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Resource Nationalism and Energy Policy: Venezuela in Context

David R. Mares

It is widely thought that state ownership of natural resources, oil and natural gas in particular, causes countries to fall under the sway of the “resource curse.” In such cases, governments allegedly display “resource nationalism,” which destabilizes the economy, society, and politics. In this book, David R. Mares dispels these beliefs and develops a powerful new account of the relationship between state resource ownership and energy policy.

Mares examines variations in energy policy across a wide range of countries, underscoring the fact that in most of the world outside the United States, subsoil natural resources are owned by the state. He considers the history of Latin American oil and gas policies and provides an in-depth analysis of Venezuela from 1989 to 2016, before, during, and after the presidency of Hugo Chávez. Mares demonstrates that the key factors that influence energy policy are the inclusiveness of the political system, competitiveness within policy making, and the characteristics of individual leaders. Domestic politics, not state ownership, determines the effectiveness and efficiency of energy policies: the “resource curse” is avoidable. Drawing on these findings, Mares reconceptualizes resource nationalism. Government intervention into resource extraction is legitimate as long as the benefits are shared through the provision of public goods. Featuring a sophisticated grasp of both Latin American politics and energy policy, this book sheds new light on why some governments are responsible stewards of natural resources while others appropriate national wealth for partisan or private benefit.

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INTRODUCTION

Resource Nationalism and the Political Economy of Energy Policy

Energy markets vary in response to constant shifts in supply. These shifts are often stimulated by extreme swings in the oil and gas policies of governments. Academic and business literatures usually explain and try to predict the policy changes by

determining whether and to what extent a country displays the quality of ‘resource nationalism’ (RN). Perusal of the arguments using RN, however, reveals an opaque concept that is used to describe government policies that hinder (for good or ill, depending on the perspective of the user) the exploitation of natural resources by private companies, rather than an analytically sharp tool to provide an explanation for policy choices. The purported causal variable (‘resource nationalism’) thus becomes simply a descriptor.

But even as a description, ‘resource nationalism’ hinders understanding because it is ill-defined and encumbered with political baggage. We encounter claims that policy ‘x’ demonstrates that a government is becoming ‘more’ or ‘less’ resource nationalist; the implicit definition is that resource nationalism is state control over a natural resource whether through state monopoly or strict controls on the private sector. Yet state monopoly has been on the decline for the past two decades and there are few if any indications that governments are interested in returning to the days of state monopoly – even Hugo Chavez in Venezuela wanted partners. If RN is not state monopoly, however, how much ‘state control’ constitutes RN? It is not unusual to see any change in government policy that increases government intervention in any country described as RN. But it is difficult to see the analytic utility of lumping a U.S. increase in offshore royalties,ⁱ a Norwegian requirement for domestic content in the development of an oil field,ⁱⁱ a Brazilian constraint on which exploration and production (E&P) projects can be fully owned by foreign investors,ⁱⁱⁱ and an Argentine demand that foreign investors increase their investments^{iv} into a concept of resource nationalism.

A new political economy model for understanding choices in the energy sector

If the concept of resource nationalism is to be analytically useful it must be clearly defined and provide a basis, consistent with the characteristics of the definition, for understanding a wide variety of policies. The characteristic that best defines resource nationalism is, in fact, the ownership of subsoil and sub-marine layer resources: resource nationalism means that subsoil and sub-marine resources belong to the nation while they are in the ground/under water. Resource nationalism is thus a legal concept, not a mode of behavior nor does it require specific policies. This simple definition is far more analytically useful than definitions of resource nationalism that assume a certain behavior of the government of that resource-owning nation and therefore suffer from either ambiguity or tautology.

Consider a 'resource nationalism' definition based on the abstract and apolitical concept of the 'landlord state', which is a subset of 'rentier state'^v. According to this perspective, the government as landlord regulates access to the resource and appropriation of the value of the resource.^{vi} This formulation gives the landlord agency but not purpose. Without some assumptions about what the landlord wants from its ownership of the resource we cannot go beyond the mere fact that any access to the resource requires the acquiescence of the landlord and it will demand a fee (monetary or otherwise) for that access.

What the landlord desires in return for that acquiescence can vary across a wide range that spans enriching top office holders to saving it all for the benefit of future generations. Specifying landlord interest requires building a model about the landlord's preferences, whether that model remains at the level of an abstract state^{vii} or incorporates domestic politics (which can be influenced by international actors and state

bureaucracies).^{viii} A number of analysts use the fact of national ownership of subsoil resources and the concepts of “landlord” and “state” to justify or condemn government control over access to the resource or acquisition of some significant portion of the value of the resource. That behavior is thus alleged to constitute ‘resource nationalism’, with positive or negative connotations depending on how one judges the goals and behavior of the government. (see discussion below) Positive interpretations see appropriation for the ‘common good’^{ix} while negative see the appropriation as rent seeking to reward itself and its constituencies at the expense of the common good.^x

But if we define ‘resource nationalism’ in accord with some definition of how those resources are used we ground the concept in contested debates about those uses and the metrics for evaluating their implementation. Ultimately, we want to discuss use and metrics, but government behavior is determined by a number of factors, among which national ownership of the resource may not be the most important. Consequently, it is more analytically useful to separate the concept of ownership from that of policies and uses.

Defining RN simply as national ownership of subsoil and submarine resources puts the analysis of energy policy squarely in the court of politics. Because these resources belong to the nation, the nation has a legitimate call on some undefined share of the value of that resource. The value of the resource, however, is not inherent but determined by the market in which it is offered for exchange in the present with a discounted value for the future. The terms of that exchange will vary in line with the dynamics in that market. How much of a share of that value the owner of the subsoil resource receives will be determined by what that owner must do to bring the resources to

market and her plan for how to use the wealth appropriated. Whoever helps the subsoil owner achieve that market value will demand a share in the realized value. These bargaining dynamics are discussed in Chapter 1, but it is important to note here that mere ownership of the resource does not determine the conditions of a 'legitimate' bargain. Hence, resource nationalism as I have defined it is not the key driver in these bargains.

A new political economy model for understanding choices in the energy sector using the narrower definition of RN described above allows political goals to be included in the analysis and evaluated in their own right. A government that claims to represent the nation (as any democratic and many non-democratic governments do) only has a legitimate call on those resources and the revenue they generate if it utilizes them for the benefit of the nation (i.e., public goods, particularly related to development and to the alleviation of poverty) rather than as private goods (e.g., patronage or corruption)). Similarly, exploration and production of the resource in a manner consistent with resource nationalism would promote current production in a sustainable manner that maximizes the resource benefits to the nation across generations. These are normative parameters consistent with national ownership of a resource. RN can only be legitimated by recourse to some concept of responsibility, otherwise any 'landlord' can do what it wants with the resource.

There is an economic literature on the most efficient depletion path for non-renewable natural resources,^{xi} but this is not what I mean by sustainable development. The benefit to future generations of the nation of 'efficient' depletion is to invest the resource wealth in creating alternative means of generating wealth after the nonrenewable resource has been effectively depleted.^{xii} In short, the benefit of the nation is not

measured by the level of natural resource wealth appropriated by the government, but by how the government utilizes however much wealth is appropriated. Under conditions of resource nationalism, *appropriation of natural resource wealth is simply a means for attaining sustainable national development.*

Defined simply by legal ownership of the resource, , there is no distinction between ‘legitimate’ and ‘illegitimate’ resource nationalism. Resource nationalism gives governments, as representatives of the nation, the responsibility to insure that the nation profits directly from the exploitation of its resources, and not merely as a byproduct of the private wealth garnered by some of its citizens or foreigners operating in the country. That special responsibility deriving from the legal regime then interacts with geology, economics and politics to determine public policy toward the resource sector. Resource nationalism thus neither describes nor determines policy but is a foundational factor in the development of natural resource policy. Those policies themselves may be classified as ‘legitimate’ or ‘illegitimate’ depending on their fidelity to the government’s obligation to utilize resource wealth for the benefit of the nation.

Resource nationalism defined as national ownership of the resource is the dominant legal reality in the oil and gas world – only the US and some Canadian provinces give surface property owners the rights to subsoil resources. But even in the U.S. some subsoil and sub-marine resources are found in federal or state property and thus the responsibility of the government to ensure that the people benefit from resource extraction is present. Consequently, the definition of ‘resource nationalism’ offered here is globally relevant.

As one of several factors, resource nationalism's weight in determining policy varies across time and place. Geology, markets, politics and the legal regime for natural resources (RN) combine to determine *the varied level of government intrusiveness into the marketplace to capture some of the value generated by the monetization of the resource*. That value can be captured in the form of taxes imposed on profits of producers (who could be domestic or foreign private companies, companies owned by foreign governments, or its own State-Owned Enterprise [SOE]); dividends earned by the resource-holding nation's own SOE; and taxes and royalties on 'rents'^{xiii} or 'excess profits' generated by market volatility and the characteristics of specific natural resource deposits that influence the costs of producing the resource.

Governments may seek to capture more or less of that value than would be optimal from an economic perspective. That variation in policy preferences can be explained by focusing on the interaction among three political variables - the *Inclusiveness* of the political system, the *Competitiveness* of the policymaking body, and the *Leader's Characteristics* in terms of risk acceptance and policy innovation. These three political variables combine with geology and markets to produce national oil and gas policy.

Latin American Oil and Gas Policies

Latin America provides excellent case material for elucidating the reasons for development and change of energy policy across the spectrum of state-market relations. The region has experienced extreme policy swings over more than a century of oil and more recently natural gas production. Those wide swings have not settled down in the past few decades. Venezuela has the largest oil reserves and seventh largest gas reserves

in the world, and its oil and natural gas policies over the past two decades provide the empirical data to test the argument. Venezuela broke its national oil company's (NOC) oil monopoly in the upstream during the early 1990s, a few years later offered extremely favorable terms to private investors to entice them to invest in the high risk/high potential extra heavy oil deposits in the Orinoco Belt, then progressively altered the contracts and put the NOC back in control a decade later. Under Hugo Chavez' Bolivarian Revolution, Venezuelan policy changes generated a significant negative impact on the productive capacities of the NOC and the fields, but they stopped far short of eliminating private and foreign participation in the oil sector. In natural gas, in contrast, the reforms of the Bolivarian Revolution reversed prior law to permit 100% private and foreign ownership of projects.

Venezuela's is a dramatic experience, but its extreme policy swings and wildly fluctuating energy outcomes are far from unique in Latin America. In Argentina, Carlos Menem used his first presidency (1989-1994) to continue the deregulation of the Argentine natural gas sector begun by the military dictatorship in the late 1970s, and to privatize the NOC, Yacimientos Petrolíferos Fiscales (YPF). Foreign investment poured in, large reserves of natural gas were discovered, and the country became a major regional gas exporter to Bolivia, Chile, Brazil and Uruguay. By 2001 the economy had collapsed (GDP fell 12%), natural gas prices were fixed, and the country would cease gas exports the following year and thereafter become an importer of gas and LNG (liquefied natural gas). Presidents Nestor Kirchner (2003-2007) and Cristina Fernández de Kirchner (2007-2015) significantly re-regulated the energy sector and re-nationalized YPF in 2012.^{xiv} In Mexico, oil and gas reserves grew exponentially under government monopoly

in the late 1970s. The country decided to limit gas exports in expectation of a growing domestic market but developed into a major oil exporter in the 1990s. The domestic gas market outgrew Mexican supplies and in 1995 the government broke the national monopoly in the mid and downstream in an attempt to make the market more efficient. By the early 2000s Mexican oil reserves were falling quickly and the country now faces the prospect of depleting its reserves by 2028.^{xv} Mexico struggled through a marginal energy reform in 2008 whose chief goal was to maintain the national monopoly, and in 2013 passed a constitutional reform to end that monopoly as a means of increasing reserves and production.^{xvi} The current administration of Andrés Manuel López Obrador is making significant efforts to roll back the reform.^{xvii}

Outside of the largest producers, other Latin American countries also exhibited extreme swings. Bolivia sold 51% of its NOC, Yacimientos Petrolíferos Fiscales Bolivianos (YPFB), in the 1990s and de-regulated the natural gas sector, attracted foreign investment and became a major supplier of gas^{xviii} to Brazil and Argentina. After energy policy-related riots drove out two presidents (in 2003 and 2004) YPFB was re-nationalized in 2006 and the sector re-regulated; reserves fell and Bolivia has had trouble meeting its export commitments since, but supply at home has supported the development of a domestic gas market. Criticized by many for pursuing ‘neo-extractivism’ the Morales government began courting international oil companies (IOC) in search of new reserves.^{xix} Brazil’s bleak oil and gas outlook in the 1970s pushed the government into supporting costly ethanol innovations; by the 1990s the government broke the NOC monopoly, partially privatized the NOC, and in the next decade experienced major oil and gas discoveries in ultra deep waters (‘pre-salt’). The

government responded to the scale of the discoveries by first suspending auctions in the pre-salt areas under the Atlantic Ocean, then in 2010 legislating a controlling role for its NOC in the exploitation of newly discovered oil and gas fields in the pre-salt, but not in other hydrocarbon basins. In 2017, confronting corruption in its NOC Petrobras and a reticence of foreign investors, Brazil began to liberalize the pre-salt regime^{xx} and the country is now expected to have the largest growth in non-OPEC oil production outside of the U.S. Permian shale basin.^{xxi}

Current Explanations for Energy Policy

The social science and business literatures offer three prime candidates to explain the extreme variations in oil and gas policy and the performance of these domestic and regional energy markets: a resource curse (RC) resulting from the geological endowment of hydrocarbons; volatility in the global oil market; and political ideology of the government.

The ‘resource curse’ literature claims that increases in revenue lead governments to intervene in the resource value chain with a focus on maximizing short term appropriation of the wealth. This reliance on a source of wealth generated by foreigners who exploit the resource permits a government to distribute the largesse without becoming beholden to the domestic recipients. The resulting lack of powerful domestic interest groups independent of the government not only diminishes government accountability and increases rent-seeking, it undermines the growth of economic activities not directly tied to the natural resource and thus the economy underperforms as commodity prices fluctuate.^{xxii} This ‘rent-seeking’ behavior undermines the productive capacity in the resource sector, the absorptive capacity of the economy through the

associated “Dutch Disease”^{xxiii}, and the capacity of the state to administer the wealth in a manner that promotes political stability and sustainable national development.^{xxiv}

The RC argument explains the adoption of policies that lead to instability and economic crisis by dynamics that derive from the government being in some way financially dependent (variously defined) on natural resource derived revenues, in particular oil or gas revenues.^{xxv} Wiens argues that the RC can only be avoided by having strong and accountable institutions that control government before the country becomes dependent on resource wealth or by no longer being dependent on natural resource revenue.^{xxvi}

But, as the historical literature on Latin America’s oil policies demonstrates, even countries that produced little oil or gas or had few geological prospects for producing, adopted policies typically associated with the resource curse. This fact strengthens the institutionalists’ argument that it is not geology but institutions that drive behavior consistent with an alleged curse. Institutionalists argue that rather than a ‘curse’ the phenomenon is more a ‘trap’, conditional on the character of economic, social and political institutions. In this sense they disagree with Wiens and see the correct institutions as exogenous to the curse. Nevertheless, institutionalists disagree about which institutions matter how they matter^{xxvii} or even how to classify outcomes.^{xxviii}

The Resource Curse literature focuses on ‘oil rich’ countries (utilizing varying definitions) and the policies they adopt, and Venezuela does not fall into that category(?). Again, however, even countries that do not qualify as oil rich may adopt the same policies and experience similar positive and negative outcomes. We therefore have adoption of similar policies but without the alleged geological drivers, suggesting that

adoption of these policies is determined by factors other than geology. The relevant universe of cases for studying the implications of natural resource wealth could, therefore, be expanded to include almost a dozen Latin American countries and decades of experience with state interventions into the oil value chain.

