UNIVERSITY OF TARTU

FACULTY OF SOCIAL SCIENCE AND EDUCATION

POLITICAL SCIENCE

Master’s thesis

The relationship between tax system and political regime in resource wealthy countries

Marie Jaksman

Supervisors: Professor Emeritus Rein Taagepera, PhD

Senior Research Fellow Andrey Belyy, PhD

Tartu, 2013

Olen koostanud magistritöö iseseisvalt ja kõik töö koostamisel kasutatud teiste autorite tööd, põhimõttelised seisukohad kirjandusallikatest ja mujalt pärinevad andmed on viidatud.

Olen nõus töö avaldamisega Tartu Ülikooli digitaalarhiivis DSpace.

/Marie Jaksman/

Abstract

This thesis exploits the relationship between taxation and level of democracy in resource abundant countries. The research is derived mainly from concepts of *rentierism* and fiscal sociology. Supporting the institutional explanation for *rentierism*, I argue that resource wealthy countries are secured with economical autonomy and therefore are not obligated to share political power more broadly with citizens in exchange for tax revenues or other forms of support. In order to analyze the linkage I have carried through three correlations using data from World Bank, IMF and Marshall, Gurr, Jaggers Polity IV . First, I find relatively strong support that resource-rich countries rely more on resource revenues than on established taxes. However, this research finds little support for the hypothesis that countries with a lower citizen taxation burden indicate resource rich autocracies. Last but not least, there seems to be no connection between the size of personal income and the type of political regime. Keeping in mind these results, this thesis proposes that fiscal policy plays a great role in the general institutional framework but the role of taxation as a secondary factor stays modest.

Contents

1. Introduction

The relationship between the wealth of natural resources and politics has raised much academic interest. There is a commonly accepted understanding that natural resources have a great influence on a country’s development, but the direction of the influence remains debatable. On the one hand, natural-resources could promote democracy. There is a variety of literature which claims that natural resource-wealthy countries tend to have better prospects for development than countries with a low level of resources[1]. The resulting framework implies that natural resources provide economical stability to countries and therefore tend to grant more democracy[2]. On the other hand, there are studies which claim resource revenues have regime-stabilizing properties. The prominent theme contends that whatever externally obtained resources enable a regime to stay in power by whatever means are best for that regime, and this is true in democracies as it is in dictatorships[3]. In this sense, natural resources do not have “antidemocratic” or “pro-democratic” properties. In addition, there are several studies that imply a negative influence from natural revenues also variously termed in the literature as “paradox of plenty” or “resource curse”[4]. The New York Times columnist Thomas Friedman argues in his article “First Law of Petropolitics”, that “the price of oil and the pace of freedom always move in opposite directions in oil-rich petrol states”[5]. According to Thomas Friedman, a country could be defined as a petrol country if they are highly dependent on oil exports and with weak institutions or authoritarian governments. The author lists Azerbaijan, Angola, Chad, Egypt, Equatorial Guinea,

[1] D`Arcy, Michelle (2012) “Taxation, Democracy and State-Building: How Does Sequencing Matter?“; *QoG Working Paper Series*, Vol. 4, p. 4.

[2] For example the case of Botswana. After becoming independent from Britain in 1966 Botswana have proved to be one of the fastest growing developing nations and model for democrats through the region. Today Botswana`s diamond industry represents one third of the country’s GDPs and account for up to 70 – 80% of its export. For more see Eigen, Peter (2005) “Avoiding the Resource Curse: What can we learn from the case of Botswana?, *Transparency International*, (URL: http://eadi.org/gc2005/confweb/papersps/Peter_Eigen.pdf, accessed May 19, 2013).

[3] Morrison, Kevin M. (2009) “Oil, Nontax Revenue, and the Redistribution Foundations of Regime Stability”, *International Organization*, Vol. 63, No. 1, pp. 107-138.

[4] See for more Stevens, Paul (2003) “Resource Impact: Curse or Blessing? A Literature Survey*” Journal of Energy Literature*, Vol. 9, No. 1, pp. 3-42; Davis, Graham A., Tilton, John E. (2005) “The Resource Curse”, *Natural Resources Forum*, Vol. 29, No. 3, pp. 233-242.

[5] Freedman, Thomas L. (2006) “The First Law of Petropolitics”, *Foreign Policy*, No. 154, p. 31.

