource rich countries. While natural resources bring unearned income to the government, resource wealth or dependence may cause a few adverse effects, including slow economic growth or a lower level of economic development, authoritarianism or difficulty of democratizing, frequent civil conflicts or regime instability, and gender inequality (Ross, 2008, 2012).

In a recent article, Voeten and Ross (2011) point out another consequence of resource endowments. They find that oil exporting countries are less likely to join international political institutions, a phenomena they call “unbalanced globalization.” They argue that it is because resource rich countries lack a need to signal

their good reputation to external actors, particularly foreign investors, and thus they tend not to join IOs, which are a device states utilize to attract foreign capital. Support for this argument can be found in the FDI literature, which shows that, despite a high level of political risks, resource rich countries are highly attractive to foreign investors because of the extraordinary profitability of investing in the resource sector (Kinoshita and Campos, 2003; Asiedu, 2006; Jensen and Johnston, 2011). The evidence I present in the left panel of Figure 2.1 also shows that oil rich countries are politically less globalized.

While resource rich countries have less incentives to participate in the international society, they do not completely avoid joining IOs. In recent decades, there has been an increasing number of IGOs formed by resource producing or exporting countries, such as the Organization of Petroleum Exporting Countries (OPEC) founded in 1961, the Intergovernmental Council of Copper Exporting Countries (CIPEC) created in 1967, and the Gas Exporting Countries Forum (GECF) established in 2001. The main purpose of this type of IGO is to create an oligopolistic market to protect from harmful fluctuations and to secure the member states' revenue growth. So joining such an IGO or forming an international cartel provides resource rich countries economic benefits by stabilizing the source of revenues. This is similar to the economic benefits that foreign investors can bring in I discuss in Section 3.1.

In addition to these international cartels which help secure resource revenues, resource rich countries join IOs that promote transparency and accountability

such as the Extractive Industries Transparency Initiative (EITI).<sup>1</sup> Joining this type of IOs or following this kind of governance-by-transparency codes, resource rich countries have to disclose their revenues and accept the oversight by stakeholders, which is believed to be able to reduce corruption and avoid political conflicts in resource rich countries (Langley, 2001; Gupta, 2008). However, the question arising is: If joining this type of overseeing IOs does not provide economic goods but only constrains the government, why would resource rich countries be willing to enter and comply? Does entering into IOs bring any other benefits to the governments of resource rich countries? This chapter seeks to answer this question by offering an explanation to why resource rich countries join IOs. Specifically, I focus on the political consequence of joining IOs for the leader, which I discuss in the next section.

## 5.2 The Political Consequence of IO Membership

Existing literature on IOs mainly focuses on how membership in IOs affects political institutions or state behavior. A large literature examines the effect of IGOs on interstate conflicts, in which the results are inconclusive: While many find that IGO membership has a pacifying effect in terms of reducing the inci-

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<sup>1</sup>The EITI is an international institution founded in 2002, which seeks to promote the transparency of resource extraction projects and the usage of resource revenues on public interests. Resource rich countries meeting its requirements, such as a commitment to work with civil society on the implementation of the EITI and the establishment of a multi-stakeholder group to oversee the implementation of the EITI, can obtain the compliant status or the candidate status. See <http://eiti.org/>

dence or the duration of militarized conflicts (Russett, Oneal and Davis, 1998; Oneal and Russett, 1999; Shannon, Morey and Boehmke, 2010), others contend that IGOs may instead stimulate conflicts, at least increase low-severity conflicts in emerging states (Chan, 2005; Fausett and Volgy, 2010). A number of scholars argue that the joining of IOs has some favorable effects, including enhancing democracy (Pevehouse, 2002*a,b*; Keohane, Macedo and Moravcsik, 2009), fostering human rights practices (Greenhill, 2010), and reducing the level of trade protection (Baccini and Kim, 2011).

In addition to IO membership, some scholars examine how institutional variations of IOs affect state behavior. Boehmer, Gartzke and Nordstrom (2004) find that whether IGO membership curtails or triggers conflicts depends on the characteristics of IGOs. Shannon (2009) shows that IOs are effective in fostering peace brokering with third party intervention. Haftel (2007) discovers that two features of regional integration arrangements (RIAs)—a wider scope of economic activity and regular high-level officials meetings—lead to reduction in violent conflicts. Hawkins (2008) argues that as the extent to which IOs are accessible to third parties increases, the level of constraints on states increases.

These studies have largely focused on the level of the nation-state or groups within the state. In recent years, scholars of IR and CP have gained leverage in explaining important questions by focusing on the incentives and behavior of individual leaders (Chiozza and Choi, 2003; Chiozza and Goemans, 2003, 2004; Bueno de Mesquita et al., 2005; Wolford, 2007; Licht, 2010). By considering politi-

cal leaders as a unit of analysis, this literature relaxes the traditional assumption that the state is a unitary actor. While the literature on the political consequence of IOs is abundant, little attention has been paid to the leaders. In fact, although states participate in IOs as a whole entity, the joining of an IO is rarely a decision made through democratic processes (Dahl, 1999). Instead, leaders are the decision-makers who choose whether or not to enter into an international institution. Therefore, I argue that a focus should be turned to how IOs affect political leaders.

Since leaders have the leeway to choose whether to join an IO, under the assumption that leaders are self-interested actors and seek longer political survival, they should participate in IOs that may help their political life. For instance, the literature indicates that domestic interest groups may mobilize the government to enter into an international institution that will privilege themselves (Keohane and Milner, 1996; Moravcsik, 1998) and that global regulation often reflects corporate interests (Braithwaite and Drahos, 2000). If these interest groups are crucial to the leader's survival, the leader will strategically select to enter into this IO, which will in turn benefit both the interest groups and the leader.

Indeed, theoretically, leaders should select to join IOs that help their political survival, but it does not mean that the joining of IOs necessarily helps all political leaders. Most leaders' political survival is essentially determined by domestic institutions or strongly secured by the resources they have, so the level of globalization may not influence their tenure. Leaders of resource rich coun-

tries, however, face a higher level of domestic threat, as I point out in Chapter 3. In other words, while leaders of resource rich countries may harness resource revenues to strengthen their power (Ross, 2001; Jensen and Wantchekon, 2004; Ulfelder, 2007; Morrison, 2009; Bueno de Mesquita and Smith, 2010), they inherently face a higher level of revolutionary threat. So while they lack a need to participate in IOs to attract foreign capital, they may need to rely on external actors to consolidate their power. I argue that membership in IOs has the effect of prolonging leadership survival in resource rich countries, and this effect works through a few mechanisms.

First, existing literature suggests that participation in influential international institutions provides political leaders legitimacy and conveys information to domestic audience (Hurd, 1999, 2005; Voeten, 2005; Chapman, 2007). This informational function of IOs may be stronger for resource rich countries because issues related to resource production often have considerable influence on the international society. For example, the Egyptian president Anwar Sadat led OPEC members to initiate the 1973 oil embargo, which makes his popularity skyrocket not only within Egypt but also among the Arab world. By entering into prominent IOs, especially resource-based IOs, therefore, political leaders signal to domestic citizens their ability to make important decisions in the international society, particularly when a decision by this type of IOs can greatly affect the global economy or international politics. This not only increases the leaders' reputation internationally but also consolidates their power domestically.

On the other hand, domestically, resource production oftentimes causes political and economic problems, as the resource curse literature suggests. Some scholars contend that IOs can be a scapegoat for domestic politicians.<sup>2</sup> This function of IOs can be particularly useful for resource rich countries. When member countries suffer from negative symptoms natural resources bring about, such as market volatility, the leaders can blame the IO and shirk the responsibility. For instance, OPEC members have to follow the policy of oil production limits, so, unlike non-OPEC members, they are unable to compensate for low price by increasing production. If a member state's economy is hurt during an oil bust, the leader can attribute the economic shock to the OPEC production ceiling. So membership in IOs may not only help enhance the leaders' prestige but also undertake the responsibility of resource curse if there is any, which holds the leaders less accountable and prolongs their survival.

Furthermore, joining an international agreement means the government is put under international surveillance, which may actually benefit the government by signaling its credibility. For non-democracies, this signaling effect is particularly important because they need domestic audiences and external actors to believe they are unbiased and reliable (Fang, 2008; Fang and Owen, 2011). In other words, international institutions not only play the role of "alarm-sounders" (McCubbins and Schwartz, 1984) to help citizens monitor their governments, but also can be an umbrella under which political leaders can engage in unpopular activities.

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<sup>2</sup>This view can be seen in Vaubel (1986) in general and Vreeland (2003) in specific for the IMF.