Volatility in the global oil market is another common explanation for extreme policy variation and the performance of domestic and regional energy markets. Volatility in oil and gas markets with their long and expensive lead times for exploration and production (E&P) is exacerbated in oil and gas by governments' attempts to manipulate supply to boost prices or to deal with budget shortfalls. One can certainly see these patterns of boom and bust in the market but they are not determinant of how a nation's energy policy responds or even of how it uses its NOC. Some countries adjust well to the fluctuations, drawing on responsible indebtedness, moderate austerity and moderate counter-cyclical spending to weather the downturn (e.g., Colombia, Peru, and Brazil). Other countries avoid austerity through inflationary counter-cyclical spending and ever-increasing indebtedness, thereby creating a debt crisis and diminishing the resilience of the national economy and society to weather the downturn and take advantage of the resource market recovery when it comes.^{xxix}

Even in the midst of a terrible oil market policies can strengthen the sector and, conversely, at the height of a boom, policies can weaken the sector. Brazil's oil and gas policies in the 1990s provide an example of the former. Its NOC Petrobras developed into a technologically sophisticated and internationally capable company and reforms for conventional E&P were sustainable when the market recovered in 2003. In contrast,

during the tight oil and gas markets of 2003-2014 Argentine, Mexican and Bolivian policies could not attract the necessary investment to increase reserves.^{xxx}

More generally, it's certainly not the case that government intervention and the presence of a NOC inevitably produce erratic policies and terrible results. Norway's Equinor (formerly Statoil) is a premier company, despite its government's policies requiring foreign investors to utilize domestically produced supplies as well as domestic capital, technology, and skilled labor.^{xxxii} Petrobras' recent corruption scandals^{xxxii} are not likely to transform the company into an ineffective and marginal partner in the global search for oil and gas. Malaysia's Petronas effectively expanded its international partnerships as domestic reserves were depleted and improved its efficiency while generating additional sources of revenue to meet its national responsibilities.^{xxxiii} PDVSA used the context of a bust in the oil market to become a major oil company. California may have inefficient energy policies regarding oil and gas drilling and the location of LNG terminals because it prioritizes environmental and social issues,^{xxxiv} but these policies have been stable and, apart from the power shortage of 2000-2001^{xxxv}, the state's energy markets that fuel its powerhouse economy have not been crippled by these choices.

Other analysts have argued that the political ideology of the government, Leftist v. Rightist or Authoritarian v. Democratic, largely determines policy choice, with energy policy simply a subset.^{xxxvi} But there is a great deal of empirical and theoretical work to demonstrate that political institutions and processes produce significant divergence along a pro-market to statist continuum within Latin American left-wing governments' economic policies.^{xxxvii} For example, leftist governments did not make laws requiring

NOC majority control over oil projects retroactive in Brazil, but did in Venezuela; did require majority control over gas projects in Bolivia but not in Venezuela; did convert all E&P contracts into service contracts in Ecuador but not in Argentina, In addition, a rightist government in Mexico reaffirmed national monopoly in the oil sector, and a leftist government in Argentina reaffirmed open access to oil and gas. As our historical chapter will demonstrate, the alignment of ideology and energy policy choices diverges frequently.

An overview of the Latin American experience in general from roughly mid-19th century to 1990 allows us to see that there is a puzzle to be solved: what accounts for the wide variation in oil and gas policies both within countries and across the region, as well as within and across eras? The answer n in-depth study of four governments in Venezuela from 1989-2016 provides data for evaluating my political economy model. The variety of policy choices within and across those governments enables us to have confidence that the three political variables in my argument have a significant impact on oil and gas policies and that these policies have consequences for national development as well as for the international market.

Explaining these policy variations requires that we look beyond the misleading rhetoric of ‘resource nationalism v. markets’ or Left v. Right and refrain from positing an inherent relationship (positive or negative) between resource nationalism and energy security or resource nationalism and national development. The puzzle is not only of intellectual and scholarly interest. Governments across the globe, multinational energy companies and citizens everywhere are confronting challenges in energy markets today that are conceptualized as a struggle among the resource nationalism of important

exporting countries and the energy security concerns of consumers in both importing and exporting countries, the profit demands of private firms. A better understanding of the dynamics of energy policy can promote broad based national development and contribute to a more positive and sustainable relationship among consuming and producing nations.

In this book I seek to explain 1) the determinants of national oil and gas policies, as well as 2) whether the policies adopted are consistent with the expected contribution of the oil and gas sector to national development strategies as required under the responsibilities of resource nationalism. My perspective is based on the observation that natural resource endowment and international constraints are significantly under-determining of national energy policy. In addition, I assume that the domestic institutional context constrains choices except in revolutionary times, which are defined as the rebellion of significant parts of society against those institutions. Post-revolutionary societies, in consequence, are constrained by the new institutions they installed.^{xxxviii} Thus, we should understand institutional constraints in terms of the willingness of social groups to abide by them, rather than as exogenous variables themselves. I argue, consequently, that three key political variables are fundamental in understanding oil and gas policy: the *Inclusiveness* of the Political System, the *Competitiveness* of the Policymaking Body, and the *Innovative and Risk-Averse Characteristics of Individual Leaders*. Whether the oil and gas policies contribute to national development strategies is determined by whether those policies produce sustained development of the energy sector and that national policies utilize the sector's wealth for public goods.

Research Design

The study is informed by social science and business literatures because answering questions about causation requires a good understanding of the empirical phenomenon being studied, in our case, the oil and gas industry. I first define terms broadly utilized but differently understood to provide a coherent tool chest for rigorous analysis. I also highlight relevant characteristics of the oil and natural gas value chains and note the public policy challenges for an energy policy. An historical overview of the region from 1862 to the 2000s demonstrates the puzzle: a wide variation in oil and gas policy choices that do not correlate well with the three common factors purportedly driving policy, that is geology, markets and ideology. Drawing on literature regarding government provision of public goods I then develop my hypothesis that oil and natural gas policy may best be understood as resulting from the variables of *Inclusiveness* of the political system, *Competitiveness* of the deliberative body, and *Leadership Characteristics*.

The political economy model of energy policymaking is evaluated through a theoretically driven, structured and focused comparison of Venezuelan oil and gas policies across four Venezuelan administrations from 1989-2016. These presidential administrations encompass two political systems, the Punto Fijo (1958-1999) and the Bolivarian Revolution (1999-present). I begin in 1989 when oil prices were still low following their collapse in the early 1980s and proceed through their historic peaks in 2008 and continue through 2016 when oil prices had fallen significantly once again. Each case examines how the three political variables as well as the geology and economics variables played out over time, including their interactions, and the variations in oil and gas policy are tracked against the hypotheses generated from the model. The model

generates surprising hypotheses about common and contrasting policies among the four administrations that dispute many contemporary analyses of Venezuela since the election of Hugo Chávez in 1998.

Primary source materials include memoirs of relevant actors, company documents, and government documents. Secondary sources include biographies, published interviews with major industry and government leaders, literature from history, economics, sociology, political science, business, and think tank working papers. Research was carried out in Argentina, Bolivia, Brazil, Mexico and Venezuela, as well as in Washington DC, Beijing, China and Oxford, England.

Chapter One

The Parameters of Nationalism and Energy Policy

National energy policy regarding oil and natural gas determines two fundamental issues: the role of the market and the distribution of the revenue that is generated from the exploitation of these natural resources. Other topics associated with energy policy such as social justice, development, environment, and even climate change have at their core either or both of these issues. Discussing these other important matters inevitably throws us back into questions concerning how much of a role the market should play and the criteria for distributing natural resource wealth.

Resource Nationalism

Controversy over the distribution of the wealth^{xxxix} generated by oil and gas develops from the nature of property rights in the sector. In most of the world (only the U.S. and three Canadian provinces^{xl} differ) subsoil resources belong to the nation. The government, given its role (elected or not) as the leader of the nation, thus has special responsibilities to ensure that the nation profits directly from the exploitation of its resources, and not merely as a byproduct of the private wealth garnered by some of its citizens or foreigners operating in the sector. Portions of the wealth generated in the sector can be captured in the form of taxes and royalties imposed on third party producers; dividends earned by the resource-holding nation's own NOC; and special taxes on 'rents' (aka, excess profits) generated by market volatility and the characteristics of specific oil and gas fields. Given the high costs and high risks inherent in exploiting oil and gas, the owner of the resource may want to use some of those potential rents to exploit the resource; that may mean selling those property rights to or sharing some proportion of the rents with those who can more effectively exploit the resource.

In the U.S. and some areas of Canada, the owners of the surface also own subsoil resources and they may sell, lease to others or exploit the resources themselves, singly or in partnership. Thus, the wealth created by the exploitation of those privately owned resources is distributed through contracts among private actors, as well as through government tax policy. Even in these two countries, however, federal and state governments own properties with oil and gas resources (particularly in offshore waters) and here they seek to use their legitimate authority to benefit the nation regarding the distribution of the wealth generated by the exploitation of these subsoil and submarine resources.

Whether property rights lie with the nation or surface owners, governments can give market forces a greater or lesser role in determining the supply of hydrocarbons as well as the demand for them. There is no one-to-one relationship between ownership characteristic and the role of the market. Even the US federal government can seek to limit the role of the market in the oil and gas sectors for domestic purposes, as it did by forbidding the export of oil between 1973 and 2016,^{xli} or regulating natural gas pipeline services from 1938 to 1992 and the wellhead price (i.e., price at which gas was sold to the market) of natural gas from 1954 to 1993;^{xlii} the Department of Energy must approve liquefied natural gas (LNG) exports, and it has only recently begun to look favorably on them.^{xliii} At the opposite end of the spectrum, nations where the state owns the subsoil resources at the federal and provincial levels can let the market determine supply and demand as Argentina did during most of the 1990s and the United Kingdom does today.

The pattern for distributing the wealth generated in the sector and the role of the market are public policy choices. It is common among analysts, industry specialists, and journalists to categorize these choices in terms of their alleged ‘resource nationalism’, leading to claims that specific nations are ‘more’ or ‘less’ resource nationalist or going through bouts of ‘resource nationalism’. The concept of resource nationalism, however, is inconsistently and poorly defined.^{xliv}

In this book, I argue that Resource Nationalism (RN) is most usefully defined as a perspective about public policy regarding natural resources that is based on four interrelated claims: 1) the natural resources in the ground or under the sea are a ‘national patrimony’; 2) the proper usage of national resources is for the generation of public goods; 3) the government determines how the wealth generated from natural resources is

used; and 4) sometimes the government uses the wealth for the generation of public goods and sometimes it does not. *RN thus provides legitimacy for government to intervene in the market, but RN does not render any action taken by the government in its name appropriate. Only when public goods are produced can we usefully argue that a government is acting in accordance with the principles of 'resource nationalism'.*

Otherwise, and despite a government's rhetorical claims, a government is appropriating national wealth for private gain and thus not in accordance with 'resource nationalism'.

Despite the term 'nationalism', RN is not about whether foreign or domestic companies exploit the resource since what matters is the use of the wealth for sustained national development. Foreign companies that pay high royalties to the national authorities who then use that revenue for the provision of public goods adhere to resource nationalism more than domestic companies that pay excessive wages, purchase domestically produced high cost and low quality inputs and pay high taxes and royalties that are distributed by the government in patronage and corruption.

In my conceptualization, resource nationalism either exists or does not; policies adopted in its name are what vary across time and place. I seek to explain the way resource nationalism is manifested in oil and gas policy. That manifestation is produced through the domestic political process; it is not inherent in the characteristics of RN. *Note that appropriation of the wealth in the sector by a government simply on the basis of being in control of the nation is NOT an expression of resource nationalism.* Such an assertion lacks the legitimizing claim that the resource belongs to the nation and that its proceeds must benefit the nation.^{xlv} I will also demonstrate that the particular

manifestation, and not resource nationalism itself, is what accounts for successful or failed national development.

My reconceptualization of resource nationalism differs significantly from that of other analysts. Resource nationalism is often used as a rhetorical device to condemn or praise depending on the user's ideology or as a purported explanatory variable with ambiguous content. The phrase can be used without definition, apparently assuming that the reader knows,^{xlvi} or as Pryke notes, "with descriptive value, but little analytic purchase."^{xlvii} For example, many analysts define resource nationalism as simply 'government control' over the upstream (exploration and production) phases of the sector^{xlviii} or efforts to limit private enterprise and assert more government control in the sector^{xlix} or "resource policies ... designed to direct economic activity in the mining and energy sectors ... towards politically defined national goals."^l Stevens recognizes that there are many competing definitions of RN and offers one in line with his focus on the NOC-IOC relationship: RN consists of limiting operations of IOCs and seeking greater national control over resource development. He also claims that RN has 'self-feeding cycles and that Canada and Australia are "often" used as examples of RN.^{li}

Other scholars believe it is necessary to bring in some sense of national benefit: "the desire of the people of resource-rich countries to derive more economic benefit from their natural resources and the resolution of their governments to concomitantly exercise greater control of the country's natural resource sectors"^{lii} or "the idea that natural resource wealth should be used for the benefit of the nation"^{liii}. Interestingly, Cawood and Oshogoya see no need to include government in a definition that focuses on national benefit, arguing that what all definitions have in common is "a sovereign claim on

resource assets by citizens of a mineral rich country, in which this claim must deliver maximum benefits to them.”^{liv}

With such broad definitions, however, even the U.S. government could be categorized as a resource nationalist state since, in addition to what I already mentioned above, it regulates private companies’ exploitation of natural resources via environmental regulations, and in 2005 effectively killed an effort by China National Offshore Oil Company (CNOOC) to acquire Union Oil Company (UNOCAL).^{lv} Actually, Bremmer and Johnston do reference ‘emerging’ resource nationalism in the U.S.^{lvi}

Resource nationalism may also be defined with assumptions about providing public goods, (e.g., “government actions to extract the maximum developmental impact and value from a country’s natural resources for its people”^{lvii}). Alternatively, a definition of resource nationalism can bring in all the elements found in the literature: “*the maximization of public revenues; the assertion of strategic state control (ability to set political or strategic direction to the development of the sector); and enhancement of developmental spillovers from extractive activity*”.^{lviii} But these efforts to combine policies and goals in which authors believe, lapse more into description or prescription than contribute to systematic analysis.

In the conclusion to their edited volume, Haslam and Heidrich propose classifications of limited-moderate-radical RN and provide metrics for evaluating the three levels.^{lix} But the argument does not hold together because they do not provide a systematic argument about the relative weights of the various components listed under each criterion nor an argument about the interactions among these criteria. Mexico is classified as ‘limited RN’ despite the fact that its 2013 reform reaffirmed state ownership

of subsoil resources and only moves the country marginally away from the monopoly over the entire oil value chain that it maintained from 1958-2013. Pemex, the NOC, was given E&P rights to 85% of Mexico's known reserves, with the government entitled to provide it with more.^{lx} Although private investment was now permitted, no concession contracts were allowed and the legal framework of the reform gives the president the ability to overturn many of its components at will.^{lxi} The government's policy towards the sector discussed using oil as the basis of national development and continued its short-term revenue maximization for the public budget, thus starving the NOC of capital to perform its state-assigned functions; Pemex is the most indebted NOC in the world because of its subordination to Mexican governments.^{lxii} Haslam and Heidrich classify the Morales government in Bolivia as Radical RN, and though the government certainly was radical, it nonetheless negotiated a deal with foreign investors for access to the country's lithium reserves that provoked demonstrations against the low royalties and lack of domestic content, forcing the Morales government to rescind the deal.^{lxiii} In 2016 the government also began adjusting contracts and tax incentives to attract more foreign direct investment (FDI) into the declining gas sector.^{lxiv} One might wonder why this behavior does not fall into the 'limited resource nationalism' category rather than the radical one. Venezuela's Bolivarian Revolution constitutes a radical government, but its hydrocarbon policy is radical only in oil since the Chávez Natural Gas Law, though claiming ownership of the resource, permits up to 100% private ownership of natural gas activities throughout the value chain, including the upstream.^{lxv} Nevertheless, granting Chevron the right to international arbitration to woo it into a joint venture with PDVSA violates the usual view of sovereignty within radical critiques of FDI.^{lxvi} In addition, the

left critique of ‘neo-extractivism’^{lxvii} and permitting any production sharing with private capital^{lxviii} means that from that perspective the Bolivarian Revolution was left, but *not* radical. Consequently, there is no clarity on what constitutes limited, moderate or radical RN.