Iran, Kazakhstan, Nigeria, Russia, Saudi Arabia, Sudan, Uzbekistan, and Venezuela as high petrol states. Therefore, countries like Britain, Norway, the United States etc, with already democratic institutions before their oil was discovered, are not subjected to the First Law of Petropolitics".

The aim of this thesis is to test the negative effect of natural resources often referred to as the *resource curse*. The fact that many of the poorest and most troubled countries in the world have a high level of resource wealth (See Figure 1) gives us reasonable evidence to believe in the harmful effect of natural resources. One of the most recent influential and comprehensive works on this topic by Michael L. Ross concludes that the oil-impedes-democracy claim is both valid and statistically robust, "…oil does hurt democracy and resource rents promote authoritarian rule[6]."

The core of the framework of this thesis is, firstly, the concept of "*rentierism*", which refers to states becoming heavily dependent on natural resource exports. Author of the *Energy Economic: Concepts, Issues, Markets and Governance* Subhes C. Bhattacharyya defines the resource export dependency as resource export revenues as a fraction of GDP. This is led by the idea that higher resource prices bring higher expected export revenues resulting in more dependency on resource export revenue for its GDP. Subhs C. Bhattacharyya identifies four indicators of resource dependency. First, the average effective export price, in constant US dollars per ton of export. Secondly, resource export importance compared to domestic use. Thirdly, oil dependency of the economy and last but not least, primary energy intensity of the economy.[7] The second central idea of this thesis is the concept of "*fiscal sociology"* by Joseph Schumpeter, referred to also as the "*taxation effect*". The purpose of revenue taxes in democratic countries is to fill the state budget and share responsibilities with its citizens. However, this "no taxation without representation" claim does not often apply to resource-rich countries. "There is no immediate need to share political power more broadly with citizens in exchange for tax revenues or other forms of support"[8]. Blessed with natural resources, a government receives sufficient revenues from the sale of natural resources, so there is no actual need

[6] Ross, Michael L. (2001) "Does Oil Hinder Democracy?", *World Politics*, Vol. 53, No. 3, p. 356.

[7] Bhattacharyya, Subhes C. (2011) *Energy Economic: Concepts, Issues, Markets and Governance*, Springer-Verlag: London, pp. 453-454.

[8] Dunning, Thad (2008) *Crude Democracy: Natural Resource Wealth and Political Regimes (Cambridge Studies in Comparative Politics)*, Cambridge University Press, p. 2.

to collect taxes from citizens. Thus, it is more likely that natural resource-rich countries tax their citizens less or not at all. Instead of collecting revenues the primary function of the state has become distributer of the revenues. Providing society with all kinds of well-being and social support has become the basis for legitimacy. In turn, it is reasonable to believe the government is less accountable to their citizenry, and the general public has less interest and chance to demand accountability and representation from their government.

The aim of this thesis is to test the linkage between taxation and regime in resource abundant countries. The general argument of this thesis takes for assumption that resource rents grant countries financial autonomy and, therefore, immunity from social pressure, since citizens are not necessarily included on the tax level, resulting in passive social outcome. The main hypothesis of this thesis contends that taxation as an institutional effect influences the level of democracy. This thesis supports the institutional approach for explaining a country's social and economic undergoing, however the results of careful empirical analysis indicate that the relationship between fiscal policy and the level of democracy is not in a linear correlation. In other words, taxation as a secondary factor within the institutional framework is not the decisive factor.

In order to analyze if the tax system in resource-rich countries could hinder democracy, I will explore three aspects of this claim. First, I will claim that mineral-wealthy countries have financial autonomy and are not obligated to collect taxes from citizens. Do resource-wealthy countries tax the population on the same basis as resource poor countries? If not, there is great reason to believe that their state budget is covered mainly by revenues from the sale of natural resources, and citizens' contribution stays modest. This leads to my second hypothesis. I claim that petrochemical-rich countries tend to be more autocratic, since citizens are not included on the tax collection level. Is it correct that democratic countries include more citizens into governing the state than autocratic countries? Do countries with higher personal taxes tend to be more democratic or not, keeping in mind the "taxation effect"? Thirdly, how does personal income influence the regime, especially in resource wealthy countries?