Recent literature finds that while some countries may enter into an international institution in order to achieve its principal goal, others join this IO to pursue a contrary purpose.<sup>3</sup> For resource rich countries, by constraining themselves to an IO, the leaders gain credibility on the commitment to the provision of public goods or to the practice of repression. Knowing the role of IOs, citizens have higher confidence in governments' promise. Foreign governments may also believe that the member countries have a determination to improve their domestic political environments. The consequence is therefore a social order similar to what North et al. (2009) term as "limited access order," in which the leader supplies public goods or coerce/coopt the opposition whereas citizens do not resort to violence.<sup>4</sup>

The above argument provides a political explanation to why resource rich countries form or join IOs. The last point, moreover, explains why resource rich countries enter into IOs that may constrain the governments such as the EITI. An interesting pattern of the EITI members is that a majority of them are unstable non-democracies.<sup>5</sup> Does this mean that the EITI is ineffective? According to my

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<sup>3</sup>This kind of arguments can be seen in several issue areas. For example, Kelley (2008) argues that, to seek legitimacy, cheating governments instead find it rational to invite international election monitors; Hollyer and Rosendorff (2009) argue that autocrats may decide to sign the UN Convention Against Torture to actually signal to the domestic opposition their low costs to repress. This explains the puzzle of why cheating/torturing governments are willing to participate in anti-cheating/anti-torturing international agreements.

<sup>4</sup>Bueno de Mesquita and Smith (2010) argue that leaders having non-tax revenues such as natural resources or foreign aid are more likely to eliminate revolutionary threats, particularly by suppressing public goods (Bueno de Mesquita and Smith, 2009b), and therefore have longer political survival. Following this logic, I argue that this effect can be stronger after a resource rich country joins resource-based IOs because the leader's legitimacy is further secured.

<sup>5</sup>Currently the EITI has 18 compliant states and 18 candidate states. Out of the 18 compliant states, 11 are non-democracies (Polity score less than six in 2010). Out of the 18 candidate states, there is a high of 13 that are non-democracies. All of these 24 non-democratic countries experienced a



argument, it is because these countries self-selected into the EITI as a signal to both foreign actors and domestic citizens. To foreign actors, the participatory leaders intend to show their willingness to follow the rules by behaving as if they are carrying out reforms, thus attracting more investment in the mining sector or reducing foreign attention to their domestic politics. To domestic citizens, the leaders display their legitimacy and their intention to consolidate the authority by participating in an international agreement monitoring them. Following this logic, we may hardly believe that the EITI can achieve its main goal,<sup>6</sup> but rather predict that the leaders of the compliant and candidate states will stay in power longer.

In short, IOs have a positive effect on the prospect of leaders' survival, especially in resource rich countries, which works through a few mechanisms. First, leaders strategically choose to enter into IOs that help their political life, such as IOs that benefit their supporters. Second, membership in IOs helps increase political leaders' international visibility, which heightens their domestic popularity. Third, IOs can be a scapegoat for leaders when unpopular outcomes are present. Lastly, political leaders signal their resolve to secure their power by joining IOs. This effect, moreover, will be stronger for resource rich countries because leaders of these countries particularly need IOs as a stage to demonstrate their influence externally and as an umbrella to cover their nasty activities domestically. There-

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regime change in the past 20 years. Contrarily, countries having stable regimes, either democracies or autocracies, rarely enter into this agreement.

<sup>6</sup>In fact, some scholars argue that the EITI is not as effective as transparency proponents expect (Kolstad and Wiig, 2009; Haufler, 2010; Aaronson, 2011).

fore, two hypotheses can be derived as follows:

*Hypothesis 5.1: The more IOs a country participates in, the more likely that the leader will have longer political survival.*

*Hypothesis 5.2 : The effect of IO membership on political survival will be stronger for leaders of resource rich countries.*

## **5.3 Research Design**

This section proposes a research design to test the hypotheses. I first discuss the data and variables, and then introduce the statistical model.

### **5.3.1 Variables and Data**

The focus in this chapter is the political survival of leaders, especially in resource rich countries, so, like the main empirical analysis in Chapter 4, the outcome variable here is whether there was a leadership change in a country in a given year. The period under investigation is from 1975 to 1999, and the sample includes 132 countries. A list of countries that are included in the analysis can be seen in Table 5.3 in the appendix.

The key explanatory variable is the number of IGOs to which a country is a member in a given year. The data are taken from the International Governmental

Organization (IGO) Data (Wallace and Singer, 1970; Pevehouse, Nordstrom and Warnke, 2004), which provides IGO membership information from 1964 to 2000. An IO is defined as an IGO when it has at least three member states and possesses indication of institutionalization such as a headquarters or permanent staff (Pevehouse, Nordstrom and Warnke, 2004). Indeed, the theory I have discussed so far is concerned with IOs, or even more broadly international institutions, rather than merely formal IGOs. But I use data on IGOs for two reasons. First, quality data only exist on IGOs, and the literature mostly uses IGO data as well. Second, IOs include IGOs and international NGOs. I exclude NGOs because these IOs' members are individuals, businesses, or interest groups, rather than governments. Since governments may not exert direct or formal influence through NGOs, we do not expect membership in NGOs to affect government leaders' tenure.<sup>7</sup>

To test the hypothesis that leaders of resource rich countries are more likely to benefit from IGO membership, I utilize a variable `RESOURCE RENTS` to measure the level of natural resource endowments. The data are from Hamilton and Clemens (1999), which calculate the annual rents generated by nonrenewable energy resources between 1970 and 1999. Using data on resource rents is preferred to other measurements of resource wealth such as production or export because rents directly accrue to the government, which in turn leads to the political and economic courses scholars claim (Ross, 2006). It is especially relevant to the theory in this

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<sup>7</sup>Another issue people may question is the usage of the *number* of IGOs. This basically assumes that every IGO has an identical effect, which may hardly be the case. While there are other ways to code this variable, such as weighting by the salience or prestige of an IGO, a careful and overarching weighting scheme is currently unavailable and is left for future research. Here, like most of the literature, I only use the count of IGO memberships.

chapter because the focus is on how leaders can spend resource rents on activities that help their survival under the umbrella of IOs.

I include the same battery of control variables that are included in the main analysis in Chapter 4, including the logged value of GDP per capita, economic growth, trade openness, government spending, political regime, finite term, elected legislative, internal threat, population, and leader's age. Table 5.4 in the appendix provides the summary statistics.

### 5.3.2 Statistical Model

The statistical model I use is basically the same as the one in Chapter 4. The outcome variable is a dichotomous indicator of leadership change, and the data structure is a multilevel structure with a country-year nested within a country, so I utilize a multilevel logit model. The intercepts are allowed to vary across countries to control for country heterogeneity. The only difference is that I also allow the intercepts to vary across years rather than simply including a dummy variable for post-Cold War. The inclusion of year effects can help control for contemporaneous shocks, and this is important here because countries tend to join IOs in the same year, particularly the year when the IO was established.<sup>8</sup> To model temporal dependence, I include the cubic smoothing splines or the dummies indicating the number of previous years in office.

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<sup>8</sup>For instance, most of the OECD members joined OCED in 1961; most of the WTO members obtained membership in 1995 or 1996; post-Soviet states actively became IO members in 1992 or 1993. So the inclusion of year-varying intercepts can account for specific effects of these years.

Simply put, in the multilevel logit model, the probability that a country  $j$  in year  $t$  experiences a leader change can be expressed as follows:

$$\Pr(y_{jt} = 1) = \text{logit}^{-1}(\alpha_j + \gamma_t + \mathbf{X}_{jt}\beta) \quad (5.1)$$

$$\alpha_j \sim N(\mu_\alpha, \sigma_\alpha^2) \quad (5.2)$$

$$\gamma_t \sim N(\mu_\gamma, \sigma_\gamma^2) \quad (5.3)$$

where  $\mathbf{X}_{jt}$  is the covariates indexed by country-year (including temporal splines or dummies),  $\alpha_j$  is the country-specific effect, and  $\gamma_t$  is the year-specific effect. Both country and year effects are assumed to be random and distributed normal.

## 5.4 Results

Table 5.1 presents the results. The first column reports the result of a multilevel logit model that includes a smoothing spline function of time to control for time dependence. As can be seen, the coefficient of IGO MEMBERSHIP is negative and statistically significant at the 99% level, meaning that a leader is less likely to be removed when the country belongs to more IGOs. Model 2 is equivalent to Model 1 except that the spline function is substituted with dummy variables for previous years in office. The result is similar to the result of Model 1, both of which support Hypothesis 5.1.