Bremmer and Johnston^{lxix} define RN as efforts to shift control of the energy sector to the government and its NOC. But ‘control’ is not well defined, since it includes any fiscal measures imposed by government. The definition led them to claim in 2009 that RN was ‘rampant’ in Canada and Britain and ‘emerging’ in the U.S. and Australia. The authors also claimed that there were ‘at least’ four variants of RN (revolutionary, legacy, economic and soft) with no systematic effort to distinguish them using common metrics nor to indicate where one might find ‘other’ variants.

Definitions emphasizing the national benefit of these alleged resource nationalism policies encounter problems since ‘maximum appropriation’ of value from the sector or maximum developmental impact is usually measured by short term goals without analysis of the medium or long term outcome. The determination of a ‘strategic sector’ is also simply left to government fiat; even within nationally-owned hydrocarbons, natural gas and petroleum are often treated differently by the same government.

If efforts to promote national development are integral to the concept, governments that exert influence in the sector in the name of the citizenry but provide private goods (e.g., rewards for political partisans or domestic content regulations that benefit a few businesses and their unionized labor force at the expense of higher oil costs to the economy) should reasonably be excluded from the category of ‘resource nationalism’.

But analysts working within the ‘national benefit’ perspective never undertake such an analysis. Ex post, many of these same cases of governments ostensibly promoting national development feed the ‘resource curse’ literature about natural resource revenue and underdevelopment when their negative implications come to fruition and the country collapses into economic and political crisis. Since policies labeled ‘resource nationalism’ sometimes promote and often undermine national development^{lxx} we should *take the outcome of resource nationalism as variable rather than making it an integral part of the definition.*

All of this ambiguity naturally leads to a conclusion that there are ‘many resource nationalisms’ and a proliferation of adjectives to describe them. In addition to the four offered by Bremmer and Johnston and the three by Haslam and Heidrich discussed above, we have ‘hybrid RN’^{lxxi}; ‘sub-national resource nationalism’^{lxxii}; ‘people-based resource nationalism’^{lxxiii} and undoubtedly many others. All of these seem to be attempts to tailor definitions of who is a resource nationalist to particular situations but at the cost of analytical clarity for the concept.

In short, resource nationalism is usually defined tautologically – a policy outcome (e.g., an increase in royalties), or declared intent (e.g., to benefit the nation) is used to label a government ‘resource nationalist’. Weak definition, however, muddles analysis of how resource nationalism affects energy policy. It is incumbent upon analysts who seek to use the concept to provide conceptual clarity if it is to be analytically, rather than simply rhetorically or politically, useful. My definition of resource nationalism provides a clear and coherent foundation for embarking on a systematic analysis of energy policy and understanding what role, if any, ownership of natural resources plays in that policy.

The manifestation of resource nationalism can be most fruitfully classified in terms of intervention into the oil and gas value chain discussed in the next section. That intervention can be direct, such as when a NOC explores and produces oil, or indirect via regulation. Those regulations can be for inputs into production (capital, labor, equipment), valuation of the projects and companies involved in production, or intended to have a direct impact on demand (e.g., via price controls).

The rationale that national ownership of the resource implies and requires national benefit has a legitimizing foundation in property rights and national purpose. For example, *Norway Petroleum*, the information site run in cooperation by the Ministry of Petroleum and Energy and the Norwegian Petroleum Directorate, states that “... revenues must accrue to the Norwegian state and thus benefit society as a whole. *Since these resources belong to society as a whole*, the Norwegian state secures a large share of the value creation through taxation and the system known as the State’s Direct Financial Interest (SDFI) in the petroleum industry.”^{lxxiv}

Resource nationalism thus cannot be simply a means by which government leaders might enrich themselves and their cronies by selling the resource. Again, what distinguishes government appropriation of some portion of the natural resource wealth as ‘resource nationalism’ rather than simply predatory rent-seeking behavior^{lxxv} is their grounding in the legal fact of national ownership and the responsibility of governments to use those national resources for the benefit of the nation.

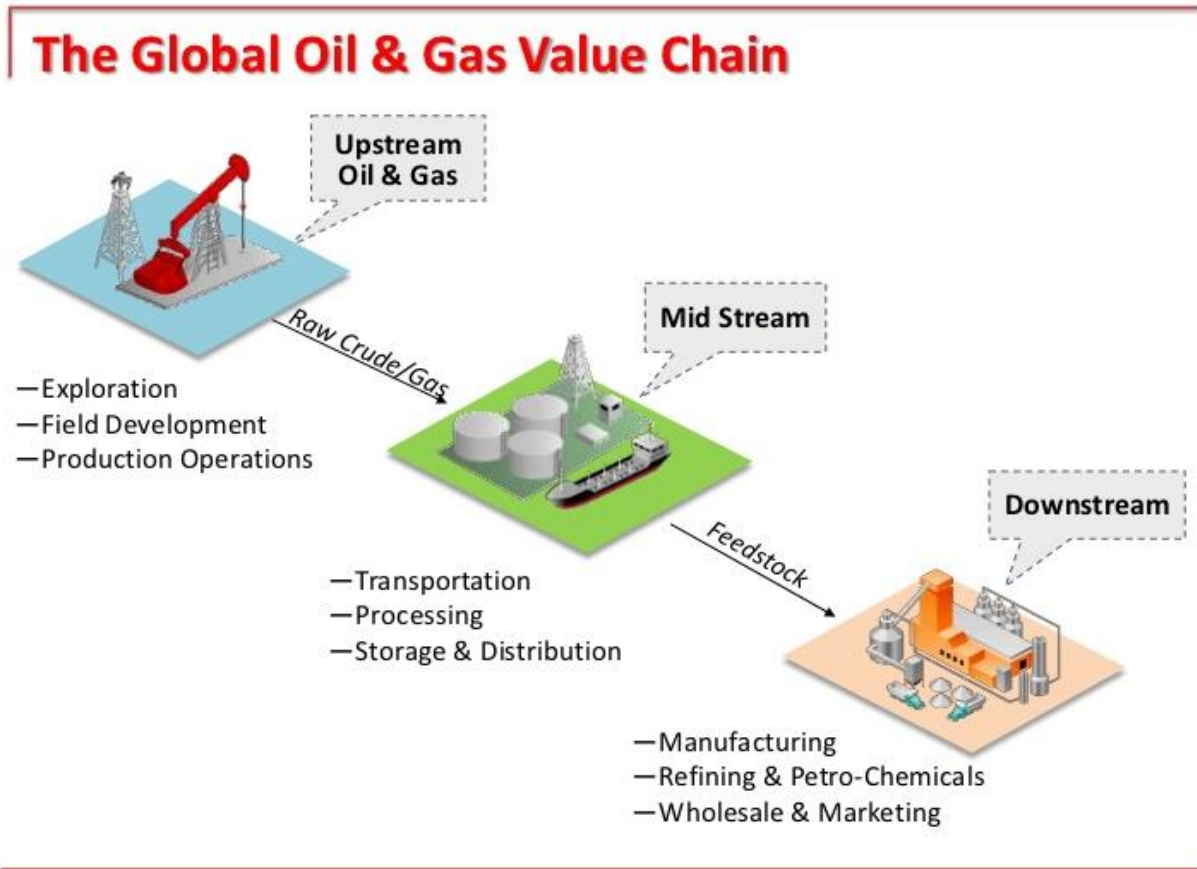
This purpose is pursued through government setting the terms for exploration, production, transportation and distribution of those resources. If the government fails to deliver on its task, its failure calls into question the government’s commitments and

skills, not the nation's property rights or the government's responsibilities with respect to those property rights. Thus, development success or failure is not attributable to a resource nationalism perspective but rather to the manner in which that perspective has been translated into public policy and the conditions under which it has been implemented.

Resource Nationalism, The Oil and Gas Value Chain and Policy Variations

Variations in energy policy do not signal a departure from 'resource nationalism' since the nation remains the owner of the resource. But variations in policy are fundamental determinants of whether government policy is utilizing the national resource for the benefit of the nation, irrespective of the geological situation of the country, the state of the international market or the historical legacies of a particular country. In order to think analytically about those policy variations, we need to begin with the oil and gas value chain – i.e., an understanding of how all the components of the industry come together from initial exploration to final consumption. Figure 1.1 illustrates the three components of that value chain: the upstream (exploration, field development and production), midstream (transportation, processing for gas, as well as storage and distribution for both) and the downstream (refining for crude oil and petrochemicals, wholesale and retail marketing for oil and gas).

Figure
1.1



3

Source: Theo Acheampong, “The Global Oil & Gas Industry: Prospects & Challenges in the Next Decade” accessed August 20, 2017
<https://www.slideshare.net/theoacheampong/theo-acheampong-presentation>

Different parts of the value chain can prosper temporarily even if public policy negatively impacts other parts. The government’s promotion of national wealth and national development built upon the nation’s ownership of these subsoil resources, however, will depend on the government’s ability to stimulate sustainable development of the oil and gas sector across the entire value chain. In addition, public policy must

appropriate a level of wealth consistent with sustainable development of the sector and utilize the proceeds for public goods.

There is a continuum along which we can array the various means by which the government may take responsibility for creating value in the oil and gas sector in order to provide public goods for the nation. The range extends from Total Responsibility to Minimal (but not Total Abdication), and in between we find various types of contractual arrangements between governments and private investors in the areas of production, transportation (pipelines and even tanker trucks), distribution, and secondary production (gasoline and other petroleum derivatives, petrochemicals, and power generation) and retail. Total Responsibility, means a state monopoly on the development of the sector and appropriation of the wealth for public goods ; Minimal Responsibility reflects a decision to limit ‘government take’ to the level of general corporate taxes outside the sector and merge those taxes into the general government budget that provides public (as well as private) goods. Total Abdication of responsibility would mean either no appropriation of any wealth from nationally-owned resources or total allocation of such revenues to private goods; the logic of resource nationalism does not recognize the legitimacy of either of these measures, so Total Abdication falls outside the range of resource nationalism. Note that, by definition, government policy dealing with private ownership of the resources is not relevant to the discussion of resource nationalism.

Table 1.1 uses the oil and gas value chain to summarize the range of variation in energy policy under conditions of resource nationalism (i.e., national ownership of subsoil and sub-marine resources). We can usefully group those concerns into the *scope* of state control (i.e., across the value chain) and the *terms* under which state and market

interact. This classification permits us to distinguish among those who agree that the resource belongs to the nation but differ on whether the nation benefits most when market signals or state direction guides oil and gas policy. We can usefully label the former ‘pro-market resource nationalists’ and the latter ‘statist resource nationalists’.

Table 1.1
Energy Policy Options under Resource Nationalism

Scope

		Upstream	Midstream	Downstream	
	Monopoly				
<u>Terms</u>	Direct State Control				
	Tax and Regulation				

Norway provides a good illustration of my argument about how energy policy under conditions of resource nationalism can be less rather than more intrusive in the sector but provide the basis for sustainable national development. The country is a ‘resource nationalist’ country because its oil and gas deposits are owned by the nation. It has a national oil company, has used its oil and gas wealth to develop the nation despite the hydrocarbons booms and busts of the past half century, and used part of its oil wealth to develop the world’s largest sovereign wealth fund, which itself has diversified away from hydrocarbon holdings.^{lxxvi}

Using Table 1.1 we can classify Norway in the upstream as choosing the option of tax and regulation, rather than a monopoly for a state entity or direct control over private actors. Norway's taxation policies focus on the companies rather than the oil and gas fields they operate because the government believes that the nation's resource wealth can only be sustainably realized if it is profitable for a company to produce. Total government revenue from the nation's oil and gas resources consists of (in order of importance since roughly 2003) taxes; the State's Direct Financial Interest (SDFI, a return on the state holdings in a number of oil and gas fields, pipelines and onshore facilities); dividends from the NOC, Equinor (previously named Statoil); environmental taxes; and royalty and area fees.^{lxxvii} "In 2017 the ordinary company tax rate is 24 %, and the special tax rate (aka 'resource rent tax'^{lxxviii}) is 54 %. This gives a marginal tax rate of 78 %. In 2016 the rates were 25 % and 53 % [and the government is concerned] to prevent the high tax rate from reducing the willingness of companies to invest on the Norwegian shelf."^{lxxix} Companies can carry forward losses on exploration or be reimbursed for them in the specific year in which they occur.^{lxxx} From this description we can see that the Norwegian government has designed its policy to take a direct and significant return on the nation's resources but in partnership with private partners whose need to earn competitive profits is taken into account.

Norway did not develop its industry with a focus on what private partners needed, but with a focus on how the country could maximize its participation in the energy bonanza. The country had domestic content requirements for sourcing and employment under its first two petroleum laws passed in 1972 and 1985. Section 54 of the 1972 Royal Decree mandated that foreign companies give priority to Norwegian suppliers who were

cost and quality competitive and made foreign companies responsible for ensuring that their foreign subcontractors complied with these terms as well. Technology transfer was pursued by requiring that at least 50% of research and development related to Norwegian fields was carried out in Norway with domestic partners. Companies were also required to train Norwegian workers and civil servants in their relevant areas of expertise.^{lxxxix}

These domestic requirement regulations had been very successful. At the beginning of Norway's oil and gas boom in 1969 none of the goods and services in the industry were supplied by Norwegian companies, but by the 1980s 60% of these products were sourced locally, with small and medium enterprises benefitting, and geographic dispersion of growth poles.^{lxxxix} The long-term partnership between BP (British Petroleum) and Statoil helped the NOC learn to develop proprietary technology that it uses in its operations.^{lxxxix} The domestic requirements only began to ease when Norway joined the European Economic Area in 1994,^{lxxxiv} the World Trade Organization in 1995^{lxxxv} and the Petroleum Act of 1996 finalized the transition.^{lxxxvi} Norwegian public and private companies are currently quite active in the export of oil and gas machinery and services and in the exploitation of oil and gas resources overseas.^{lxxxvii}

Key Concepts for the Study of the Oil and Gas Industry

Analyzing energy policy requires understanding a number of key terms and their implications: ownership of the resource, resource endowment, investment, rents, and the role of the market.

Ownership of the Resource.

By historical tradition and political constitutions, all Latin American countries own the subsoil resources in their political jurisdiction (this includes offshore oil and

gas). Although in the early to mid-20th century governments often transferred ownership of reserves to companies through oil concessions, the practice has been virtually eliminated in the region. Today ownership of these resources cannot be bartered or sold; depending upon national laws, different legal structures (e.g., joint ventures, service contracts, etc.) might be permissible means through which parties other than the owner (the national or provincial government acting in the name of the country or province) may have access to the subsoil resources.^{lxxxviii} All countries in the world have similar ownership claims, except as noted previously, the U.S. and certain Canadian provinces. *Commercial viability, not the mere existence of a resource, is what generates wealth.*

There are rhetorical claims that the commodity itself has an intrinsic monetary value, not one determined by the market, and that this value belongs to the nation.^{lxxxix} But although in the early days of the oil industry petroleum may have seeped from the ground or been found in easily tapped shallow reservoirs, the easy and high-quality oil has been depleted. Oil (and gas) is harder to find, of poorer quality, and harder to develop from difficult and costly reservoirs. The monetary value of that oil and gas, therefore, is dependent upon its commercial viability.

Resource endowment and production are dependent on Investment.