There have been many studies on oil and its influence on a states development[9]. However, the scholarly attention towards natural-resources in general has stayed relatively modest. I believe the relationship between natural resources and politics should be analyzed in a broader sense and not be limited only to oil. It is reasonable to expect that if the rents from oil have an undermining effect on a state`s democracy, this effect should apply to other "externally obtained" revenues as well. Secondly, the concept of "*rentier state*" has often been used in the context of the Middle East. Furthermore, many "global studies" have excluded Middle East in their studies as an exception. However, I believe there is no reasonable ground for doing so. If natural resources are truly at fault, a comprehensive study could add knowledge about the so called "*resource curse*" all over the world. It could help explain and predict political problems in resource-wealthy countries around the world, such as Nigeria, Indonesia, Venezuela, Russia etc. Thirdly, using a simple analytical model for data available for 2010 can provide us with valuable insight into the current relationship between natural resources and political systems. It would be useful to analyze if the relationship is preserved in a cross-time analysis, however, this goes beyond the scope of this research.

In the remainder of this thesis I will proceed as follows. First, I begin with outlining the central concepts of this thesis. Chapter 2, "Theoretical Framework", provides us with knowledge about previous empirical and theoretical research in the field of the *resource curse*. I will clarify the concepts of "*rentier state*" and "*taxation effect*" and describe the previous academic background. Chapter 3 describes the research design and is followed by results and discussion in Chapter 4. Chapter 5 takes a closer look on the state-economy relationship in resource rich Norway, Venezuela and Qatar. This thesis ends with a conclusion and short guidelines for further research (Chapter 6).

---

[9] See for example Michael L. Ross (2001) "Does Oil Hinder Democracy?" *World Politics*, Vol. 53, pp. 325-61; Smith, Benjamin (2006) "The Wrong Kind of Crisis", *Studies in Comparative International Development*, Vol. 40, No. 4, pp. 55-76; Karl, Terry L. (1997) *The Paradox of Plenty: Oil Booms and Petro-States*, Berkley and London: California University Press; Tsui, Kevin K. (2011) "More Oil, Less Democracy: Evidence From Worldwide Crude Oil Discoveries", *The Economic Journal*, Vol. 121, No. 551, pp. 89-115; Stevens, Paul (2003) "Resource Impact: Curse or Blessings? A literature survey", *Journal of Energy Literature*, No. 9, Vol. 1, pp. 3-42; Davis, Graham A.; Tilton, John E. (2005) "The Resource Curse", *Natural Resources Forum*, Vol. 29, No. 3, pp. 233-242.

FIGURE 1. "Countries by political regime type and resource dependency"[10]