Table 5.1: IGO Memberships, Resource Rents, and Leadership Turnover (1975–1999)

DV: Leadership change (Time dependence)	<b>Model 1</b> Spline	<b>Model 2</b> Dummy	<b>Model 3</b> Spline	<b>Model 4</b> Dummy
IGO membership	−0.017 (0.006)	−0.017 (0.006)	−0.001 (0.009)	−0.002 (0.009)
Resource rents (logged)	0.002 (0.014)	0.001 (0.014)	0.060 (0.030)	0.054 (0.030)
IGO membership × Resource rents			−0.001 (0.0005)	−0.001 (0.0004)
Development	0.176 (0.100)	0.178 (0.100)	0.181 (0.099)	0.182 (0.099)
Growth	−0.019 (0.012)	−0.019 (0.012)	−0.020 (0.012)	−0.020 (0.012)
Trade openness	−0.003 (0.003)	−0.003 (0.003)	−0.003 (0.003)	−0.002 (0.003)
Government spending	−0.010 (0.014)	−0.008 (0.014)	−0.008 (0.014)	−0.006 (0.014)
Political regime	0.185 (0.019)	0.183 (0.019)	0.189 (0.019)	0.186 (0.019)
Legislature elected	−0.791 (0.146)	0.793 (0.148)	0.818 (0.147)	0.820 (0.149)
Finite term	−0.178 (0.252)	−0.177 (0.253)	−0.171 (0.252)	−0.172 (0.253)
Internal threat	0.057 (0.016)	0.058 (0.017)	0.056 (0.016)	0.056 (0.012)
Population (logged)	0.258 (0.112)	0.270 (0.113)	0.284 (0.112)	0.296 (0.112)
Leader's age	−0.063 (0.007)	−0.061 (0.007)	−0.064 (0.007)	−0.062 (0.007)
Number of observations	2,633	2,633	2,633	2,633
Number of countries	132	132	132	132
Log likelihood	−1,017	−1,000	−1,015	−997.9
AIC	2,088	2,122	2,085	2,120
BIC	2,247	2,481	2,250	2,484

*Notes.* Standard errors are in parentheses.

In Model 3 and Model 4, I include an interaction term between IGO MEMBERSHIP and RESOURCE RENTS to test if the effect is stronger for resource rich countries. As Model 3 shows, after the interaction term enters the model, the coefficient of IGO MEMBERSHIP turns statistically insignificant and the coefficient of RESOURCE RENTS turns statistically significant. Moreover, the interaction term is negative and statistically significant at the 95% level, which suggests that the effect of IGO membership is not constant across countries. Instead, as the level of resource rents a country has increases, the effect of IGO membership on leadership turnover decreases. This means that IGOs lead to a lower likelihood of leadership turnover in resource rich countries than in other countries, lending support to Hypothesis 5.2.

I graphically present the marginal effect of IGO membership on leadership turnover conditional on resource rents and the 95% confidence intervals in the left panel of Figure 5.1, since it is widely known that the marginal effect of a conditional variable and its standard errors cannot be interpreted just based on the regression table (Brambor, Clark and Golder, 2006). As the left pane of Figure 5.1 shows, membership in IGOs has a negative effect on leadership turnover, suggesting that the participation in IGOs helps prolong a leader's survival. For countries having a higher level of resource rents, moreover, this effect is more salient. The histogram in red displays the distribution of resource rents. We can see that a substantial portion of country-years do not have any resource rents, indicated by the bar on the leftmost side. For these countries, the effect of IGO membership on

leadership turnover is basically statistically indistinguishable from zero. But for other countries, the more resource rents they have, the stronger the effect of IGO membership is.

On the other hand, the right panel of Figure 5.1 displays the marginal effect of resource rents on leadership turnover depending on the number of IGO memberships. The density plot in red displays the distribution of IGO membership, which shows that the mode is about 50. As can be seen, resource rents have little effect on leadership change when the country is inactive in participating in IGOs. As the number of IGOs a country belongs to increases, the effect of resource rents on leadership turnover decreases. In other words, leaders of resource rich countries that are highly globalized are more likely to stay in power.

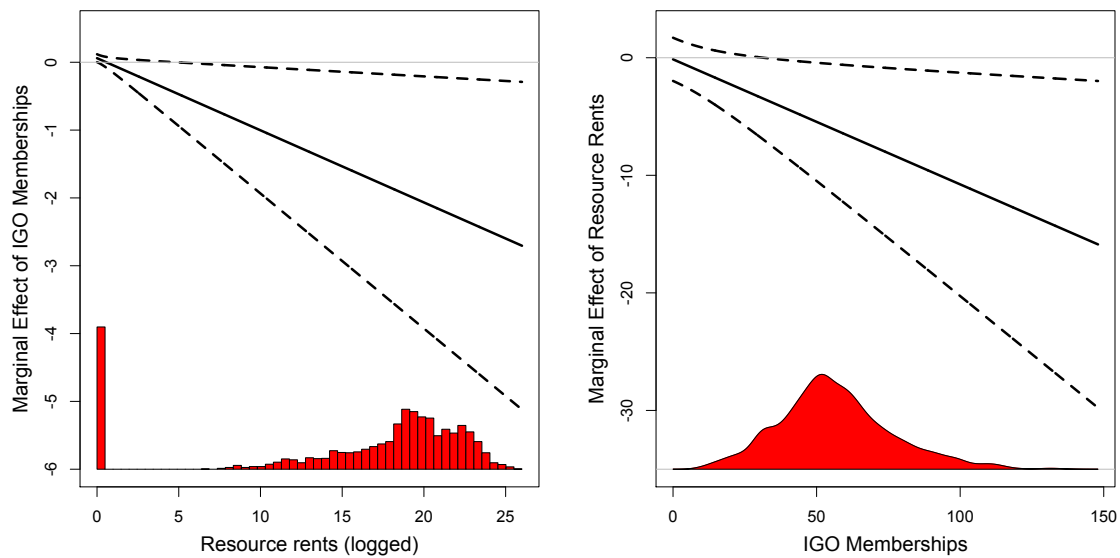


Figure 5.1.: Marginal Effects of IGO Membership and Resource Rents on Leadership Turnover



In addition to the impact of IGO membership and resource rents, Table 5.1 shows that economic conditions and political institutions are important determinants of leadership turnover, largely consistent with the findings in Chapter 4. In wealthier countries, leadership change is more frequent, probably because people put higher expectation on leaders. This finding is also present in Bueno de Mesquita and Smith (2009*b*). Leaders of fast growing countries are less likely to be replaced, suggesting that economic performance greatly affects leaders' survival. The level of democracy has a positive effect; leadership turnover is more frequent in democratic regimes than in authoritarian regimes. Whether there is elected legislature, contrarily, has a negative effect on leadership turnover, suggesting that representation helps stabilize a leader's survival. Finally, the level of internal threat and the population size are positively related to leadership turnover, and the leader's age has a negative effect.

## **Robustness Analysis**

To check the robustness of the results, I use an alternative measure of resource wealth and an alternative survival model. First, much of the resource curse literature focuses only on oil, since oil is the most important natural resource and it is relatively easy to identify whether a country is oil rich. I use a dichotomous variable `OIL PRODUCER` to replace the resource rents variable. The data on oil producers are from Ross (2012), who defines a country as an oil producer when the per capita oil and gas production in a year is greater than or equal to 100 dollars.

There are 44 oil producing countries in the sample, which are marked in Table 5.3 in the appendix.

The results when the oil producer variable is used are presented in Model 1 and Model 2 of Table 5.2.<sup>9</sup> As can be seen in Model 1, IGO membership has a negative effect on leadership change, consistent with the results in Table 5.1. In Model 2, which includes an interaction term between IGO MEMBERSHIP and OIL PRODUCER, the effect of IGO membership remains negative and statistically significant. Moreover, the interaction term has a negative and statistically significant coefficient, which means that the negative effect of IGO membership on leadership turnover is stronger for oil producing countries.

Second, I utilize a Cox proportional hazard model, which is also a widely used survival model, and include shared frailty for countries to account for the unobserved country heterogeneity (Box-Steffensmeier and Jones, 2004). The statistical results estimated by the Cox proportional hazard model are presented in Model 3 and Model 4 of Table 5.2.<sup>10</sup> The results in both models are very similar to those produced by the discrete-time survival model. Membership in IGOs reduces the hazard of being deposed for a leader, and this effect increases as the level of resource rents a country enjoys increases.

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<sup>9</sup>I only present results estimated by a multilevel model with temporal spline functions. The results when temporal dummy variables are used are unchanged, but not shown here.

<sup>10</sup>Because a shared-frailty model does not allow two random effects (frailty), I do not control for year-specific effects in this model; instead, I use a variable indicating post-Cold War period to account for any possible systematic shocks after the Cold War ended.