Reserves are divided into three categories: Proved, Probable and Potential.^{xc} Proved reserves (aka P1) are exploitable under current market conditions using current technologies; wildcat wells (drilling in areas where no oil or gas has been produced) are necessary to certify exploitation conditions. An oil reservoir does not yield up all the oil in it due to geological conditions and technical limitations, so the recovery factor of a given field is a ratio of exploitable oil to total oil. Probable reserves (aka P2) are from

known reserves that are not yet commercially viable but have at least a 50 percent chance of becoming so. Potential or Possible reserves (aka P3) are from known reservoirs with less than a 50 but at least a 10 percent probability of becoming commercially viable. Governments and markets are also interested in a country's reserves-to-production ratio (R/P), which suggests how long the reserves would last if the country continued to produce at the same rate.^{xci}

From this description one should note that a country's resource endowment as well as its production depends upon investment, which can be quite substantial (e.g., Mexico calculated that it would cost US\$38 billion dollars to fully develop its Chicontepec oil field^{xcii} and the cost of just one well drilled in Brazil's pre-salt reservoirs can exceed US\$200 million.^{xciii}). Investment could come from either public or private entities. Innovation and human skills are also key components in exploration and production, especially in technologically challenging situations (e.g., extra heavy oil in Venezuela in the 1990s, pre-salt reserves in Brazil as well as shale oil and gas in Argentina today).

Investment Capital may be scarce and always has opportunity costs.

Capital availability and price depend on the state of the international energy and financial markets, national budgetary priorities and to a lesser degree on the priorities of the international development banks. The challenge of raising capital affects both IOCs and NOCs. Opportunity costs mean that projects are always competing with other uses for this capital, including buying back one's own stock or subsidizing domestic gasoline. For example, even as oil prices escalated to record highs from 2006-2008 (thus signaling the need to find additional energy sources), Exxon Mobil purchased its own stock to the

tune of \$32.6 billion in 2006 and \$31.8 billion in 2007.^{xciv} Opportunity costs affect governments as well. NOCs often find their E&P budgets slashed in favor of subsidizing domestic energy consumption, social programs or patronage. Energy subsidies cost the Argentine government US\$10 billion in 2011,^{xcv} even as private companies' investments in gas exploration dwindled because the subsidies were not sufficient to offset the low domestic price.

Natural resource rents are theoretical constructs, best defined as “super” profits and which can only be realized by getting the resources to market. Market conditions determine the level of rents at any particular time, but distribution of rents falls in the political arena.

Rents are calculated as “the payment to a factor of production over and above the sum necessary to induce it to do its work”^{xcvi} – i.e., earnings above the costs of production plus a competitive rate of return to capital. Prices are determined in a global market for oil and regionally or bilaterally for gas, but production costs per barrel of oil (including the cost of capital) vary widely by field and country; in Latin America they range from \$1-\$15 a barrel for oil.^{xcvii} In these circumstances, the size of rents varies by field and can be quite high. But when the market is weak, no rents are produced – e.g., when oil prices fell to ~\$10/barrel in the 1990s or in 2020.

Since rents are earnings beyond some determination of normal profit and ownership of the resource lies with the nation, the question of the distribution of those rents between the owner and the producer arises. Since the rent theoretically belongs to the owner of the resource, some analysts, politicians and citizens argue that the nation should appropriate the entire rent. But if the government needs a partner to bring the

resource to market, that partner will bargain for access to a portion of the rents. Thus, in practice, realized rents never belong 100% to the nation unless the government has a monopoly in the sector.

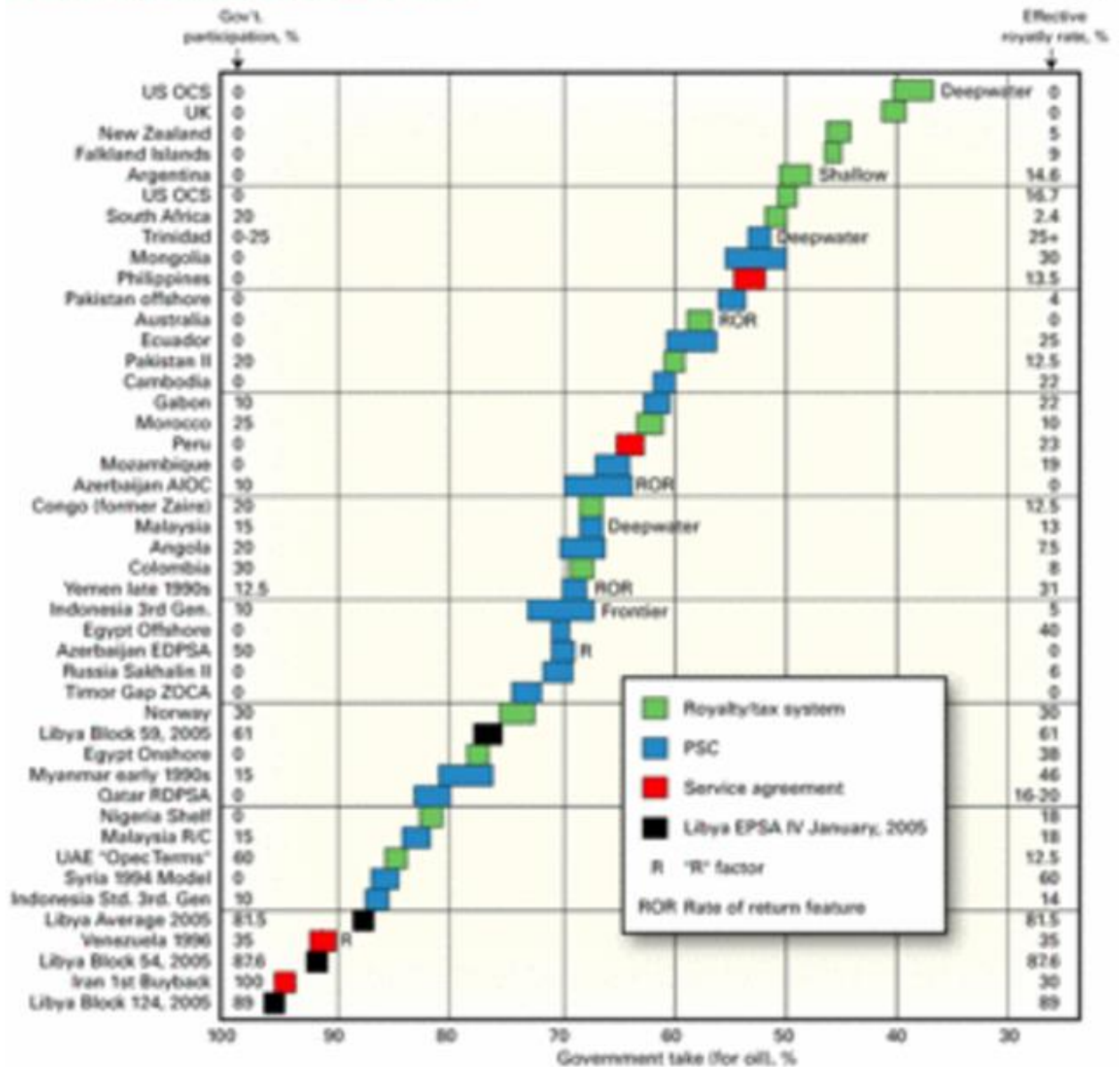
The distribution of rents is particularly conflicted when contracts have not been designed to deal with price volatility.^{xcviii} Rents are appropriated by the owner of the asset largely in five ways: fees, royalties, taxes, production sharing and risk sharing; the combination comprises what is referred to as “government take”.^{xcix} (Other means of appropriating rents include dividends paid by NOCs, increasing a company’s cost of business through redundant employment policies, domestic content requirements, responsibilities for social programs, bonuses, etc.) Utilizing the tax structure to capture rents is inefficient because of the information asymmetries concerning deductible expenses between the company and the government; the tax structure can also provide perverse incentives that lead a company to produce from higher cost fields. While some analysts believe that the royalty is the key mechanism by which the owner of the resource can capture rents,^c since 2007 Norway has given up the royalty in favor of a special tax. Figure 1.2 illustrates the wide variation in government take across producing countries.

Figure 1.2

Government Take, 2005

LIBYAN EPSA IV TERMS IN THE GLOBAL MARKET

Fig. 4



Source: Daniel Johnston, "Impressive Libya licensing round contained tough terms, no surprises" *Oil and Gas Journal* April 18, 2005

Royalties, nevertheless, create their own problems when prices fluctuate significantly, as has been the case for oil since 1973. Consider the following simplified example, based on a 50 percent royalty. A price of \$50/barrel with production costs of \$15/barrel produces \$25 for the government and \$10 for the firm. When the price doubles

to \$100 the government gets \$50 and the firm gets \$35, meaning that the company has increased its profit by 250 percent while the government has seen a substantially lower increase at 100 percent.^{ci} This disproportionate distribution of the additional rents produced by an increase in the market price will usually generate political demands from some sectors of society for the government to reconsider the contract, but not all governments will be amenable or vulnerable to those pressures.

How much rent a nation receives depends on many factors. The Obsolescing Bargain Model (OBM) developed by Vernon^{cii} and elaborated or modified by many others, tells us something about the process of negotiation between government and investor. It accurately describes the advantages investors with capital, technology, marketing and operational skills have when a nation initially seeks development of its natural resources. OBM also provides a framework for understanding the potential modifications that can occur over time as those initial investor advantages dissipate and the nation's ownership advantage becomes more relevant, especially when prices rise.^{ciii} The model's extension outside of natural resources into the Product Life Cycle in manufacturing provided a basis for understanding cycles in oil bargains as the global market demanded more supply either to offset OPEC restrictions or to meet increasing demand. Thus 'heavy' oil (higher sulfur content requiring special refining technology and equipment to meet increasing pollution restrictions), 'deep' water production, tar sands, extra-heavy oil and now shale oil and gas production all shifted the advantage back to investors and the bargaining began anew. As evidenced by the extreme efforts of Saudi Arabia in the last few years to flood the market and depress prices to bankrupt US shale

production^{civ} or Mommer's assertion in 2002 that there "cannot be any doubt that the country [US] is running out of oil"^{cv} many of these innovations are unforeseeable.

But OBM neither provides an explanation of why some governments might prefer no deal if they cannot get their minimum terms, or why some pursue modification of the initial bargain and some do not, nor how much modification will be pursued. Answering those questions requires developing a model of the domestic drivers of policy.

Ramamurti focuses on the role investor confidence plays in a government's development strategy and provides a long list of domestic and foreign interests that lead governments to adopt different development strategies. He makes an important point that bilateral bargaining between government and investor occurs in a context structured at the international level by negotiations involving states, international government organizations and international financial institutions. But he leaves the domestic politics side of the resource nation out of his bargaining model.^{cvi} Vivoda notes that the OBM does not just depend on prices but must incorporate the goals, resources and constraints on both parties.^{cvii} Nevertheless, his 2009 and 2016 analyses are dominated by prices because he offers no argument about the determinants of goals, resources and constraints and how they come together to affect the bargain. He did offer the beginnings of a model in 2011^{cviii} with a long list of actors and relationships that might potentially influence the decision to initiate rebargaining, the relative power of the dyadic actors and the outcomes. At the conclusion of this process, however, Vivoda can only call for the accumulation of rich empirical cases that might reveal sufficient data to inductively stipulate the key relationships and players. Rosales^{cix} argues that state capacity is the key and that some governments may face ideational and 'structural' constraints on state

capacity to enact policies which could shift the bargain in the government's favor. His argument is rich in detail about the Correa government in Ecuador, but none of the propositions are developed in a manner that would facilitate examining them across the wide array of governments that have centralizing and authoritarian characteristics and underdeveloped state capacity.

This perusal of a wide literature adding factors to the basic OBM model is empirically rich but provides no testable propositions about which variables need to be added, when, and with what payoffs. My analysis in this book draws on the insights of the OBM regarding geology and price but is more systematic. I seek to bring analytic rigor to the argument of why a government would or would not adopt policies that shift the bargain with foreign or domestic investors in favor of the state. I present my casual model, develop hypotheses about government policy and test it empirically.

The OBM focuses on state-foreign investor relations, but the distributional debate about sharing of rents also occurs with other states and within domestic society. Now that many NOCs are investing internationally the distributional question can pit one government's interests against another's. For example, when Bolivia nationalized its gas fields in 2006 the company most affected was Petrobras, the Brazilian NOC. Even developed countries like the U.K., Canada and Norway forced private oil companies to renegotiate their production contracts when oil prices boomed.^{cx} Yet not all oil exporters did so,^{cx} demonstrating that price is a factor but not the only one determining contract renegotiation. The battle for rents is fought in still another arena often overlooked by analysts focusing on international markets: within the producing country, between elite

and poor, rural and urban, and a variety of other domestic distinctions that have political salience.

The distribution of rents also becomes an issue domestically when important sectors of society believe that they have not been getting their ‘fair’ share or one commensurate with their development needs. When society questions the representativeness of their public agents, the question of appropriation of rents for private or public benefit can polarize politics and policymaking.

The issue of appropriation of oil and gas wealth, or who benefits from excess profits in the oil and gas sector is of critical importance in resource nationalist polities. Oil nationalists generally comprise two groups, who battle between themselves to guide natural resource policy. There are statist, who believe in direct government control of the industry for purposes of distributing the resource to the citizenry in ways that maintain political support for the government. There are also pro-market oil nationalists who focus on making the sector and the NOC economically efficient in order to increase sustainable overall government take from the sector. Statists are concerned that some rents that could be funding national development or the political coalition in power are being appropriated by the private sector (foreign or national) for their own private gain. Alternatively, “pro-marketers” are more concerned that ‘excessive’ government capture of rents will generate (more) corruption and undermine the long-term development of the sector to the detriment of the citizens. These are *ceteris paribus* descriptions; domestic politics will affect the manner in which statist and pro-marketers will seek to distribute that oil and gas wealth.^{cxii}

It is worth highlighting that both pro-marketers and statisticians have proven quite willing to accept the appropriation of natural resource rents for private gain. When labor unions force producers (even if they are NOCs) to pay above labor market compensation, consumers demand the natural resource domestically at below market prices (e.g., gasoline, heating oil, electricity), or national politicians fund development projects with little public benefit, they, too are appropriating rents for private purpose. Some empirical examples are the Mexican oil workers union, middle class automobile drivers in Venezuela, and gas-generated heating of Argentine middle-class homes. It would be far more efficient to provide public goods and target subsidies for helping the poor if the goal were to promote broad based and sustainable national development.

Role of the Market

If we think about private and public determination of the terms of exchange (that is, market v. government control) as arranged along a continuum, at one end is the total substitution of market forces by government control of production and distribution while the total elimination of the state as an actor in the energy marketplace represents the other extreme. Note that even in this latter situation ‘politics’ is not absent, since permitting the market such a wide latitude is a political decision. In between is a range of possibilities for the balance between market and government determination of the terms of exchange. For example, the market could set a general price for gas and the government could provide targeted subsidies to people below a certain income level; in this instance the market plays a greater role in the domestic provision of gas than the government. Alternatively, the government could cap the price of gas and leave companies to scramble to drive down costs to remain in business; companies that can drive down costs remain in

business, those that cannot close their doors. In this latter case, the role of the market is significantly subordinate to government policy.

When discussing Latin America, it makes sense to consider the role of the market in three arenas: the international, regional and domestic markets. For the purposes of thinking about energy policy such distinctions are important, although clearly each one of these markets is affected by events in the others. For example, in the 1980s Mexico and Venezuela exported oil on terms determined by the international market yet made a special arrangement to supply Central America with petroleum on politically negotiated terms and supplied their own domestic market at subsidized prices.^{cxiii} Thus, while utilizing the price in the international market, both countries applied political considerations in setting prices in select regional and domestic markets.

Key concepts for understanding the role of government

The Institutions of Government Matter.