Table 5.2: IGO Memberships, Oil, and Leadership Turnover (1975–1999)

DV: Leadership change	<b>Model 1</b> (Multilevel models)	<b>Model 2</b>	<b>Model 3</b> (Cox PH models)	<b>Model 4</b>
IGO membership	−0.014 (0.006)	−0.010 (0.006)	−0.015 (0.005)	−0.004 (0.008)
Resource rents (logged)			−0.016 (0.012)	0.030 (0.024)
Oil producer	−0.293 (0.230)	0.799 (0.612)		
IGO membership × Oil producer (resource rents)		−0.017 (0.009)		−0.0006 (0.0004)
Development	0.175 (0.092)	0.165 (0.091)	0.233 (0.073)	0.207 (0.075)
Growth	−0.017 (0.011)	−0.017 (0.011)	−0.012 (0.009)	−0.014 (0.009)
Trade openness	−0.003 (0.003)	−0.003 (0.003)	−0.002 (0.002)	−0.002 (0.002)
Government spending	−0.006 (0.013)	−0.006 (0.013)	−0.005 (0.011)	−0.005 (0.011)
Political regime	0.172 (0.018)	0.174 (0.018)	0.116 (0.016)	0.120 (0.015)
Legislature elected	−0.789 (0.137)	−0.785 (0.137)	−0.478 (0.118)	0.477 (0.118)
Finite term	−0.108 (0.243)	−0.106 (0.243)	−0.169 (0.211)	−0.146 (0.211)
Internal threat	0.060 (0.016)	0.062 (0.016)	0.008 (0.012)	0.009 (0.012)
Population (logged)	0.211 (0.093)	0.208 (0.092)	0.190 (0.085)	0.186 (0.088)
Leader's age	−0.059 (0.007)	−0.059 (0.007)	−0.027 (0.006)	−0.028 (0.006)
Post-Cold War			0.313 (0.127)	0.278 (0.127)
Number of observations	2,784	2,784	2,469	2,469
Number of countries	141	141	132	132
Log likelihood	−1,074	−1,072		
AIC	2,202	2,200		
BIC	2,362	2,366		
Likelihood ratio test			354	375

Notes. Standard errors are in parentheses.

## 5.5 Conclusion

The presence of natural resources is a double-edged sword to political leaders. It can be a blessing because it strengthens their power by generating windfalls and reducing the need to tax citizens (Morrison, 2009). Because of these windfalls, resource rich countries have little incentive to participate in the international society (Voeten and Ross, 2011). It may also be a curse because resource wealth motivates or facilitates political opposition to carry out anti-government activities (Ross, 2004*b*; Dunning, 2008). Due to this revolutionary threat, I argue, leaders of resource rich countries may resort to external forces to help consolidate their power. Therefore, although resource rich countries tend to be less globalized, leaders of these countries strategically choose to enter into IOs to improve their own political survival prospects.

While this dissertation focuses on resource rich countries, the argument developed in this chapter here can be applied to all countries. IGO membership helps leaders because leaders select to enter into IOs that benefit their patrons and because participation in IOs provides visibility and legitimacy to leaders. This effect, however, will be stronger for resource rich countries since they particularly need IGOs to cover their intention to strengthen the power and to be a scapegoat when the resource curse is present. In this chapter, I therefore hypothesize that IGO membership has a positive effect on leadership survival, in general, and on leadership survival in resource rich countries, in particular.

To test the hypotheses, I draw upon data on leadership turnover, IGO membership, and resource rents. The result shows that the more IGOs a country belongs to, the longer the leader will stay in power. This effect, furthermore, is contingent on the extent to which a country enjoys resource windfalls. As the level of resource rents increases, the effect of IGO membership on leadership turnover decreases, meaning that IGO membership makes leaders *less* likely to be removed in resource rich countries.

## 5.6 Appendix

Table 5.3: List of Countries Included in the Empirical Analysis in Table 5.1

<i>Albania</i>	<i>Algeria</i>	<i>Angola</i>	<i>Argentina</i>
Armenia	<i>Australia</i>	<i>Austria</i>	<i>Azerbaijan</i>
Bangladesh	Belarus	Belgium	<i>Benin</i>
<i>Bolivia</i>	Botswana	Brazil	Bulgaria
Burkina Faso	Burundi	Cambodia	<i>Cameroon</i>
<i>Canada</i>	Central African Rep.	Chad	<i>Chile</i>
China	<i>Colombia</i>	<i>Congo Brazzaville</i>	Congo Kinshasa
Costa Rica	<i>Croatia</i>	Cuba	Czech Republic
<i>Denmark</i>	Dominican Rep	<i>Ecuador</i>	<i>Egypt</i>
El Salvador	Eritrea	Estonia	Ethiopia
Finland	France	<i>Gabon</i>	Gambia
Georgia	Germany	Ghana	Greece
Guatemala	Guinea	Guinea-Bissau	Haiti
Honduras	<i>Hungary</i>	India	<i>Indonesia</i>
<i>Iran</i>	<i>Ireland</i>	<i>Israel</i>	Italy
Ivory Coast	Jamaica	Japan	Jordan
<i>Kazakhstan</i>	Kenya	<i>Kuwait</i>	Kyrgyzstan
Laos	Latvia	Lesotho	Lithuania
Macedonia	Madagascar	Malawi	<i>Malaysia</i>
Mali	Mauritania	Mauritius	<i>Mexico</i>
Moldova	Mongolia	Morocco	Mozambique
Namibia	Nepal	<i>Netherlands</i>	<i>New Zealand</i>
Nicaragua	Niger	<i>Norway</i>	<i>Oman</i>
Pakistan	Panama	<i>Papua New Guinea</i>	Paraguay
<i>Peru</i>	Philippines	Poland	Portugal
<i>Romania</i>	Rwanda	<i>Saudi Arabia</i>	Senegal
Sierra Leone	Singapore	Slovak Republic	Slovenia
South Africa	Spain	Sri Lanka	Sudan
<i>Sweden</i>	Switzerland	<i>Syria</i>	Tajikistan
Tanzania	Thailand	Togo	<i>Trinidad</i>
<i>Tunisia</i>	Turkey	<i>Turkmenistan</i>	Uganda
Ukraine	<i>United Kingdom</i>	<i>United States</i>	Uruguay
<i>Uzbekistan</i>	<i>Venezuela</i>	Zambia	Zimbabwe

Note: Countries with names in italic are oil producers.

Table 5.4: Descriptive Statistics for the Sample in Table 5.1

	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev.</b>	<b>Minimum</b>	<b>Maximum</b>
Leadership turnover	3,588	0.161	0	0.367	0	1
Membership in IGOs	3,588	52	54.20	22.34	1	143
Resource rents (logged)	3,172	12.95	17.91	9.69	0	26.01
GDP per capita (logged)	3,083	7.36	7.23	1.57	4.06	11.02
Economic growth	3,107	3.067	3.569	7.072	-51.030	106.300
Trade/GDP	3,088	68.800	58.450	43.890	1.466	412.20
Government spending/GDP	2,984	16.42	15.40	7.157	2.976	76.220
Democracy (Polity score)	3,550	-0.149	-2	7.592	-10	10
Elected legislature	3,517	1.700	2	0.685	0	2
Finite term	3,494	0.734	1	0.442	0	1
Internal threat	3,497	1.466	0	3.465	0	49
Population (logged)	3,503	15.930	15.870	1.545	11.93	20.94
Leader's age	3,588	56.6	56	11.591	18	92

*Note.* The upper block includes the whole sample; the lower block includes oil producers.





# Chapter 6

## Conclusions

This dissertation starts with the discussion of the resource curse theory, pointing out two issues that deserve more attention: the missing role of foreign actors and the contradictory findings of regime stability and frequent civil conflicts in resource rich countries. It then presents a theory that can address these two issues: the presence of foreign actors in resource rich countries helps the leaders survive. The theory is built within a framework that separates the leader from the citizens/opposition, and incorporates different types of foreign actors, especially a coalition of foreign investors and their home governments. The main argument is that foreign actors will support the leaders of resource rich countries where they invest, and a particular form of support is not to support the opposition.

There are two core elements underpinning the theory: Powerful foreign countries take natural resources seriously, and natural resources increase revolutionary threat. The first fact provides foreign actors the incentives to assist the leaders of

resource rich countries, and the second fact offers the leaders the incentives to cooperate with foreign actors. When the leader and foreign actors have this tacit arrangement of “resource for protection” swap, the opposition has little chance to challenge, not only because the leader has the money and ability to keep down the opposition, but also because foreign actors are unlikely to support the opposition. This leads to the hypothesis that a leader of a resource rich country is less likely to fail if foreign actors are involved in the resource sector.

Using data on political leaders and oil ownership, I show that foreign ownership of oil has a negative effect on leadership turnover, meaning that leaders stay in power longer. This finding is not subject to the reverse causality problem. I also use alternative data to measure the level of cooperation with the United States, including the U.S. mining investment and the U.S. oil import, both of which have a positive effect on leader length as well. Moreover, to test the mechanisms, I use data on military intervention, budgetary aid, and IMF assistance, and the results indicate a positive relationship between foreign ownership of oil and various forms of foreign support. So the big takeaway from this dissertation is that foreign actors have incentives and do make actual efforts to support the leaders of the countries in which they have a strategic interest, i.e. natural resources.

## Future research

A question that arises is why we still see oil rich countries not privatizing their oil to foreign investors even if foreign ownership helps the leader to thrive. While this dissertation assumes that foreign investors always want to enter resource rich countries, the theory implies that a leader in face of revolutionary threat or strong domestic opposition is more likely to privatize natural resources. The evidence provided in Jones Luong and Weinthal (2010, p. 318) to a certain degree supports this implication, which shows that oil producing countries that have a higher level of distributional conflict are more likely to choose private ownership than state ownership. What determines natural resource ownership, however, is beyond the scope of this dissertation and needs to be explored in future research.

Moreover, an important assumption in this dissertation is that foreign companies and their home governments have overlapping interests. For some industries, this assumption may be problematic because the government's foreign policy and the private companies' interests may be divergent.<sup>1</sup> In the resource sector, however, this assumption is fairly reasonable because both the governments and their MNCs care about the cooperation of resource rich countries, which leads to stable profits for the MNCs and resource sustainability for the governments. Also, in

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<sup>1</sup>For example, there is a huge literature on trade or FDI discussing MNCs' ability to lobby or to engage in political activities and the degree to which they get protected or benefits (e.g., Garland and Biglaiser, 2009; Hansen and Mitchell, 2000; McGillivray, 2004), which implies that government policies may not be in line with firms' interests.

some IOCs, their home governments are actually the biggest stakeholders, which guarantees the common interest of both.<sup>2</sup>

This said, it is likely that foreign companies are privatized (if they were previously state owned) or gain independence from their home governments. It leads to the question of whether this divergence will lead to different foreign policy on oil and natural resources or have different effects on the domestic politics of resource rich countries. So future research may want to relax the assumption of common interests and investigate the variations within foreign actors.

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<sup>2</sup>For instance, there is an increasing scholarly interest in the Chinese outward investment in oil or mining sectors in African or Central Asian countries. This literature basically assumes that the Chinese state owned petroleum/resource companies follow the Chinese government's will with the support of Beijing (e.g., Andrews-Speed and Vinogradov, 2000; Taylor, 2006; Zweig and Jianhai, 2005).



# Bibliography

- Aaronson, Susan Ariel. 2011. "Limited partnership: Business, government, civil society, and the public in the Extractive Industries Transparency Initiative (EITI)." *Public Administration and Development* 31(1):50–63.
- Acemoglu, Daron and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. Cambridge: Cambridge University Press.
- Acemoglu, Daron., Simon Johnson and James Robinson. 2002. "An African Success Story: Botswana." *CEPR Discussion Paper No. 3219* .
- Albertus, Michael and Victor Menaldo. 2012. "If You're Against Them You're With Us: The Effect of Expropriation on Autocratic Survival." *Comparative Political Studies* 45(8):973–1003.
- Alesina, A. and B. Weder. 2002. "Do corrupt governments receive less foreign aid?" *American Economic Review* 92(4):1126–1137.
- Alesina, A. and D. Dollar. 2000. "Who gives foreign aid to whom and why?" *Journal of economic growth* 5(1):33–63.
- Andersen, Jørgen J and Michael L Ross. 2013. "The Big Oil Change: A Closer Look at the Haber–Menaldo Analysis." *Comparative Political Studies* .

- Andersen, Jørgen Juel and Silje Aslaksen. 2012. "Oil and political survival." *Journal of Development Economics* .
- Andrews-Speed, Philip and Sergei Vinogradov. 2000. "China's involvement in central Asian petroleum: convergent or divergent interests?" *Asian Survey* 40(2):377-397.
- Asiedu, Elizabeth. 2006. "Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability." *The World Economy* 29(1):63-77.
- Asiedu, Elizabeth and Donald Lien. 2010. "Democracy, Foreign Direct Investment and Natural Resources." *Journal of International Economics* 84(1):99-111.
- Aslaksen, Silje. 2010. "Oil and Democracy: More than a Cross-country Correlation?" *Journal of Peace Research* 47(4):421.
- Aslaksen, Silje and Ragnar Torvik. 2006. "A Theory of Civil Conflict and Democracy in Rentier States." *Scandinavian Journal of Economics* 108(4):571-585.
- Baccini, Leonardo and Soo Yeon Kim. 2011. "Preventing protectionism: International institutions and trade policy." *The Review of International Organizations* pp. 1-30.
- Bapat, Navin A. 2011. "Transnational Terrorism, US Military Aid, and the Incentive to Misrepresent." *Journal of Peace Research* 48(3):303-318.

- Basedau, Matthias and Wolfram Lacher. 2006. "A paradox of plenty? Rent distribution and political stability in oil states." *GIGA working paper* .
- Bayulgen, Oksan. 2010. *Foreign Investment and Political Regimes*. Cambridge: Cambridge University Press.
- Bearce, David H. and Jennifer A. Laks Hutnick. 2011. "Toward an Alternative Explanation for the Resource Curse: Natural Resources, Immigration, and Democratization." *Comparative Political Studies* 44(6):689–718.
- Beblawi, Hazem and Giacomo Luciani. 1987. *The Rentier State*. Vol. 2 Routledge.
- Beck, Nathaniel, Jonathan N. Katz and Richard Tucker. 1998. "Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable." *American Journal of Political Science* 42(4):1260–1288.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer and Patrick Walsh. 2001. "New Tools in Comparative Political Economy: The Database of Political Institutions." *The World Bank Economic Review* 15(1):165–176.
- Bindemann, Kirsten. 1999. *Production-sharing agreements: an economic analysis*. Oxford Institute for Energy Studies Oxford.
- Boehmer, Charles, Erik Gartzke and Timothy Nordstrom. 2004. "Do Intergovernmental Organizations Promote Peace?" *World Politics* 57(1):1.



- Box-Steffensmeier, Janet M. and Bradford S. Jones. 1997. "Time is of the essence: Event history models in political science." *American Journal of Political Science* pp. 1414–1461.
- Box-Steffensmeier, Janet M. and Bradford S. Jones. 2004. *Event History Modeling: A Guide for Social Scientists*. Cambridge: Cambridge University Press.
- Boyce, James K. 2002. "Aid conditionality as a tool for peacebuilding: Opportunities and constraints." *Development and Change* 33(5):1025–1048.
- Braithwaite, John and Peter Drahos. 2000. *Global business regulation*. Cambridge University Press.
- Brambor, Thomas, William Roberts Clark and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14(1):63–82.
- Bronson, Rachel. 2006. *Thicker than Oil: America's Uneasy Partnership with Saudi Arabia*. Oxford: Oxford University Press.
- Broz, J. Lawrence and Michael Brewster Hawes. 2006. "Congressional politics of financing the International Monetary Fund." *International Organization* 60:367–399.
- Brunnschweiler, Christa N. and Erwin H. Bulte. 2009. "Natural Resources and Violent Conflict: Resource Abundance, Dependence, and the Onset of Civil Wars." *Oxford Economic Papers* 61(4):651–674.

- Brunnschweiler, C.N. and E.H. Bulte. 2008a. "Linking Natural Resources to Slow Growth and More Conflict." *Science* 320:616.
- Brunnschweiler, C.N. and E.H. Bulte. 2008b. "The resource curse revisited and revised: a tale of paradoxes and red herrings." *Journal of Environmental Economics and Management* 55(3):248–264.
- Bueno de Mesquita, B. and A. Smith. 2009a. "A Political Economy of Aid." *International Organization* 63(02):309–340.
- Bueno de Mesquita, Bruce and Alastair Smith. 2007. "Foreign aid and policy concessions." *Journal of Conflict Resolution* 51(2):251–284.
- Bueno de Mesquita, Bruce and Alastair Smith. 2009b. "Political Survival and Endogenous Institutional Changes." *Comparative Political Studies* 42(2):167–197.
- Bueno de Mesquita, Bruce and Alastair Smith. 2010. "Leader Survival, Revolutions, and the Nature of Government Finance." *American Journal of Political Science* 54(4):936–950.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson and James D. Morrow. 2005. *The Logic of Political Survival*. Cambridge, MA: The MIT Press.
- Carter, David B and Curtis S Signorino. 2010. "Back to the future: Modeling time dependence in binary data." *Political Analysis* 18(3):271–292.
- Cetinyan, Rupen. 2002. "Ethnic bargaining in the shadow of third-party intervention." *International Organization* 56(3):645–677.

- Chan, Steve. 2005. "Discerning the Causal Relationships Between Great Powers' Membership in Intergovernmental Organizations and Their Initiation of Militarized Disputes." *Conflict Management and Peace Science* 22(3):239–256.
- Chapman, Terrence L. 2007. "International security institutions, domestic politics, and institutional legitimacy." *Journal of Conflict Resolution* 51(1):134–166.
- Chiozza, Giacomo and Ajin Choi. 2003. "Guess Who Did What: Political Leaders and the Management of Territorial Disputes, 1950-1990." *Journal of Conflict Resolution* 47(3):251–278.
- Chiozza, Giacomo and H. E. Goemans. 2003. "Peace through Insecurity: Tenure and International Conflicts." *Journal of Conflict Resolution* 47(4):443–467.
- Chiozza, Giacomo and H. E. Goemans. 2004. "International Conflict and the Tenure of Leaders: Is War Still Ex Post Inefficient?" *American Journal of Political Science* 48(3):604–619.
- Choi, Seung-Whan. 2013. "What determines US humanitarian intervention?" *Conflict Management and Peace Science* 30(2):121–139.
- Chwioroth, Jeffrey and Andrew Walter. 2013. "Banking crises and political survival over the long run: why Great Expectations matter." *Working Paper* .
- Collier, Paul. 2010. *The Plundered Planet: Why We Must—and How We Can—Manage Nature for Global Prosperity*. Oxford University Press.