Government institutions (constitutions, laws, offices and agencies) influence the content of legislation, the transparency of governmental behavior, the credibility of any commitments entered into by the government and the incentives that lead people and firms to make the energy related decisions they do.^{cxiv} Because countries vary in their institutions of government, the way in which the energy sector will be regulated also varies across countries.^{cxv}

Government institutions similarly affect what resources constitute power and therefore which individuals and groups have influence. For example, before the new constitution in Bolivia gave indigenous communities veto over exploration in their geographic areas the only way they could stop exploration and production was through

physically blocking access; since the communities are small and dispersed, it was difficult for them to resist the police and the army. Evo Morales (2006-2019) is indigenous, supported a culturally sensitive agenda and promoted a new constitution designed to empower indigenous communities. Nonetheless, he was often dismayed and forced to alter his development plans when small indigenous and rural communities protested against his government's efforts to implement neo-extractive policies.^{cxvi}

Institutions also affect for whom government will make policy (their own private interests, those of partisans, or for the public good) through the incentives they provide politicians. In addition, institutions affect how much discretion governments have in implementing laws and abiding by contracts. An inter-temporal commitment challenge arises when governments sign contracts that are binding on future governments, so ordinarily one would want minimal discretion permitted for overturning legal contracts.

The discretion issue, however, is more complex than a focus on the sanctity of contracts suggests. The individuals and companies that benefit from a particular interpretation want future governments to be constrained in re-interpreting those laws. But discretion can be a particularly contentious issue when reformists are elected by newly empowered groups in the expectation that they will use their discretion to alter the distribution of costs and benefits under the law (i.e., not rejecting or discarding the law) yet learn that they are far too constrained by institutions to do so. This situation can contribute to the development of new constitutions or major new legislation to force through changes that were theoretically possible under the prior institutional structure, but were blocked by opposition groups, as occurred in Venezuela, Bolivia and Ecuador in the past two decades. Since governments are 'sovereign' international courts have

minimal ability to sanction a state for changes in the fiscal terms of the contract; thus, domestic institutions that make such changes more or less likely will have an impact on energy policy via this mechanism as well.^{cxvii}

Government Capacity is Not Inherent But Needs to be Developed

If the government is to carry out its roles effectively and efficiently in the energy sector it must have the relevant capacity and skills. Geddes has defined these roles of government in a general sense and they are relevant to energy policy: the ability to tax, coerce, shape the incentives facing private actors, and make effective bureaucratic decisions during implementation.^{cxviii}

Capacity doesn't just imply having the institutional right to the task, but also the skill and autonomy to carry it out effectively in the name of the public good. If government agencies depend on the agents whom they are supposed to regulate for the necessary information, their ability to carry out effective oversight will be diminished. By the same token, if government agencies are directly beholden to politicians for their positions or resources, they will be more likely to provide opportunities for patronage rather than public goods. This may be a particularly challenging task for a country seeking to exert more control over the oil sector because of, on the one hand, informational asymmetries favoring investors, but also because the government can be focused more on appropriating revenue fast rather than building state capacity to effectively control the sector.^{cxix}

In the context of energy markets, one of the key players from the public sector should be the Independent Regulatory Agent (IRA). To be effective this agent should be independent so that it can constrain both the government and the private sector. Among

the important tasks of the IRA should be to limit the ability of the government to starve the NOC of resources, use it for patronage purposes, or, if private actors participate in the market, use its powers to favor the NOC.^{cxix} Consequently, institutional constraints on the discretionary scope of a regulatory agent are also important and will affect the credibility of contracts and therefore investment.

The importance of the IRA can be inferred from the varying performances of NOCs. A number of studies demonstrate that some NOCs have been efficient competitors with IOCs.^{cxxi} The studies highlight the importance of a proper institutional framework, viz, an independent regulator to insulate the NOC from rent-seeking politicians and ensure competition in exploration, production and sales. Partial privatization of the NOC via the selling of stock (as Norway, Brazil and Colombia have done, and Peru and Saudi Arabia authorized) or the opening up of exploratory blocs and productive fields without giving up managerial control (as Brazil in the pre-salt and Venezuela in all oil fields, though not in gas, undertook), will make the NOC more transparent, but as the case of Petrobras demonstrated, is not a guarantee against mismanagement and should not substitute for the independent regulator.

Public Goods, Public Services and Private Goods.

Public goods are characterized by two properties: nonrivalry and nonexcludability. Nonrivalry means that the consumption of the good by one person does not affect the ability of another to consume it, while nonexcludability means that it is very difficult if not impossible to keep someone from consuming the good even if they do not pay for its provision. Defense and clean air are examples of public goods. The power

of such a classification comes from understanding that provision and distribution of these goods are significantly determined by their physical or technological characteristics.

Although most goods provided by government cannot meet the strict definitions of nonrivalry and nonexcludibility, the basic idea that some goods are designed to benefit the country as a whole rather than specific groups is a powerful distinction by which to evaluate government behavior. Thus it is standard in political economy studies to distinguish between ‘pure public goods’ and simply ‘public goods’ or alternatively, public services, which are provided by the government for the benefit of society as a whole.^{cxxii} Private goods, in the political economy sense, benefit specific groups (connected in some way to the government financing or allocating the goods) to the exclusion of others; hence they are also classified as ‘selective benefits’. As Snidal notes, “the notion of exclusion is central to understanding the political aspects of public goods analysis.”^{cxxiii}

The identity of the national goal pursued (whether it be development, equality and social justice, etc.) is not key to the basic argument that the use of this wealth is legitimate to the extent that it provides public goods. Ranking of public goods demands varies by societies and will be affected by the national institutional structures that aggregate preferences within the political system. Which public goods are pursued with national wealth is thus not inherently fixed.^{cxxiv} The implication of that fact for our purpose is that we cannot explain the rankings among public goods by reference to resource nationalism; we can only note whether or not they are pursued with the wealth generated by ownership of these resources.

Why isn't the correlation between natural resource wealth and the existence of national goals sufficient to claim resource nationalism? When the state budget is significantly dependent on mineral wealth (taxation and royalties) rather than on taxation of citizens, governments can determine the distribution of state provided goods and services with a freer hand and less scrutiny.^{cxxv} Under some conditions these revenues can underpin the political bargains that support democracy,^{cxxvi} which we can classify as a public good. Yet often these conditions result in a distortion of the provision of public goods to cronies and clients, and to the detriment of the nation.

Government can, therefore, effectively privatize what should be a public good or service by providing it in ways that undermine its public goods characteristics -- e.g., by funding public services not through a common budget and process that prioritizes need and contribution to national goals but through pork barrel log rolling.^{cxxvii} Governments can also create private goods, such as when governments assign rights and privileges to particular groups.

Governments in Latin America have often created private goods under the guise of generating public goods and services. During the 1950s-1970s Latin American governments and societies pursued import substitution industrialization (ISI) as a public good. It was believed at the time to contribute to the overall development of the economy, stimulate national technological and scientific innovation, improve trade imbalances, reduce wealth inequalities, and permit the government to increase funding for social services.^{cxxviii} Government sponsored ISI was thus theoretically a public good.

In support of ISI, governments legislated high tariffs on many manufactured products. The tariffs generated benefits for the owners of the firms and their labor force

that produced these previously imported consumer goods. But the profits and wages in these ISI industries were subsidized by domestic consumers who paid higher prices for domestically produced (and usually lower quality) goods. Primary product exporters in agriculture and mining faced increased taxation and an overvalued exchange rate to pay for necessary intermediate and capital goods for the industrial sector. When governments rationed foreign exchange, preferential rates to support ISI meant that the public purse contributed to subsidize ISI as well.

The situation for labor under ISI is particularly interesting from the perspectives of public goods in a labor surplus economy, a desire to reduce inequality, and promotion of social justice. Latin American governments advocated ISI partly through foreign exchange access and credit provision which favored the import of labor-saving machinery. The labor unions in the protected industries (representing a minority of the labor sector) used their political influence to prolong import protection and public subsidies of the firms in which they were employed, hence creating a private good for these unions and their members.

In Latin America, these ISI firms overwhelmingly failed to become internationally competitive. ISI thus became a drag rather than a stimulus to national development. Governments could not adjust ISI policies to meet the original goal because the political costs were too high.^{cxxix} Latin American economies crashed with the collapse of the 1970s commodity boom and 1980s international debt crisis which had allowed them to sustain ISI policies.^{cxxx} So much for theoretical public goods.

ISI was not the only massive public goods program to go awry in Latin America. The commodity booms of the 1970s and early 2000s fueled another colossal failure. The

international transfer of wealth from consumers to the producers of these primary commodities offered an opportunity for governments to significantly increase their provision of public goods. Government programs directed towards the poor to promote social justice and increase standards of living through improved health, education, and social welfare programs can benefit society and the economy as a whole if distributed efficiently, in a sustainable manner and non-discriminatorily within the poor. But non-transparent budgeting, minimal accountability for public and private operators and distributors of the services and products, and often political litmus tests to screen beneficiaries plague these government programs. For example, the provision and location of schools and health clinics may respond to partisan politics rather than their contribution to development or social justice and the services themselves can be undermined through corruption. Public housing projects may be rife with graft and of such poor quality that its benefits lapse in the short to medium term. The public budget is often politically saddled with these programs even as they fail as public goods.^{cxxxix} In these circumstances, what appear to be government investment in public goods are in actuality a means for private goods provision which, once established are politically difficult to terminate.

The Relevant Governance Structure for the Energy Sector

Governments seek to promote investment in the energy sector as well as further national development. In pursuit of these objectives, governments pass legislation, issue decrees and sign contracts. The laws and agreements attempt to find common ground among competing interests: investors seek economic returns and national development

requires distributing a portion of those returns for public goods and generating linkages between enclave sectors and the larger economy.

‘Governance’ refers to a process by which actors beyond the government have a direct impact on the forms and rules guiding the specific arena under consideration, in our case, the oil and gas sector. Governance includes the public and private sectors, as well as civil society. It is operationalized through rules and institutions that are created by the interaction among these three categories of actors, though it can be effectively biased in favor of one actor. ‘Governance’ is designed to conceptualize a rulemaking and rule-implementing context in which government does not impose its choice, but the relevant actors formally and informally negotiate the terms of the choice.^{cxxxii}

Governance in the case of a natural resource is underpinned by the property rights associated with the resource. As noted above, when subsoil resources belong to the nation, rather than to the surface owner, the government has, in the eyes of its citizens, a legitimate responsibility to appropriate wealth associated with resource development. In a non-democratic polity, the government claims the unique right to decide how the nation can best benefit from the use of its resources, while in a democracy the government has been elected by a broad electorate to make those decisions in its name.

Contrast the legitimacy of that governmental claim with those of a private firm or a civil society group. The private firm is relegated to contesting whether the fruits of its labor in getting the subsoil resource to the surface should convey ownership rights *at that point* and leveraging its financial and technological resources and operational skill to persuade the government to create the conditions that make it profitable to invest. This situation pits private profit against the national good, unless the firm can argue that production is difficult if not impossible in the absence of private initiative AND that its profits will be ‘reasonable’.

Even a civil society actor or group finds it difficult to lay claim to the legitimate authority to decide how the national patrimony should be used, since it represents one interest group among many in the nation.

Given the special claim of a government in a resource nationalist state, governance structures will reflect the needs of the host government more than one would expect in a polity in which ownership of subsoil/sub-marine resources belong to the surface owner. But whether the governance structure in a national resource state produces public goods is not a foregone outcome. The democratic accountability of the government and the transparency of both its decision-making process and implementation of policy are prerequisites for governance to represent the priorities of the citizenry regarding the economic and environmental trade-offs inherent in the exploitation of its natural resources. Even democratic polities generate private goods and exclude some groups from the decision-making process.

Energy Security

‘Energy security’ (ES) embodies a claim for government action to protect national economic activity from shocks emanating from the international or domestic energy market. Adjustment to a price shock from the international market could be market based: decreased use of this resource via either increased efficiency or reduced activity and a search for alternative sources of energy. The time required for, and the difficulty of, increasing efficiency and developing alternatives creates adjustment costs that are not simply economic, but also include social dislocation as jobs, consumption and investment are affected; even political realignment or upheaval pursuant to a major social and economic adjustment process can occur. Therefore, the usual response by governments to

a significant external shock is not to let the market determine adjustment, but to adopt public policies to mitigate at least some of those costs while market adjustment unfolds.

This defense of the domestic economy to an energy-related shock can be pursued via government regulation of private companies or consumers in national energy markets or through direct state provision of energy at subsidized prices. In either case, the policy goal of energy security implies subordination of other policy goals (e.g., production of food, environmental protection or increased competitiveness of the national economy in world trade) to a more aggressive pursuit of domestic supplies, price controls or trade restrictions. In the U.S., for example, in the name of ‘energy security’ the export of oil and natural gas was limited, domestic production of corn-based ethanol was subsidized and there were high tariffs on the import of more efficient sugar cane-based ethanol. But even net oil and gas exporting governments can be concerned about ‘energy security’ when they perceive competition between the domestic and international markets, as in Bolivia since 2006.

While the concept of ‘energy security’ first came to the attention of publics in the U.S. and Western Europe after the Arab oil embargo of 1973, it is a longstanding concern in Latin America. Already in the 1920s the major countries in the region were concerned about it. As the international market began to shift into surplus in the late 1920s and the major oil companies colluded amongst themselves to protect market share, their production in high cost Latin America (Venezuela was the only low cost producer) declined.^{cxxxiii} These countries had to use scarce foreign exchange to meet domestic demand for crude or petroleum products at high oligopolistic prices, negatively impacting the domestic economy.

The argument about the opportunity costs of producing your own high cost oil instead of importing it doesn't hold much sway with statisticians, particularly with respect to energy security. Producing oil at home is seen as a means of generating employment, subsidizing industrial development and diminishing the threat of producer governments and their companies using access to oil to influence a country's policies.^{cxxxiv} Statisticians perceive that the defense of sovereignty and national development more than justifies the national economy paying higher costs for oil and petroleum products. In this sense, the energy security focus was one of the early harbingers of the import-substitution industrialization strategies that virtually all Latin American countries pursued to varying degrees from the 1930s through the 1970s.

In addition to these historical issues, today's ES concerns include, on the one hand, whether oil will be available in sufficient quantities in the future (aka, 'peak oil' debates) and on the other hand, there is a growing concern for the environmental impact of hydrocarbons and a search for alternative sources of energy.

From the exporter's perspective, the ES issue is whether the demand for oil and gas, and hence national earnings, will be significantly reduced when a deep and global recession occurs or if more environmentally friendly sources of fuel are embraced.^{cxxxv} The loss in export revenue as oil and gas markets weaken can produce similar economic, social and political adjustment issues for exporting countries as described above for importers when those markets are tight. In major exporting countries the specific route through which the impact is felt is often via a reduction in revenue that had permitted the government to subsidize consumption of energy goods or to absorb a great deal of low skilled labor. For example, riots broke out in both Venezuela and Iran when governments

attempted to raise extremely low gasoline prices because export revenues were no longer sufficient to cover the cost of the subsidies.^{cxxxvi}

The relationship between government appropriation of the value produced in the oil and gas sectors and energy security is variable. Under certain circumstances a producing country pursuing energy security via cheap domestic energy can undermine optimal revenue capture by lowering the profitability of the industry to the point that reserves are depleted, no new exploration is undertaken by private firms and the NOC becomes too inefficient and unskilled to pursue the requisite exploration and production (E&P) to increase reserves and maintain production. While one can see cheap domestic energy as a transfer to consumers of the value created in the sector, the point is that it is unsustainable and thus the generation of future revenues will fall or be lower than would occur based on geological or market conditions. On the other hand, pursuing maximum revenue appropriation can undermine ES by diminishing private investment and giving more control to a less effective NOC, resulting in decreased productive capacity and ultimately supply shortages. At the international level, the pursuit of energy security by importing countries can fuel short-term strategies by producing countries to capture more revenue now before alternative sources of energy can be adopted on a large scale. And of course, high levels of revenue appropriation in exporting countries can fuel increased efforts at ES in importing countries if the latter perceive that investors will leave these countries, thereby threatening supply.