- Collier, Paul and Anke Hoeffler. 1998. "On Economic Causes of Civil War." *Oxford Economic Papers* 50(4):563–573.
- Collier, Paul and Anke Hoeffler. 2005. "Resource rents, governance, and conflict." *Journal of Conflict Resolution* 49(4):625.
- Copelovitch, Mark S. 2010. "Master or Servant? Common Agency and the Political Economy of IMF Lending." *International Studies Quarterly* 54:49–77.
- Cottle, Simon. 2011. "Media and the Arab Uprisings of 2011: Research Notes." *Journalism* 12(5):647–659.
- Cox, D.R. 1972. "Regression models and life-tables." *Journal of the Royal Statistical Society. Series B (Methodological)* pp. 187–220.
- Crane, Keith, Andreas Goldthau, Michael Toman, Thomas Light, Stuart E. Johnson, Alireza Nader, Angel Rabasa and Harun Dogo. 2009. *Imported Oil and US National Security*. Santa Monica, CA: Rand Corporation.
- Crespo-Tenorio, Adriana, Nathan M. Jensen and Guillermo Rosas. 2013. "Political Liabilities: Surviving Banking Crises." *Comparative Political Studies*. Forthcoming.
- Cuaresma, Jesus Crespo, Harald Oberhofer and Paul A Raschky. 2011. "Oil and the duration of dictatorships." *Public Choice* 148(3-4):505–530.

- Dahl, Robert A. 1999. Can international organizations be democratic? A skeptical view. In *Democracy's edges*, ed. Ian Shapiro and Casiano Hacker-Cordon. Cambridge: Cambridge University Press pp. 19–36.
- Deutch, John and James R. Schlesinger. 2006. National Security Consequences of US Oil Dependency. Technical report DTIC Document.
- Devarajan, Shantayanan and Vinaya Swaroop. 2000. "The implications of foreign aid fungibility for development assistance." *The World Bank: Structure and Policies* pp. 196–209.
- Djankov, Simeon, Jose G Montalvo and Marta Reynal-Querol. 2008. "The curse of aid." *Journal of Economic Growth* 13(3):169–194.
- Dreher, A. 2006a. "Does globalization affect growth? Evidence from a new index of globalization." *Applied Economics* 38(10):1091–1110.
- Dreher, A. 2006b. "IMF and economic growth: The effects of programs, loans, and compliance with conditionality." *World Development* 34(5):769–788.
- Dreher, A., N. Gaston, P. Martens and W.J.M. Martens. 2008. *Measuring globalisation: gauging its consequences*. Springer Verlag.
- Dreher, Axel and Nathan M. Jensen. 2007. "Independent actor or agent? An empirical analysis of the impact of US interests on International Monetary Fund conditions." *The Journal of Law and Economics* 50.

- Dreher, Axel, Silvia Marchesi and James Raymond Vreeland. 2008. "The political economy of IMF forecasts." 137:145–171.
- Dunning, Thad. 2005. "Resource dependence, economic performance, and political stability." *Journal of Conflict Resolution* 49(4):451.
- Dunning, Thad. 2008. *Crude Democracy: Natural Resource Wealth and Political Regimes*. Cambridge: Cambridge University Press.
- Easterly, W.R. 2002. *The elusive quest for growth*. MIT press.
- ElWarfally, Mahmoud G. 1988. *Imagery and Ideology in US Policy Toward Libya 1969–1982*. University of Pittsburgh Press.
- Engel, Eduardo and Ronald Fischer. 2010. Optimal Resource Extraction Contracts under Threat of Expropriation. In *The Natural Resource Trap: Private Investment without Public Commitment*, ed. William Hogan and Federico Sturzenegger. Cambridge, MA: The MIT Press pp. 161–195.
- Fang, S. 2008. "The informational role of international institutions and domestic politics." *American Journal of Political Science* 52(2):304–321.
- Fang, S. and E. Owen. 2011. "International institutions and credible commitment of non-democracies." *The Review of International Organizations* pp. 1–22.
- Fausett, Elizabeth and Thomas J. Volgy. 2010. "Intergovernmental Organizations (IGOs) and Interstate Conflict: Parsing Out IGO Effects for Alternative Di-

- mensions of Conflict in Postcommunist Space." *International Studies Quarterly* 54(1):79–101.
- Fearon, James D. 2005. "Primary Commodity Exports and Civil Wars." *Journal of Conflict Resolution* 49(4):483.
- Fearon, James D. and David D. Laitin. 2003. "Ethnicity, insurgency, and civil war." *American Political Science Review* 97(01):75–90.
- Feyzioglu, Tarhan, Vinaya Swaroop and Min Zhu. 1998. "A panel data analysis of the fungibility of foreign aid." *The World Bank Economic Review* 12(1):29–58.
- Fordham, Benjamin O. 2008. "Power or plenty? Economic interests, security concerns, and American intervention." *International Studies Quarterly* 52(4):737–758.
- Frank, Andre Gunder. 1969. *Capitalism and underdevelopment in Latin America: historical studies of Chile and Brazil*. Monthly Review Press New York.
- Gandhi, Jennifer and Adam Przeworski. 2007. "Authoritarian Institutions and the Survival of Autocrats." *Comparative Political Studies* 40(11):1279–1301.
- Garland, Marshall W. and Glen Biglaiser. 2009. "Do Electoral Rules Matter? Political Institutions and Foreign Direct Investment in Latin America." *Comparative Political Studies* 42(2):224–251.
- Gasiorowski, M.J. 1995. "Economic Crisis and Political Regime Change: An Event History Analysis." *American Political Science Review* 89(4):882–897.

- Gibbs, David N. 1991. *The Political Economy of Third World Intervention: Mines, Money, and US Policy in the Congo Crisis*. University of Chicago Press.
- Girod, Desha M. 2012. "Effective Foreign Aid Following Civil War: The Nonstrategic-Desperation Hypothesis." *American Journal of Political Science* 56(1):188–201.
- Goemans, Henk E., Kristian Skrede Gleditsch and Giacomo Chiozza. 2009. "Introducing Archigos: A Dataset of Political Leaders." *Journal of Peace Research* 46(2):269–283.
- Gould, Erica R. 2003. "Money Talks: Supplementary Financiers and International Monetary Fund Conditionality." *International Organization* 57(03):551–586.
- Gray, Christopher J. 1998. "Cultivating citizenship through Xenophobia in Gabon, 1960-1995." *Africa today* 45(3/4):389–409.
- Greenhill, Brian. 2010. "The company you keep: international socialization and the diffusion of human rights norms." *International Studies Quarterly* 54(1):127–145.
- Gupta, Aarti. 2008. "Transparency under scrutiny: information disclosure in global environmental governance." *Global Environmental Politics* 8(2):1–7.
- Guriev, Sergei, Anton Kolotilin and Konstantin Sonin. 2011. "Determinants of nationalization in the oil sector: A theory and evidence from panel data." *Journal of Law, Economics, and Organization* 27(2):301–323.



- Haber, Stephen and Victor Menaldo. 2011. "Do Natural Resources Fuel Authoritarianism? A Reappraisal of the Resource Curse." *American Political Science Review* 105(1):1–26.
- Haftel, Yoram Z. 2007. "Designing for peace: Regional integration arrangements, institutional variation, and militarized interstate disputes." *International Organization* pp. 217–237.
- Hajzler, Christopher. 2010. "Resource-based FDI and Expropriation in Developing Economies." *Working Paper* .
- Hajzler, Christopher. 2012. "Expropriation of Foreign Direct Investments: Sectoral Patterns from 1993 to 2006." *Review of World Economics* 148(1):119–149.
- Hamilton, James D. 1983. "Oil and the Macroeconomy since World War II." *The Journal of Political Economy* pp. 228–248.
- Hamilton, K. and M. Clemens. 1999. "Genuine savings rates in developing countries." *The World Bank Economic Review* 13(2):333–356.
- Hansen, Wendy L. and Neil J. Mitchell. 2000. "Disaggregating and explaining corporate political activity: Domestic and foreign corporations in national politics." *American Political Science Review* 94(4):891–903.
- Harford, Tim and Michael Klein. 2005. "Aid and the Resource Curse: How Can Aid Be Designed to Preserve Institutions?" *The World Bank Open Knowledge Repository* .

- Hart, Parker T. 1998. *Saudi Arabia and the United States: Birth of A Security Partnership*. Bloomington, IN: Indiana University Press.
- Haufler, Virginia. 2010. "Disclosure as governance: the Extractive Industries Transparency Initiative and resource management in the developing world." *Global Environmental Politics* 10(3):53–73.
- Hawkins, Darren. 2008. "Protecting Democracy in Europe and the Americas." *International Organization* 62(03):373–403.
- Herb, M. 2005. "No representation without taxation? Rents, development, and democracy." *Comparative Politics* pp. 297–316.
- Hollyer, J.R. and B.P. Rosendorff. 2009. "Domestic Politics and the Accession of Authoritarian Regimes to Human Rights Treaties." *Working Paper* .
- Honaker, James, Gary King and Matthew Blackwell. 2011. "Amelia II: A Program for Missing Data." *Journal of Statistical Software* 45(7).
- Humphreys, Macartan. 2005. "Natural Resources, Conflict, and Conflict Resolution: Uncovering the Mechanisms." *Journal of Conflict Resolution* 49(4):508–537.
- Hurd, Ian. 1999. "Legitimacy and authority in international politics." *International Organization* 53(02):379–408.
- Hurd, Ian. 2005. "The Strategic Use of Liberal Internationalism: Libya and the UN Sanctions, 1992-2003." *International Organization* 59(3):495.

- Isham, J., M. Woolcock, L. Pritchett and G. Busby. 2005. "The varieties of resource experience: Natural resource export structures and the political economy of economic growth." *The World Bank Economic Review* 19(2):141.
- Jensen, Nathan M. 2003. "Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment." *International Organization* 57(3):587–616.
- Jensen, Nathan M. 2008. "Political Risk, Democratic Institutions, and Foreign Direct Investment." *Journal of Politics* 70(4):1042–1052.
- Jensen, Nathan M. and Leonard Wantchekon. 2004. "Resource Wealth and Political Regimes in Africa." *Comparative Political Studies* 37(7):816–841.
- Jensen, Nathan M. and Noel P. Johnston. 2011. "Political Risk, Reputation, and the Resource Curse." *Comparative Political Studies* 44(6):662–688.
- Jensen, Nathan M., Noel P. Johnston, Chia yi Lee and Abdulhadi Sahin. 2012. "Expropriation, Punishment, and the Democratic Curse." *Working Paper* .
- Jodice, David A. 1980. "Sources of Change in Third World Regimes for Foreign Direct Investment, 1968–1976." *International Organization* 34(2):177–206.
- Jones Luong, Pauline and Erika Weinthal. 2001. "Prelude to the Resource Curse: Explaining Oil and Gas Development Strategies in the Soviet Successor States and Beyond." *Comparative Political Studies* 34(4):367–399.

- Jones Luong, Pauline and Erika Weinthal. 2006. "Rethinking the Resource Curse: Ownership Structure, Institutional Capacity, and Domestic Constraints." *Annual Review of Political Science* 9:241–263.
- Jones Luong, Pauline and Erika Weinthal. 2010. *Oil Is Not A Curse: Ownership Structure and Institutions in Soviet Successor States*. Cambridge: Cambridge University Press.
- Kahler, Miles. 2000. "Conclusion: The Causes and Consequences of Legalization." *International Organization* 54(3):661–683.
- Katz, Menachem, Ulrich Bartsch, Harinder Malothra and Milan Cuc. 2004. *Lifting the Oil Curse: Improving Petroleum Revenue Management in Sub-Saharan Africa*. International Monetary Fund.
- Keefer, Philip. 2010. "DPI2010. Database of Political Institutions: Changes and Variable Definitions." *Development Research Group, World Bank* .
- Kelley, J. 2008. "Assessing the complex evolution of norms: the rise of international election monitoring." *International Organization* 62(02):221–255.
- Keohane, R.O., S. Macedo and A. Moravcsik. 2009. "Democracy-enhancing multilateralism." *International Organization* 63(01):1–31.
- Keohane, Robert O. and Helen V. Milner. 1996. *Internationalization and Domestic Politics*. Cambridge University Press.

- Killick, Tony. 1997. "Principals, agents and the failings of conditionality." *Journal of International Development* 9(4):483–495.
- Kinoshita, Yuko and Nauro F. Campos. 2003. "Why does FDI Go Where It Goes?: New Evidence from the Transition Economies." *IMF Working Paper* .
- Klare, Michael T. 2002. *Resource Wars: The New Landscape of Global Conflict*. New York, NY: Henry Holt and Company.
- Kobrin, Stephen J. 1980. "Foreign Enterprise and Forced Divestment in LDCs." *International Organization* 34(1):65–88.
- Kobrin, Stephen J. 1984. "Expropriation as an attempt to control foreign firms in LDCs: trends from 1960 to 1979." *International Studies Quarterly* pp. 329–348.
- Koeberle, Stefan and Zoran Stavreski. 2005. Budget support: concept and issues. In *Budget Support as More Effective Aid? Recent Experiences and Emerging Lessons*, ed. Stefan Koeberle, Zoran Stavreski and Jan Walliser. The World Bank p. 1.
- Kolstad, Ivar and Arne Wiig. 2009. "Is transparency the key to reducing corruption in resource-rich countries?" *World Development* 37(3):521–532.
- Kono, Daniel Yuichi and Gabriella R Montinola. 2009. "Does foreign aid support autocrats, democrats, or both?" *The Journal of Politics* 71(02):704–718.
- Kraemer, Thomas D. 2006. *Addicted to oil: strategic implications of American oil policy*. Strategic Studies Institute.

- Langley, Paul. 2001. "Transparency in the making of global environmental governance." *Global Society* 15(1):73–92.
- Leong, W. and K. Mohaddes. 2011. "Institutions and the Volatility Curse."
- Lewis-Beck, Michael S and Mary Stegmaier. 2000. "Economic Determinants of Electoral Outcomes." *Annual Review of Political Science* 3:183–219.
- Li, Quan. 2009. "Democracy, Autocracy, and Expropriation of Foreign Direct Investment." *Comparative Political Studies* 42(8):1098.
- Li, Quan and Adam Resnick. 2003. "Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries." *International Organization* 57(1):175–211.
- Licht, Amanda A. 2010. "Coming into Money: The Impact of Foreign Aid on Leader Survival." *Journal of Conflict Resolution* 54(1):58–87.
- Little, Roderick J. A. and Donald B. Rubins. 1987. *Statistical Analysis with Missing Data*. New York: Wiley.
- Mahdavy, Hossein. 1970. "The patterns and problems of economic development in rentier states: The case of Iran." 1970 pp. 428–467.
- Manning, A. 2004. "Human Capital as a Transmission Mechanism of the Resource Curse." *The Park Place Economist* 12:75–86.
- Manzano, O. and R. Rigobon. 2001. "Resource curse or debt overhang?"

- McCubbins, M.D. and T. Schwartz. 1984. "Congressional oversight overlooked: Police patrols versus fire alarms." *American Journal of Political Science* 28(1):165–179.
- McGillivray, F. 2004. *Privileging industry: The comparative politics of trade and industrial policy*. Princeton University Press.
- McGillivray, Fiona and Alastair Smith. 2000. "Trust and Cooperation through Agent-specific Punishments." *International Organization* 54(4):809–824.
- McGillivray, Fiona and Alastair Smith. 2004. "The Impact of Leadership Turnover on Trading Relations Between States." *International Organization* 58(3):567–600.
- McGillivray, Fiona and Alastair Smith. 2006. "Credibility in Compliance and Punishment: Leader Specific Punishments and Credibility." *Journal of Politics* 68(2):248–258.
- Minor, M.S. 1994. "The demise of expropriation as an instrument of LDC policy, 1980-1992." *Journal of International Business Studies* pp. 177–188.
- Moravcsik, Andrew. 1998. *The Choice for Europe: Social Purpose and State Power from Messina to Maastricht*. Cornell University Press.
- Morrison, Kevin M. 2007. "Natural resources, aid, and democratization: A best-case scenario." *Public Choice* 131(3):365–386.
- Morrison, Kevin M. 2009. "Oil, Nontax Revenue, and the Redistributive Foundations of Regime Stability." *International Organization* 63(1):107–138.

- Morrison, Kevin M. 2012. "Oil, Conflict, and Stability." *Working Paper* .
- Nellor, David C.L. 1987. "Sovereignty and Natural Resource Taxation in Developing Countries." *Economic Development and Cultural Change* 35(2):367–392.
- North, D.C., J.J. Wallis, B.R. Weingast and Dawsonera. 2009. *Violence and social orders: a conceptual framework for interpreting recorded human history*. Cambridge University Press New York.
- Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *American Political Science Review* 87(3):567–576.
- Omeje, Kenneth C. 2006. *High stakes and stakeholders: Oil conflict and security in Nigeria*. Ashgate Publishing.
- Ongba, Luc Désiré. 2009. "On the Duration of Political Power in Africa The Role of Oil Rents." *Comparative Political Studies* 42(3):416–436.
- Oneal, John R. and Bruce M. Russett. 1999. "The Kantian Peace: The Pacific Benefits of Democracy, Interdependence, and International Organizations, 1885-1992." *World Politics* 52(1).
- Paler, Laura. 2013. "Keeping the Public Purse: An Experiment in Windfalls, Taxes, and the Incentives to Restrain Government." *American Political Science Review* 107(4):706–725.
- Perotti, Enrico C. 2004. "State Ownership: A Residual Role?" *World Bank Policy Research Working Paper No. 3407* .