Producers and Consumers

In addition to the wealth distribution and role of the market issues discussed above, two subsidiary issues appear on the resource nationalism agenda: who should

extract the resource (public or private firms) and to which markets (foreign or domestic) should the resources flow; in more radicalized versions a distinction between domestic markets for the elites and the ‘people’ is also made. These issues span the spectrum of natural resources, but in this book we will be concerned with their manifestation in the oil and gas sector.

The question of who should extract and market the resource has two variants. The dominant variant is the public-private divide and the secondary is the foreign-national private investor/producer issue. Statists believe that only a state-owned enterprise (SOE) would be willing to exploit the country’s natural resources with national interests in mind. These claims refer not only to the prices at which the commodities would be sold but also to their rate of exploitation. Today statists focus on not running down reserves too quickly in order to benefit foreign consumers, but in the middle of the 20th century statists’ concerns were that the IOCs were not exploiting many Latin American oilfields because Middle Eastern production was cheaper, thus producing the problems for the government noted above.

Once a country has decided to open its oil and gas sector to private investment some statists seek to favor national investors. Part of the reasoning in favor of national capital follows the preference for national capital in sectors deemed “strategic” under ISI development paradigms: by restricting foreign investment the government was expected to help create a national industrial capitalist class. In recognition that few national capitalists had the capital, skills or know-how to invest in these opportunities, governments might permit foreigners to invest; in these cases it was usually only in partnership with private national companies. Nevertheless, the limitations of this path for

promoting sustainable and broad-based national development have been well documented in the ISI literature and contributed to the backlash against privatization after 2001.^{cxxxvii}

But some statist fear creating a powerful domestic interest group if private national capital is given preference. Thus, when Venezuela sought to reduce the influence of IOCs during the early 1960s the government considered and rejected opening the sector to private national investment. Instead, it created a state company (*Corporación Venezolana de Petróleo, CVP*) to negotiate with the foreign privately owned IOCs.

Two efforts of note to broaden private capital participating in NOCs so as to benefit the ‘average’ or poor citizen were developed in Bolivia and Mexico. In Bolivia the government of Gonzalo Sánchez de Lozada, while not an exponent of statist conceptions of the responsibilities inherent in resource nationalism, recognized that simply opening the oil and gas sector to private investment would not win popular approval. Consequently, when the government sold 51% of the shares of its NOC YPFB in 1996, as well as those of a number of other SOEs, it distributed shares to private pension funds to stimulate a national credit market, create adherents to the market and convince average Bolivians that they would benefit directly once they reached retirement age.^{cxxxviii} In Mexico, the 2008 reforms of Felipe Calderón, who also would have preferred to reject statist approaches, limited private participation in Pemex to Mexican citizens who could purchase bonds. Though this strategy was never implemented, it was based on a hope that this ownership would convince the average Mexican that he should be more concerned about how Pemex was performing rather than by who owned it.^{cxxxix} When the Cardoso administration in Brazil first offered shares in Petrobras they were limited to national citizens, but within two years purchasing was opened to everyone.^{cxl}

Statists can also be concerned about whether the domestic or international market has priority for consuming the natural resource. This can be a particularly relevant issue in countries with many poor who cannot pay the price demanded by the international market. Export controls have been used historically in Latin America for this purpose.

Resource Nationalism, Resource Wealth and Energy Policy

The concept of 'resource nationalism' can help us understand energy policy. But we must define it non-tautologically and systematically, following the logic of our definition where it leads. In this chapter I have argued that the most useful definition of resource nationalism places it at the center of a specific relationship that exists in most of the world, not just in developing countries: the nation is the rightful owner of the subsoil and submarine natural resources. The chapter then examined the issues that arise when one discusses the generation of natural resource wealth in the context of national ownership of the resource. I argued that only policies which generated sustainable public goods logically followed from this understanding of resource nationalism. I also offered examples of governments utilizing their legitimate role in appropriating natural resource wealth for private rather than public benefit and thus violating the legitimacy provided by a resource nationalism perspective.

Statists in resource nationalist polities articulate lofty goals and that is their attraction to people who feel exploited by markets. Their underlying concern is how to use rents to quickly promote national development and they focus on the absolute level of money appropriated by the government. Unfortunately, without ensuring efficient use of that money, it is possible that a government that appropriates a greater percentage of natural resource rents and spends it inefficiently promotes national development far less

than a government that appropriates a lower share but invests it wisely. Just being 'pro-market', however, does not mean that the resource is being used for the benefit of the nation rather than private interests. It is competitive markets, with well-functioning regulation to tax and deal with negative externalities, and investment in public goods that transform state ownership of natural resources into national benefit.

The focus on private goods, whether by statist or pro-marketers, produces what many have misleadingly called the 'resource curse'. As I discuss in the Introduction, though theorizing causality is unsettled, the ability of a nation to avoid the negative economic and political manifestations associated with the 'resource curse' depends on institutional factors. Those institutions generally make government's use of the wealth generated by the resource transparent and subject to evaluation, while holding the government accountable to the nation in whose name it collects that resource wealth.

The concept of resource nationalism that I propose both recognizes the importance of governments seeking to appropriate natural resource value for the sustainable provision of public goods AND the inherent complementarity of national goals and private investor goals. This chapter has demonstrated the multiple options for implementing an energy policy based upon the fact that subsoil and sub-marine resources belong to the nation and a recognition of the responsibility of government to utilize resulting revenues to advance national development. The analytic challenge thus becomes understanding the determinants of variations in energy policy adopted and implemented.

ⁱ . “Oil and Gas Royalty” STATEMENT OF C. STEPHEN ALLRED, ASSISTANT SECRETARY, LAND AND MINERALS MANAGEMENT, UNITED STATES DEPARTMENT OF THE INTERIOR, BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES, UNITED STATES SENATE JANUARY 18, 2007 <https://www.doi.gov/ocl/hearings/110/OilAndGasRoyaltyManagement11806> In justifying the increase in royalty from 12.5% to 16.7% Mr. Allred said, “The American people own these resources and are entitled to receive a fair return....In FY 2006 ...royalties totaling about \$12.6 billion ...compliance and enforcement program has generated an annual average of more than \$125 million for each of the last 24 years.”

ⁱⁱ . Farouk Al-Kassim, *Managing Petroleum Resources: The ‘Norwegian Model’ in a Broad Perspective* (Oxford: Oxford Institute for Energy Studies, 2006).

ⁱⁱⁱ . Paulo Valois Pires, Schmidt, Valois, Miranda, Ferreira and Agel, “Oil and gas regulation in Brazil: overview”,

law stated as at July 1, 2019, Westlaw, accessed July 9, 2019, [https://content.next.westlaw.com/2-524-2451?transitionType=Default&contextData=\(sc.Default\)&lrTS=20190209093307822&firstPage=true&hcp=1](https://content.next.westlaw.com/2-524-2451?transitionType=Default&contextData=(sc.Default)&lrTS=20190209093307822&firstPage=true&hcp=1).

^{iv} . Hugh Bronstein, “Argentina nationalizes oil company YPF”, *Reuters*, May 3, 2012.

^v . H. Mahdavy, “The Patterns and Problems of Economic Development in Rentier States: the Case of Iran” in M.A. Cook, *Studies in the Economic History of the Middle East*. London: Oxford University Press, 1970: 428-467

^{vi} . Merrie Gilbert Klapp, “The State -- Landlord or Entrepreneur?” *International Organization* 36:3 Summer 1982 and *The Sovereign Entrepreneur: Oil Politiéis in Advanced and Less Developed Capitalist Countries*. Ithaca: Cornell University Press, 1987; Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro-States* Berkeley: University of California Press, 1997 sees petro-states as a subcategory of landlord states p. 49; Bernard Mommer, *Global Oil and the Nation State* Oxford University Press, 2002

^{vii} . Revi Ramamurti, “The Obsolescing ‘Bargaining Model’? MNC-Host Developing Country Relations Revisited” *Journal of International Business Studies*. 32:1 (1st Qtr, 2001) 23-39 sees a context in which MNC-developing country bargaining occurs within rules set by developed countries;

^{viii} . e.g., Klapp, 1982 and 1987 builds on a model of state bureaucratic autonomy; Karl 1997 examines domestic institutions and rent-seeking; Mommer, 2002 assumes an international context exploitive of developing countries and a class based analysis of domestic social and economic dynamics that influence who controls ‘the state’.

^{ix} . cf. Dag Harold Claes, *The Politics of Oil: Controlling Resources, Governing Markets and Creating Political Conflicts*. London: Edward Elgar, 2018

^x . cf. Karl, *Paradox of Plenty*. 1997

^{xi} . cf., Anthony A. Sampson, “A Model of Optimal Depletion of Renewable Resources” *Journal of Economic Theory*. 12:315-324 (1976); N.V. Quyen, “The Optimal Depletion and Exploration of a Nonrenewable Resource” *Econometrica*. 56:6 November 1988: 1467-1471; Hassan Benchekekroun and Cees Withagen, “The optimal depletion of exhaustible resources: A complete characterization” *Resource and Energy Economics*. 33:3 September 2011: 612-636

^{xii} . Ascher lists “... extracting the right amount of wealth from resource exploiters, setting output prices to encourage economic efficiency, using resource wealth wisely, borrowing off the resource endowment and using the loans efficiently for long-term economic growth, finding the best means of taxing (which may or may not involve taxing natural-resource outputs) ...” William Ascher, *Why Governments Waste Natural Resources: Policy Failures in Developing Countries*. Baltimore: Johns Hopkins University Press, 1999:20

^{xiii} The theoretical concept of ‘rents’ and the issues that arise as they are generated will be discussed in Chapter 1.

^{xiv} David R. Mares, “Natural Gas Pipelines in the Southern Cone” in David G. Victor, Amy M. Jaffe and Mark H. Hayes, eds., *Natural Gas and Geopolitics From 1970-2030*. Cambridge: Cambridge University Press, 2006: 169-201; David R. Mares, “The Governance of Shale Gas in Argentina” *Oil, Gas & Energy Law Intelligence*. 12:3 June 2014

^{xv} . BP, *Statistical Review of World Energy*. June 2019 based on reserves to production ratio p. 14

^{xvi} . Duncan Wood, ed., *Mexico’s New Energy Reform*. Washington, DC: Mexico Institute, Woodrow Wilson International Center for Scholars, 2018

^{xvii} . Francisco Monaldi, “Making Pemex Great Again?” *Americas Quarterly*. August 21, 2019;

^{xviii} In this book the term “gas” refers to natural gas and “gasoline” refers to the refined fuel derived from petroleum. For two different evaluations and explanations of these reforms see Derrick Hindery, *From Enron to Evo: Pipeline Politics, Global Environmentalism, and Indigenous Rights in Bolivia*. Tucson: University of Arizona Press, 2013; Vicente Fretes-Cibils, Marcelo Glugale, and Connie Luff, eds., *Bolivia: Public Policy Options for the Well-Being of All*. Washington, DC: The World Bank, 2006

^{xix} . Hindery, *From Enron to Evo*. 148-163; Nancy Postero, *The Indigenous State: Race, Politics, and Performance in Plurinational Bolivia*. Berkeley: University of California Press, 2017; “Bolivia reaches preliminary \$2.5 billion oil, gas investment deal,” *Reuters*, February 26, 2018,

<https://www.reuters.com/article/bolivia-energy/bolivia-reaches-preliminary-2-5-billion-oil-gas-investment-deal-idUSL2N1QG1DT>.

^{xx} . Giorgio Romano Schutte, “Brazil: New Developmentalism and the Management of Offshore Oil Wealth” *European Review of Latin American and Caribbean Studies* 95 October 2013: 49-70; Justin

Jacobs, “Brazil's pre-salt promise”, *Petroleum Economist*, November 2, 2017, <https://www.petroleum-economist.com/articles/upstream/exploration-production/2017/brazils-pre-salt-promise>.

^{xxi} . Daniel Rodriguez, “Petrobras expects Brazil's deepwater pre-salt play to remain competitive to shale”, *SPGlobal*,

May 6, 2019, <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/050619-petrobras-expects-brazils-deepwater-pre-salt-play-to-remain-competitive-to-shale>.

^{xxii} The rentier state concept that underlies the resource curse was developed in Mahdavy, “Patterns and Problems of Economic Development in Rentier States”; Karl, *Paradox of Plenty*; Michael L. Ross, “The Political Economy of the Resource Curse” (review article) *World Politics*. 51:2 1999:297-322; Richard Auty, *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. London:Routledge, 1993; Macartan Humphreys, Jeffrey D Sachs and Joseph E. Stiglitz, eds. *Escaping the Resource Curse* (New York, NY: Columbia University Press, 2007; The journalist Thomas Friedman, makes dependence on oil wealth a guarantee that democracy, and by extension, national development, will fail. “The First Law of Petropolitics.” *Foreign Policy*, October 16, 2009.

^{xxiii} . Richard Auty, *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. London: Routledge, 2003; Jeffrey D. Sachs, “How to Handle the Macroeconomics of Oil Wealth” in Humphreys, Sachs and Stiglitz, eds. *Escaping the Resource Curse* 2007:173-193

^{xxiv} . Jeffrey D Sachs and Andrew M. Warner, “The curse of natural resources” *European Economic Review*. 45: 4-6 May 2001: 827-838

^{xxv} . cf., Michael L. Ross, “The Resource Curse”;; Auty, *Sustaining Development in Mineral Economies* 1993

^{xxvi} . David Wiens, “Natural resources and institutional development” *Journal of Theoretical Politics* Vol. 26, No. 2, (2014), 197–221, DOI:10.1177/0951629813493835.

^{xxvii} . cf., These vary broadly from the general ‘weak state’ thesis (c.f., the review by Victor Menaldo, “The New Political Economy of Natural Resources in Latin America” *Latin American Politics and Society*, Vol. 57, No. 1 (Spring 2015), 163-173), to a focus on economic institutions (cf., Jeffrey Frankel, “The Natural Resource Curse: A Survey” in Brenda Shaffer and Taleh Ziyadov., eds., *Beyond the Resource Curse* (University of Pennsylvania Press, 2012)

^{xxviii} . Thad Dunning (*Crude Democracy: Natural Resource Wealth and Political Regimes* (Cambridge University Press, 2009)) used Venezuela as an example of oil facilitating the creation and stability of democracy, while Karl, *Paradox of Plenty* saw its democracy as already in crisis in 1997. Bayulgen’s review of Jones Luong and Weinthal (Oksan Bayulgen, “Review ‘Oil Is Not a Curse: Ownership Structure and Institutions in Soviet Successor States by Pauline Jones Luong and Erika Weinthal’” *Political Science Quarterly*, Vol. 127, No. 1 (Spring 2012), 178-179)) disagrees that Azerbaijan and Kazakhstan have in fact averted “many of the pathologies associated with the mineral curse”.

^{xxix} . cf., the cases analyzed in Ascher, *Why Governments Waste Natural Resources*; Humphreys, Sachs & Stiglitz, *Escaping the Resource Curse*;

^{xxx} . BP, *Statistical Review of World Energy*. Oil and Gas Tables, June 2007 and June 2018; Business News Americas, *Oil & Gas Survey 2014: Opportunities abound*, Intelligence Series, February 2014.

^{xxxi} . Farouk Al-Kassim, *Managing Petroleum Resources: The ‘Norwegian Model’ in a Broad Perspective* (Oxford Institute for Energy Studies, 2006); Andrew Cumbers, “North Sea Oil, the State and Divergent Development in the United Kingdom and Norway” in 221-242; Klapp, “The State – Landlord or Entrepreneur?”

^{xxxii} . Business News Americas, *Brazil’s Oil and Gas Revamp: A New Dawn?*, Intelligence Series, c 2017.

^{xxxiii} . Klapp, “The State – Landlord or Entrepreneur?”; Silvana Tordo, *National Oil Companies and Value Creation*, World Bank, Working paper no. 218, 62.

^{xxxiv} . Katy Grimes, “Legislation Would End Oil and Gas Production In Most of California”, *California Globe*,

April 22, 2019 <https://californiaglobe.com/legislature/legislation-would-end-oil-and-gas-production-in-most-of-california/>.

^{xxxv} . Christopher Weare, “The California Electricity Crisis: Causes and Policy Options” San Francisco, CA: Public Policy Institute of California, 2003

^{xxxvi} . Allan R Brewer-Carías, *Dismantling Democracy in Venezuela: The Chávez Authoritarian Experiment* (Cambridge, U.K.: Cambridge University Press, 2010); Nikolas Kozloff, *Hugo Chávez: Oil, Politics, and*

the Challenge to the U.S. (New York: Palgrave, 2006); George Ciccariello-Maher, *We Created Chávez: A People's History of the Venezuelan Revolution* (Durham, NC: Duke University Press, 2013).

^{xxxvii} . cf., Gustavo A. Flores-Macías, *After Neoliberalism?: The Left and Economic Reform in Latin America* (New York: Oxford University Press, 2012); K Weyland, RL Madrid & W Hunter, eds., *Leftist Governments in Latin America: Successes and Shortcomings* (Cambridge: Cambridge University Press, 2010); Levitsky, S, & KM Roberts, eds., *The Resurgence of the Latin American Left* (Baltimore: Johns Hopkins University Press, 2011).

^{xxxviii} . On institutional design see Koremenos, Barbara, Charles Lipson, and Duncan Snidal, "The Rational Design of International Institutions," *International Organization* 55, no. 4 (2001): 761-99.

^{xxxix} . Some scholars focus on 'rent appropriation' but governments can also attempt to drive down the 'normal' profit rates and thus appropriate not just 'rents' or 'excess profits' (the theoretical concept of 'rents' and the issues that arise as they are generated is discussed further in the chapter). Some analysts focus on 'revenue appropriation' rather than distinguish among normal and super profits. But there is value or wealth in discovered resources that are not yet brought to market and producing revenues; governments and third parties have conflicted over who can 'book' these reserves, indicating their value. Consequently, government policy may be focused in a particular instance on capturing significant portions of the wealth in the sector, or of the revenue being generated, or simply on the 'excess profits'.

^{xi} . Canada has a complicated legal regime regarding subsurface rights, reflecting inducements to colonization and infrastructure development as well as which subsoil resources were deemed valuable at the time land grants were allocated. Cf., Global CCS Institute, "Canadian property rights relating to CCS"

<https://hub.globalccsinstitute.com/publications/property-rights-relation-ccs/canadian-property-rights-relating-ccs> accessed August 18, 2017; Prowse Chowne LLP Team, "What are Subsurface Rights in Canada?" February 23, 2017

<http://prowsechowne.com/what-are-subsurface-rights-in-canada/> accessed August 18, 2017; University of Alberta, Alberta Land Institute, "A Guide to Property Rights in Alberta" <http://propertyrightsguide.ca/subsurface-property-rights/> accessed August 18, 2017

^{xli} . Amy Harder and Lynn Cook, "Congressional Leaders Agree to Lift 40-Year Ban on Oil Exports" *Wall Street Journal*, Updated Dec. 16, 2015;

^{xlii} . NaturalGas.Org, "The History of Regulation" <http://naturalgas.org/regulation/history/> accessed August 18, 2017

^{xliii} . "The Debate over Natural Gas Exports", Snelson, accessed August 18, 2017, <http://www.snelsonco.com/debate-over-natural-gas-exports/>; Mary Anne Sullivan, "LNG Exports – A Rare Case of Policy Continuity from Obama to Trump", May 8, 2017, <https://knect365.com/flame/article/f07241ed-4652-44b6-89c0-21446dfd1940/lng-exports-a-rare-case-of-policy-continuity-from-obama-to-trump>.

^{xliv} . This is a common complaint. Cf., Francisco J. Monaldi, "The Cyclical Phenomenon of Resource Nationalism in Latin America" *Oxford Handbook of International Political Economy*, Online Publication Date: Mar 2020 DOI: 10.1093/acrefore/9780190228637.013.1523; Sam Pryke, "Explaining Resource Nationalism" *Global Policy* 8:4 November 2017; Östensson, O. "Promoting downstream processing: resource nationalism or industrial policy?" *Mineral Economics* 32, 205–212 (2019). <https://doi.org/10.1007/s13563-019-00170-x>;

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- ^{xlv} . I come at this issue from a comparative politics perspective, but others make a similar point from different analytic perspectives. Kadir and Murray take a human rights approach when they argue that the Indonesian Constitution should alter Article 33 from “full and direct state control over natural resources to fully and directly benefitting the people” which requires a non state-centric understanding of ‘the people’. They further argue that ‘under the control’ (of the state) does not mean ‘ownership’ (which rests with the people) p. 322-324; 333. For critical theorizing about resource nationalism, see Koch, N., & Perreault, T. (2019). “Resource nationalism”. *Progress in Human Geography*, 43(4), 611–631. <https://doi.org/10.1177/0309132518781497> ; John Childs, “Geography and resource nationalism: A critical review and reframing” *The Extractive Industries and Society* 3:2, April 2016, Pages 539-546 <https://doi.org/10.1016/j.exis.2016.02.006>
- ^{xlvi} . cf. Vlado Vivoda (2009) “Resource Nationalism, Bargaining and International Oil Companies: Challenges and Change in the New Millennium”, *New Political Economy*, 14:4, 517-534, DOI: 10.1080/13563460903287322 in which he repeatedly refers to ‘resurgent resource nationalism’ and cites many authors discussing retreat and resurgence, yet never defines the concept.
- ^{xlvi} . Pryke, “Explaining Resource Nationalism” p. 474
- ^{xlvi} . Kretzschmar, Gavin L., Axel Kirchner, and Liliya Sharifzyanova. "Resource Nationalism — Limits to Foreign Direct Investment." *The Energy Journal* 31, no. 2 (2010): 27-52.
- ^{xliv} . Paul Stevens, “National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle” *Journal of World Energy Law & Business*, 2008, Vol. 1, No. 1 p.5
- ^l . Jeffrey D. Wilson (2015) Understanding resource nationalism: economic dynamics and political institutions”, *Contemporary Politics*, 21:4, 399-416, DOI: 10.1080/13569775.2015.1013293
- ^{li} . Stevens, “National oil companies” 5-30
- ^{lii} . Mapungubwe Institute for Strategic Reflection (MISTRA) and David Maimela, eds., *Resurgent Resource Nationalism: A Study into the Global Phenomenon*, Real African Publishers, 2016. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/ucsd/detail.action?docID=4426703> p. 7
- ^{liii} . Kevin A. Young, *Blood of the Earth: Resource Nationalism, Revolution, and Empire in Bolivia*. Austin: The University of Texas Press, 2017 p.1
- ^{liv} . Cawood, F.T., & Oshokoya, O.P.. (2013). “Resource nationalism in the South African mineral sector: Sanity through stability”. *Journal of the Southern African Institute of Mining and Metallurgy*, 113(1), 45-52. 14, 2020.
- ^{lv} . “CNOOC withdraws bid for Unocal, citing politics”, *Oil and Gas Journal*, August 8, 2005 <http://www.ogj.com/articles/print/volume-103/issue-30/general-interest/cnooc-withdraws-bid-for-unocal-citing-politics.html>.
- ^{lvi} . Ian Bremmer and Robert Johnston, “The Rise and Fall of Resource Nationalism” *Survival* March 2009 51(2):152 DOI: 10.1080/00396330902860884
- ^{lvii} . George Joffé, Paul Stevens, Tony George, Jonathan Lux, and Carol Searle, “Expropriation of oil and gas investments: Historical, legal and economic perspectives in a new age of resource nationalism” *Journal of World Energy Law & Business*, 2009, Vol. 2, No. 1 p. 4

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- ^{lviii} Paul A. Haslam and Pablo Heidrich, *The Political Economy of Natural Resources and Development*. London: Routledge, 2016 p. 1
- ^{lix} . Haslam and Heidrich, pp. 223-235
- ^{lx} . Adrián Lajous, “Mexican Oil Reform: The First Two Bidding Rounds, Farmouts and Contractual Conversions in a Lower Oil Price Environment” Center on Global Energy Policy, Columbia University, October 2015
- ^{lxi} . Guillermo José García Sánchez, “The Fine Print of the Mexican Energy Reform” in Duncan Wood, ed., *Mexico’s New Energy Reform*. Washington, DC: Mexico Institute, Woodrow Wilson International Center for Scholars, October 2018 36-52
- ^{lxii} Juan Carlos Moreno-Brid and Alicia Puyana, “Mexico’s new wave of market reforms and its extractive industries” in Haslam and Heidrich, *Political Economy of Natural Resources*. 141-157; Wood, ed., *Mexico’s New Energy Reform*: Ognen Stojanovski, “Handcuffed: an assessment of Pemex’s performance and strategy” in David G. Victor, David R. Hulst and Mark Thurber, eds., *Oil and Governance: State-owned Enterprises and the World Energy Supply*. Cambridge: Cambridge University Press, 2012:280-333
- ^{lxiii} . AFP News, “Bolivia Cancels Lithium Deal With German Firm” November 4, 2019 <https://www.ibtimes.com/bolivia-cancels-lithium-deal-german-firm-2859668>
- ^{lxiv} . Business News Americas, “Sustaining Bolivias (sic) Natural Gas Bonanza” *Oil & Gas Intelligence Series* August 31, 2016 p. 8
- ^{lxv} . Ley Orgánica de Hidrocarburos Gaseosos, *Gaceta Oficial* No. 36.793 September 23, 1999 Article 2
- ^{lxvi} . Daniel Hellinger, “Resource Nationalism and the Bolivarian revolution in Venezuela” in Haslam and Heidrich, 217. The so-called “Calvo Doctrine” against the use of international rather than national arbitration for dispute with the state has long been defended by the left in Latin America.
- ^{lxvii} . cf., Eduardo Gudynas, “Se eres tan progresista Por qué destruyes la naturaleza?: Neoetactivismo, izquierda y alternativas” *Ecuador Debate* 79:61-81 2010 The author is very tough on Correa (Ecuador), Lula (Brazil) and Morales (Bolivia) but gives Chávez (Venezuela) a free pass. Nevertheless, his argument fits the Venezuelan case well.
- ^{lxviii} . cf., Antonio Gershenson, *El Petróleo de México: La Disputa del Futuro*. Mexico City: Random House Mondadori, 2010; Jorge Alonso, “The energy reform: A great loss and a betrayal” *Revista Envío* (Nicaragua) 390: January 2014 envio.org.ni/articulo/4807
- ^{lxix} . Bremmer and Johnston, “The Rise and Fall of Resource Nationalism”; see also, Stefan Andreasson “Varieties of resource nationalism in sub-Saharan Africa's energy and minerals markets” *The Extractive Industries and Society* 2:2 April 2015, Pages 310-319 <https://doi.org/10.1016/j.exis.2015.01.004>
- ^{lxx} . cf., William Ascher, *Why Governments Waste Natural Resources: Policy Failures in Developing Countries*. Baltimore: Johns Hopkins University Press, 1999; Nick Holland, “Resource nationalism can mean growth and prosperity”, *Business Day*, August 16, 2013 <http://www.bdlive.co.za/opinion/2013/08/16/resource-nationalism-can-mean-growth-and-prosperity>.
- ^{lxxi} . Antulio Rosales, “Pursuing foreign investment for nationalist goals: Venezuela’s hybrid resource nationalism” *Business and Politics* 2018 20:3 438-464

^{lxxii} . Minerva Chaloping-March, “The mining policy of the Philippines and «resource nationalism» towards nation-building”, *Journal de la Société des Océanistes*, 138-139 | 2014, 93-106.

^{lxxiii} . M.Y. Aiyub Kadir and Alexander Murray, “Resource Nationalism in the Law and Policies of Indonesia: A Contest of State, Foreign Investors, and Indigenous Peoples” *Asian Journal of International Law* 9: 2 July 2019 , pp. 298-333

<https://doi.org/10.1017/S204425131900002X>

^{lxxiv} . “The government’s revenues”, Norwegian Petroleum, updated May 15, 2019, <http://www.norskipetroleum.no/en/economy/governments-revenues/>, emphasis added.

^{lxxv} . Economists expanded the concept of “rent” beyond the natural resource sector to capture the phenomenon of distorting competitive markets to earn greater profits. See James M. Buchanan, Tollison, Robert D. and Tullock, Gordon, eds., *Toward a theory of the rent-seeking society* (College Station: Texam A&M University Press, 1980). A large literature in economics and political science now routinely focus on ‘rent-seeking’ behavior to explain artificially created imperfect markets that favor powerful actors. The concept of a natural resource rent, however, is based on the inherent characteristics of natural resources and their markets and theoretically belongs to the owner of the resource.

^{lxxvi} . The country’s success was not without challenges nor is it unmitigated. Cf., Farouk Al-Kasim, *Managing Petroleum Resources: The ‘Norwegian Model’ in a Broad Perspective*. Oxford Institute for Energy Studies, 2006; Dag Harald Claes, “Globalization and State Oil Companies: The Case of Statoil” *The Journal of Energy and Development*, Vol. 29, No. 1 (Autumn, 2003), pp. 43-64; Ole Andreas Engen, Oluf Langhelle and Reidar Bratvold, “Is Norway Really Norway?” in Brenda Shaffer and Taleh Ziyadov, eds., *Beyond the Resource Curse* University of Pennsylvania Press. (2012: 259-279); Andrew Cumbers, “North Sea Oil, the State and Divergent Development in the United Kingdom and Norway” in John-Andrew McNeish and Owen Logan, eds., *Flammable Societies: Studies on the Socio-economics of Oil and Gas*. London: Pluto Press, 2012 pp. 221-242

^{lxxvii} . “The government’s revenues”, figure ‘The net government cash flow from petroleum activities, 1971-2017’ updated May 15, 2019, <http://www.norskipetroleum.no/en/economy/governments-revenues/>.

^{lxxviii} . Ernst & Young Global Limited, *Global Oil and Gas Tax Guide*, June 2015, [http://www.ey.com/Publication/vwLUAssets/EY-2015-Global-oil-and-gas-tax-guide/\\$FILE/EY-2015-Global-oil-and-gas-tax-guide.pdf](http://www.ey.com/Publication/vwLUAssets/EY-2015-Global-oil-and-gas-tax-guide/$FILE/EY-2015-Global-oil-and-gas-tax-guide.pdf), 421.

^{lxxix} . “Fundamental Regulatory Principles” updated January 18, 2017 <http://www.norskipetroleum.no/en/framework/fundamental-regulatory-principles/>

^{lxxx} . “The petroleum tax system”, updated May 2, 2019, <http://www.norskipetroleum.no/en/economy/petroleum-tax/>.

^{lxxxii} Jia et al., 2016. Jia, Suzhe, Toledano, Perrine and Thomashasuen, Sophie. “Local Content: Norway – Petroleum.” Columbia Center on Sustainable Investment (CCIS), May 2016, <http://ccsi.columbia.edu/files/2014/03/Local-Content-Norway-Petroleum-CCSI-May-2016.pdf>.; Cumbers, “North Sea Oil, the State...”; Klapp, “The State – Landlord or Entrepreneur?”

^{lxxxii} Richard Dobbs et al, *Reverse the Curse: Maximizing the potential of resource-driven economies*, McKinsey Global Institute, December 2013, [https://www.mckinsey.com/~media/McKinsey/Industries/Metals%20and%20Mining/Our%20Insights/Reverse%20the%20curse%20Maximizing%20the%20potential%20of%20resource%20driven%20economies/MGI Reverse the curse Full report.pdf](https://www.mckinsey.com/~media/McKinsey/Industries/Metals%20and%20Mining/Our%20Insights/Reverse%20the%20curse%20Maximizing%20the%20potential%20of%20resource%20driven%20economies/MGI%20Reverse%20the%20curse%20Full%20report.pdf); *Cumberland* 2012, 232-233

^{lxxxiii} Dobbs et al., 72-73.