- Perreault, Thomas. 2006. "From the Guerra Del Agua to the Guerra Del Gas: resource governance, neoliberalism and popular protest in Bolivia." *Antipode* 38(1):150–172.
- Pettersson, Jan. 2007. "Foreign sectoral aid fungibility, growth and poverty reduction." *Journal of International Development* 19(8):1074–1098.
- Pevehouse, Jon C. 2002a. "Democracy from the outside-in? International organizations and democratization." *International Organization* 56(03):515–549.
- Pevehouse, Jon C. 2002b. "With a little help from my friends? Regional organizations and the consolidation of democracy." *American Journal of Political Science* pp. 611–626.
- Pevehouse, Jon, Timothy Nordstrom and Kevin Warnke. 2004. "The Correlates of War 2 international governmental organizations data version 2.0." *Conflict Management and Peace Science* 21(2):101–119.
- Pickering, Jeffrey and Emizet F Kisangani. 2009. "The International Military Intervention dataset: An updated resource for conflict scholars." *Journal of Peace Research* 46(4):589–599.
- Quandt, William B. 1981. *Saudi Arabia in the 1980s: Foreign Policy, Security, and Oil*. Brookings Institution Press.
- Ramsay, Kristopher W. 2011. "Revisiting the Resource Curse: Natural Disasters, the Price of Oil, and Democracy." *International Organization* 65(3):507–529.

- Ross, Michael L. 1999. "The Political Economy of the Resource Curse." *World Politics* 51(2):297–322.
- Ross, Michael L. 2001. "Does Oil Hinder Democracy?" *World Politics* 53(3):325–361.
- Ross, Michael L. 2004a. "How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases." *International Organization* 58(1):35–67.
- Ross, Michael L. 2004b. "What Do We Know about Natural Resources and Civil War?" *Journal of Peace Research* 41(3):337–356.
- Ross, Michael L. 2006. "A Closer Look at Oil, Diamonds, and Civil Wars." *Annual Review of Political Science* 9:265–300.
- Ross, Michael L. 2008. "Oil, Islam, and Women." *American Political Science Review* 102(1):107.
- Ross, Michael L. 2012. *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*. Princeton, NJ: Princeton University Press.
- Russett, Bruce, John R. Oneal and David R. Davis. 1998. "The third leg of the Kantian tripod for peace: International organizations and militarized disputes, 1950–85." *International Organization* 52(03):441–467.
- Sachs, J.D. and A. Warner. 1995. "Natural resource abundance and economic growth."

- Schubert, S.R. 2006. "Revisiting the oil curse: are oil rich nations really doomed to autocracy and inequality?".
- Shafer, Michael. 1983. "Capturing the Mineral Multinationals: Advantage or Disadvantage?" *International Organization* 37(01):93–119.
- Shannon, Megan. 2009. "Preventing war and providing the peace? International organizations and the management of territorial disputes." *Conflict Management and Peace Science* 26(2):144–163.
- Shannon, Megan, Daniel Morey and Frederick J. Boehmke. 2010. "The Influence of International Organizations on Militarized Dispute Initiation and Duration<sup>1</sup>." *International Studies Quarterly* 54(4):1123–1141.
- Shaxson, N. 2005. "New approaches to volatility: dealing with the resource curse in sub-Saharan Africa." *International Affairs* 81(2):311–324.
- Shaxson, Nicholas. 2007. *Poisoned wells: the dirty politics of African oil*. Palgrave Macmillan.
- Shleifer, Andrei. 1998. "State versus Private Ownership." *The Journal of Economic Perspectives* 12(4):133–150.
- Smith, A. 2008. "The perils of unearned income." *The Journal of Politics* 70(03):780–793.
- Smith, Benjamin. 2004. "Oil Wealth and Regime Survival in the Developing World, 1960–1999." *American Journal of Political Science* 48(2):232–246.

- Smith, Benjamin. 2013. "Resource Wealth and Political Regimes: How Solid a Link after 40 Years of Research?" *APSA-CD* 11(2):17–20.
- Sovey, Allison J. and Donald P. Green. 2011. "Instrumental Variables Estimation in Political Science: A Readers Guide." *American Journal of Political Science* 55(1):188–200.
- Staiger, Douglas and James H Stock. 1997. "Instrumental Variables Regression with Weak Instruments." *Econometrica* 65(3):557–586.
- Stevens, Paul. 2008. "National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle." *The Journal of World Energy Law & Business* 1(1):5–30.
- Stone, R.W. 2004. "The political economy of IMF lending in Africa." *American Political Science Review* 98(04):577–591.
- Stone, R.W. 2008. "The scope of IMF conditionality." *International Organization* 62(04):589–620.
- Taylor, Ian. 2006. "China's oil diplomacy in Africa." *International affairs* 82(5):937–959.
- Thyne, Clayton L. 2006. "Cheap Signals with Costly Consequences The Effect of Interstate Relations on Civil War." *Journal of Conflict Resolution* 50(6):937–961.
- Tierney, Michael J, Daniel L Nielson, Darren G Hawkins, J Timmons Roberts, Michael G Findley, Ryan M Powers, Bradley Parks, Sven E Wilson and Robert L

- Hicks. 2011. "More dollars than sense: refining our knowledge of development finance using AidData." *World Development* 39(11):1891–1906.
- Tingley, Dustin H and Barbara F Walter. 2011. "Can cheap talk deter? an experimental analysis." *Journal of Conflict Resolution* 55(6):996–1020.
- Tobin, Jennifer and Susan Rose-Ackerman. 2005. "Foreign Direct Investment and the Business Environment in Developing Countries: The Impact of Bilateral Investment Treaties." *Yale Law & Economics Research Paper No. 293* .
- Tomz, Michael and Mark L.J. Wright. 2010. Sovereign Theft: Theory and Evidence about Sovereign Default and Expropriation. In *The Natural Resource Trap: Private Investment without Public Commitment*, ed. William Hogan and Federico Sturzenegger. Cambridge, MA: The MIT Press pp. 69–110.
- Torvik, R. 2009. "Why do some resource-abundant countries succeed while others do not?" *Oxford Review of Economic Policy* 25(2):241.
- Tsui, Kevin K. 2010. "Resource Curse, Political Entry, and Deadweight Costs." *Economics & Politics* 22(3):471–497.
- Tsui, Kevin K. 2011. "More Oil, Less Democracy: Evidence from Worldwide Crude Oil Discoveries." *The Economic Journal* 121(551):89–115.
- Ulfelder, Jay. 2007. "Natural-resource Wealth and the Survival of Autocracy." *Comparative Political Studies* 40(8):995–1018.

- Van der Ploeg, F. 2011. "Natural resources: curse or blessing?" *Journal of Economic Literature* 49(2):366–420.
- Vaubel, R. 1986. "A public choice approach to international organization." *Public Choice* 51(1):39–57.
- Vernon, Raymond. 1971. "Sovereignty at Bay: The Multinational Spread of US Enterprises." *The International Executive* 13(4):1–3.
- Voeten, Erik. 2005. "The political origins of the UN Security Council's ability to legitimize the use of force." *International Organization* 59(3):527.
- Voeten, Erik and Michael L. Ross. 2011. "Unbalanced Globalization in the Oil Exporting States." *Working Paper* .
- Vreeland, James R. 2003. *The IMF and economic development*. Cambridge University Press.
- Wallace, M. and J.D. Singer. 1970. "Intergovernmental organization in the global system, 1815–1964: A quantitative description." *International Organization* 24(02):239–287.
- Wallerstein, Immanuel. 1974. "The rise and future demise of the world capitalist system: concepts for comparative analysis." *Comparative studies in society and history* 16(4):387–415.
- Warwick, Paul. 1992. "Economic Trends and Government Survival in West European Parliamentary Democracies." *American Political Science Review* pp. 875–887.

- Wick, K. 2008. "Conflict and production: an application to natural resources." *The BE Journal of Economic Analysis & Policy* 8(1):2.
- Wolford, Scott. 2007. "The Turnover Trap: New Leaders, Reputation, and International Conflict." *American Journal of Political Science* 51(4):772–788.
- Wright, Joseph. 2011. "Curses and Conditionality: Do Oil and Aid Affect Democracy Differently?" *Working Paper* .
- Wright, Joseph, Erica Frantz and Barbara Geddes. 2013. "Oil and Autocratic Regime Survival." *British Journal of Political Science* .
- Yamaguchi, K. 1999. *Event history analysis*. Vol. 28 Sage Publ.
- Yates, Douglas Andrew. 1996. *The rentier state in Africa: Oil rent dependency and neocolonialism in the Republic of Gabon*. Africa World Press.
- Young, Joseph K and Michael G Findley. 2011. "Can peace be purchased? A sectoral-level analysis of aids influence on transnational terrorism." *Public Choice* 149(3-4):365–381.
- Zweig, David and Bi Jianhai. 2005. "China's global hunt for energy." *Foreign affairs* pp. 25–38.