^{lxxxiv} “Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994.” *Official Journal of the European Communities*, L164/4, Brussels, Belgium, May 30, 1994, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A31994L0022>.

^{lxxxv} “TRIMS & Local Content.” *Bridges*, Volume 12 No. 3, International Centre for Trade and Sustainable Development, May 1, 2008, <https://www.ictsd.org/bridges-news/bridges/news/trims-local-content>.

^{lxxxvi} “Act of 29 November 1996 No. 72 relating to petroleum activities.” Norwegian Petroleum Directorate, November 29, 1996, <http://www.npd.no/en/Regulations/Acts/Petroleum-activities-act/>.

^{lxxxvii} Dobbs et al., 72-73. Engen, Langhelle and Bratvold, 265-266

^{lxxxviii} . For a discussion of the various types of contracts, see Gavin Bridge and Philippe Le Billon, *Oil* Malden MA: Polity Press, 2013 p. 209, fn. 10; Daniel Johnston, *International Petroleum Fiscal Systems and Production Sharing Contracts* Tulsa, Oklahoma: PennWell, 1994: 21-27

[https://web.archive.org/web/20080516050159/http://www.total.com/en/corporate-social-responsibility/Ethical-Business-Principles/Financial-transparency/contractual arrangements 13289.htm](https://web.archive.org/web/20080516050159/http://www.total.com/en/corporate-social-responsibility/Ethical-Business-Principles/Financial-transparency/contractual%20arrangements%2013289.htm)

^{lxxxix} . Populations that continue to believe that the country is rich despite current low prices in international markets reflect this view of intrinsic wealth. cf., “La izquierda mexicana está unida en la defensa del petróleo nacional: Sandoval” *Nota N° 3760 Fundar: Centro de Análisis e Investigación*, http://www.fundar.org.mx/c_e/notas.htm accessed September 20, 2009

^{xc} . Society of Petroleum Engineers, “Glossary of Terms Used in Petroleum Reserves/Resources Definitions” spe.org/en/industry/terms-used-petroleum-reserves-resource-definitions/

^{xci} . *BP Statistical Review of World Energy* June 2018 p. 12 note

^{xcii} . “Mexico: Oil Depletion and Illegal U.S. Immigration”, *Worldpress.org*, April 25, 2006 <http://www.worldpress.org/Americas/2326.cfm>

^{xciii} . Jacobs, “Brazil's pre-salt promise”

^{xciv} . Jim Jubak, “Is Exxon Mobil's future running dry?” *Jubak's Journal*, MSN Money, May 9, 2008,

<https://web.archive.org/web/20111117211618/http://articles.moneycentral.msn.com/Investing/JubaksJournal/IsExxonMobilsFutureRunningDry.aspx?page=all>.

^{xcv} . Abigail Wilkinson, “The winners and losers in Argentina's subsidy story - Emilio Apud” *Business News Americas* January 20, 2012

^{xcvi} . Wessel, R. H. (1967). “A note on economic rent”. *The American Economic Review*, 57(5), 1222, as cited in Paul Segal, “Resource Rents, Redistribution, and Halving Global

Poverty: The Resource Dividend” *World Development* Vol. 39, No. 4, pp. 475–489, 2011
doi:10.1016/j.worlddev.2010.08.013

^{xcvii} . Manzano, Osmel, Francisco Monaldi, and Federico Sturzenegger. "The Political Economy of Oil Production in Latin America [with Comments]." *Economía* 9, no. 1 (2008): 59-103. P. 74

^{xcviii} . On upward price mobility see Manzano, Osmel and Francisco Monaldi “The Political Economy of Oil Contract Renegotiation in Venezuela” chapter 12 in Hogan, William and Federico Struzenegger, *Populism and Natural Resources*. Cambridge: MIT Press 2009; for downward price volatility see Rosales, “Ecuador”

^{xcix} . for a discussion, see Chapter 6 “Fiscal Regimes” in Andrew Inkpen and Michael H. Moffett, *The Global Oil & Gas Industry: Management, Strategy and Finance*. Tulsa, OK: PennWell, 2011, 214-255

^c . Bernard Mommer, “The New Governance of Venezuelan Oil” Oxford Institute for Energy Studies

WPM 23 April 1998, 37; Manzano, Osmel and Francisco Monaldi “The Political Economy of Oil Contract Renegotiation in Venezuela” chapter 12 in Hogan, William and Federico Struzenegger, *Populism and Natural Resources*. Cambridge: MIT Press 2009

^{ci} . Example elaborated from Manzano and Monaldi, “Political Economy of Oil Contract Renegotiation”

^{cii} . Raymond Vernon, *Sovereignty at Bay*:

^{ciii} . Theodore H. Moran, *Multinational Corporations and the Politics of Dependence: Copper in Chile*. Princeton: Princeton University Press, 1974

^{civ} . Jason Bordoff, “The 2020 Oil Crash’s Unlikely Winner: Saudi Arabia” *Foreign Policy* May 5, 2020

^{cv} . Mommer, 2002 p. 63

^{cvi} . Ravi Ramamurti, 2001 “The ‘Obsolescing Bargain’ Model? MNC-Host Developing Country Relations Revisited” *Journal of International Business Studies* 32:1 (1st Quarter 2001) 23-39

^{cvii} . Vivoda (2009) “Resource Nationalism, Bargaining and International Oil Companies”;

Vlado Vivoda in Haslam and Heidrich 2016 p. 55

^{cviii} . Vlado Vivoda, “Bargaining Model for the International Oil Industry” *Business and Politics* 2011 13:4 1-34 doi:10.2202/1469-3569.1384

^{cix} . Antulio Rosales, “Structural Constraints in Times of Resource Nationalism: oil Policy and state capacity in post-neoliberal Ecuador” *Globalizations* 17:1 77-92 DOI: <https://doi.org/10.1080/14747731.2019.1614722> ; see also Moran, *Multinational Corporations and the Politics of Dependence*

^{cx} . Merrie Gilbert Klapp, *The Sovereign Entrepreneur: Oil Policies in Advanced and Less Developed Capitalist Countries*. Ithaca: Cornell University Press, 1987, 76-81, 92-93

^{cx} . For Colombia and Peru, Gabriela Valdivia and Angus Lyall, “The Oil Complex in Latin America: Politics, frontiers and habits of oil rule” in Julie Cupples, Marcela Palomino-Schalscha, and Manuel Prieto, eds., *Routledge Handbook of Latin American Development*, New York: Routledge, 2019 p. 461: Brazil under the Workers Party administration of Luiz Inácio Lula da Silva (Lula) did not renegotiate signed contracts

even though it halted auction for offshore fields after the massive pre-salt discoveries in 2007 and instituted a new oncontract regime specifically for the pre-salt areas. Stephen Sewalk, “Brazil’s Energy Policy and Regulation” *Fordham Environmental Law Review*. 25:3 2015: 652-705

^{cxii} . Bernard Mommer, a highly respected oil analyst who worked in Venezuela and the Oxford Institute for Energy Studies, is a fine example of how difficult it is for business-focused oil nationalists to prevail over their statist compatriots if domestic institutions cannot constrain their desire to use oil wealth for patronage. He wound up violating his own recommendation of 1994 regarding the role of the NOC when he became Vice-Minister of Oil and a member of the PDVSA Board of Directors. Cf., Bernard Mommer, “The Political Role of National Oil Companies in Exporting Countries: The Venezuelan Case” Oxford Institute for Energy Studies, WPM 18, September 1994 and the discussion in Chapter 8 of this book.

^{cxiii} . George W. Grayson, "The San José Oil Facility: South-South Cooperation." *Third World Quarterly* 7, no. 2 (1985): 390-409

^{cxiv} . Brian Levy and Pablo T. Spiller, *Regulations, Institutions, and Commitment: Comparative Studies of Telecommunications* Cambridge: Cambridge University Press, 1996.

^{cxv} . J. Luis Guasch and Pablo Spiller, *Managing the Regulatory Process: Design, Concepts, Issues, and the Latin America and Caribbean Story* Washington, D.C.: The World Bank, 1999 pp. 27-29.

^{cxvi} . Nancy Postero, *The Indigenous State Race, Politics, and Performance in Plurinational Bolivia* Oakland: University of California Press, 2017. DOI: <http://doi.org/10.1525/luminos.31> ; Hindery, *From Enron to Evo*

^{cxvii} . Jan Paulsson, “The Power of States to Make Meaningful Promises to Foreigners” *Journal of International Dispute Settlement*, Vol. 1, No. 2 (2010), pp. 341–352 doi:10.1093/jnlids/idq013.

^{cxviii} . Barbara Geddes, *Politician’s Dilemma: Building State Capacity in Latin America*, Berkeley: University of California Press, 1996, 14.

^{cxix} . cf., Rosales 2020 “Structural constraints”; Haslam and Heidrich, “From Neoliberalism...” 10-11

^{cxx} . Silvana Tordo with Brandon S. Tracy and Noora Arfaa, *National Oil Companies and Value Creation*, World Bank Working Paper No. 128, Washington, D.C.: The World Bank, 2011, 28.

^{cxxi} . “The Changing Role of National Oil Companies in International Energy Markets” Baker Institute Policy Report, James A. Baker III Institute for Public Policy, Rice University Number 35 April 2007 pp. 5-6; Tordo *National Oil Companies and Value Creation*.

^{cxxii} . cf., Duncan Snidal, “Public Goods, Property Rights, and Political Organizations” *International Studies Quarterly*, Vol. 23, No. 4 (December 1979), 532-566; Bruce Bueno de Mesquita and Alastair Smith, “Political Succession: A Model of Coups, Revolution, Purges, and Everyday Politics” *The Journal of Conflict Resolution*, Vol. 61, No. 4 (April 2017), pp. 707-743

^{cxxiii} . Snidal, “Public Goods...” p. 539

^{cxxiv} . Klaus Desmet, Ignacio Ortuño-Ortín and Shlomo Weber “Peripheral diversity: transfers versus public goods” *Social Choice and Welfare*, Vol. 49, No. 3/4, (December 2017), p. 788 relates a country’s diversity to the pursuit of language homogeneity, schooling, and the location of roads and railroads Trey Billing, “Government Fragmentation, Administrative Capacity, and Public Goods: The Negative Consequences of Reform in Burkina Faso” *Political Research Quarterly*, Vol. 72, No. 3 (September 2019), pp. 669-685 examines nighttime light intensity; poor relief is the subject in Masayuki Tanimoto, “Introduction” in *Public Goods Provision in the Early Modern Economy: Comparative Perspectives from Japan, China, and Europe* Masayuki Tanimoto and R. Bin Wong, editors, Berkeley: University of California Press; United Nations Industrial Development Organization, *Public Goods for Economic Development* Vienna, 2008 focuses on international public goods for development.

^{cxxv} . Michael L. Ross, “The Political Economy of the Resource Curse” *World Politics* 51(2) 297-322

^{cxxvi} . Thad Dunning, *Crude Democracy: Natural Resource Wealth and Political Regimes* New York: Cambridge University Press, 2008

^{cxxvii} . Guillaume R. Fréchette and John H. Kagel, “Pork versus public goods: an experimental study of public good provision within a legislative bargaining framework” *Economic Theory* April 2012, Vol. 49, No. 3, Symposium on Political Economy (April 2012), pp. 779-800; Indridi H. Indridason, “Executive veto power and credit claiming: Comparing the effects of the line-item veto and the package veto” *Public Choice* , March 2011, Vol. 146, No. 3/4 (March 2011), pp. 375-394

^{cxxviii} . Significant contribution to national development is generally recognized as a characteristic of a public good. Tanimoto and Wong, eds., *Public Goods Provision*

^{cxxix} . Werner Baer, “Import Substitution and Industrialization in Latin America: Experiences and Interpretations” *Latin American Research Review* Spring, 1972, Vol. 7, No. 1 (Spring, 1972), pp. 95-122; Albert O. Hirschman, “The Turn to Authoritarianism in Latin America and the Search for its Economic Determinants” in David Collier, ed., *The New Authoritarianism in Latin America* Princeton: Princeton University Press, 1979 pp. 61-98

^{cxxx} . The failure of Latin American ISI is not presented here as inherent in an ISI development strategy. The debate about national development and ISI is part of the larger debate around the role of the state, particularly that of the Developmental State, and not the subject of this book. For an overview of this debate, see Stephan Haggard, *Elements in the Politics of Development*. Cambridge: Cambridge University Press, 2021

^{cxxxii} . For example, state-owned infrastructure companies are created as public goods. But when they fail to generate their product (e.g., electricity, telephones, etc) at the low prices they are allowed to charge they rely on state subsidies and the product is rationed, usually ensuring supply to partisans of the government or groups of citizens that can easily disrupt political stability. Cf., Jaime Millan and Nils-Henrik H. von der Fehr, “Introduction” in Jaime Millan and Nils-Henrik H. von der Fehr, eds., *Keeping the Lights On: Power Sector Reform in Latin America* Washington, D.C: Inter-American Development Bank, 2003 pp. 1-16

^{cxxxii} . The complexities involved in conceptualizing and implementing governance can be appreciated in the following reviews. Jo Rowlands, “Review” *Development in Practice*,

Vol. 18, No. 6 (November, 2008), 801-804; David A. Detomasi, "Review: Mapping the Governance Terrain" *International Studies Review*. Vol. 8, No. 1 (March 2006) 101-103; Liana Joseph, "Review: Challenges in Effective Governance of Natural Resources" *Conservation Biology*, Vol. 26, No. 3 (June 2012), 578-579

^{cxxxiii} . The standard reference source for this evolution is Daniel Yergin, *The Prize: The Epic Quest for Oil, Money & Power*, Free Press, 2008

^{cxxxiv} . Consider the U.S. embargo on Cuba, which includes oil and related technology. Jens Erik Gould, "Cuba Would Welcome U.S. Oil Companies if Embargo Ends (Update 2)" Bloomberg.com April 3, 2009
www.bloomberg.com/apps/news?pid=20601103&sid=aSIKerkORLLA&refer=us# .

^{cxxxv} . cf., HRH Faisal Bin Turki 'Perspectives on the Saudi Arabian Energy Industry' Royal Institute of International Affairs in London, U.K. on December 2, 2000
<http://www.saudiembassy.net/archive/2000/speeches/page0.aspx> ; Jad Mouawad, "Saudi Officials Seek to Temper the Price of Oil" *New York Times*, January 28, 2007
<http://www.nytimes.com/2007/01/28/business/28oil.html>

^{cxxxvi} . Riots and police and military violence in multiple Venezuelan cities in 1989, known as the Caracazo, killed hundreds and forced the president to declare a state of emergency. Moisés Naím, *Paper Tigers & Minotaurs: The Politics of Venezuela's Economic Reforms* New York: Carnegie Endowment, 1993; Marc Wolfensberger, "Tehran revolts Iran Rations Gasoline, Sparks Protest in Tehran (Update3)" Bloomberg.com, June 27, 2007
<http://web.archive.org/web/20140215031151/http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a9HiN8aoQngM&refer=india> .

^{cxxxvii} . Eduardo Silva, *Challenging Neoliberalism in Latin America*. Cambridge, U.K.: Cambridge University Press, 2009

^{cxxxviii} . José A. Valdez, "Capitalization: Privatizing Bolivian Style" *Economic Reform Today*, Number One: 1998.

^{cxxxix} . David R. Mares, "Energy Cooperation and Security in the Hemisphere: Mexican Challenges and Opportunities" Task Force Policy Paper series, Center for Hemispheric Policy, University of Miami, 2009.

^{cxl} . Aldo Musacchio and Sergio G. Lazzarini, *Reinventing State Capitalism: Leviathan in Business, Brazil and Beyond*. Cambridge, MA: Harvard University Press, 2014 p. 108