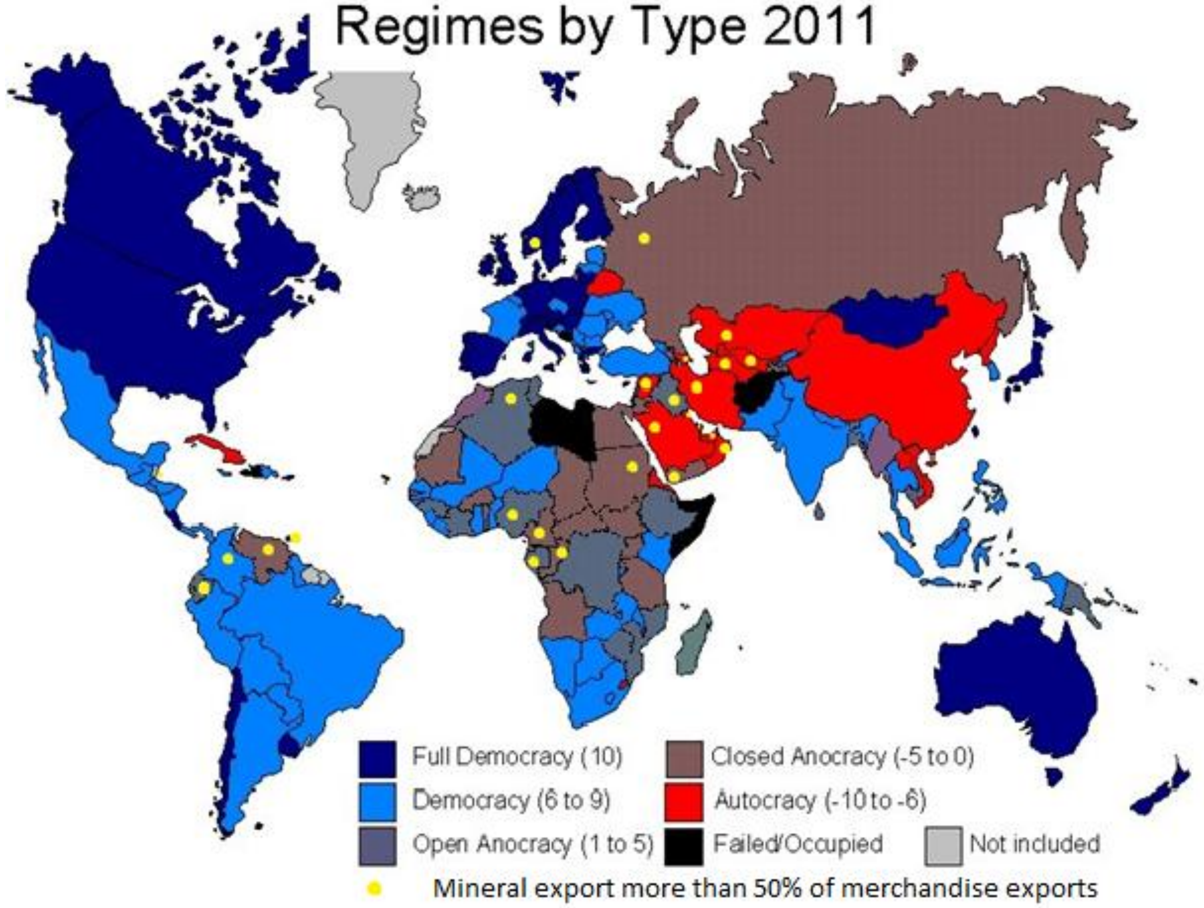


Figure 1 illustrates the relationship between mineral wealth and regime type. The figure charts countries based on their regime types by Marshall, Gurr and Jaggers Polity IV data, and countries marked with yellow dots indicate countries heavily dependent on mineral resource exports, based on data from World Bank. As we can see, half of the autocracies are heavily dependent on resources export. Moreover, 44% of resource-rich countries are labeled as strong autocracies, as compared to two resource-rich democracies out of 95 democratic countries (See Appendix 1).

[10] Own compilation based on Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) „Polity IV Individual Country Regime Trends, 1946-2010", *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2011*, (URL: http://www.systemicpeace.org/polity/polity4.htm, accessed April 22, 2013) and fuel export percentage of merchandise exports data from World Bank,
(URL: http://data.worldbank.org/indicator/TX.VAL.FUEL.ZS.UN, accessed April 22, 2013).

2.Theoretical Framework

This thesis presents an institutional approach for explaining the negative social and economic performance in resource abundant countries. I claim that taxation as a part of the general institutional framework has a great influence on democratic development. In the following chapter I will provide a general overview of the debate over the political economy of resource curse and a short empirical background for the reasons. I will concentrate more closely on the *theory of rentierism* and the *"taxation effect*".

2.1 The political economy of the resource curse

It is clear, that revenues from natural resources create opportunities for countries to develop faster than they would otherwise do. However, except for a few cases, the natural resource rich countries have experienced lower economic growth and social performance than countries without natural resources – a phenomenon often referred to in academic literature as *resource curse*. The debate over how natural resources affect economic and social development is still relevant and receives significant academic attention. Although there is a general acceptance that natural resource abundant countries tend to perform economically worse, explanations for the reasons are still debatable. The debate is diversified by using different units for analyzing and by chosen methods and available data. All in all, for understandable reasons it is important to understand the reasons why natural resources undermine economic and social development, especially for countries struggling with resource wealth. Before, digging into the crucial concepts of this thesis, I will review the academic literature, both empirical and theoretical, for the reasons of economic and social undergoing in resource rich countries.

Before we can continue, there has to be questioned if the resource curse really exist. The negative link between resource wealth and economic performance was demonstrated in the 1980s. However, the term was not proposed before 1993 by British economist Richard M. Auty to describe the social and economic undergoing of resource-rich countries[11]. More recently, among other empirical researches, van der Ploeg gives a comprehensive overview of the effects of natural resources and emphasizes that the effects and outcomes of having natural resources varies considerably[12]. In this light, one of the first and most comprehensive studies in the field was carried through by Jeffrey D. Sachs and Andrew M. Warner in "Natural Resource Abundance and Economic Growth"[13]. Analyzing ninety seven countries from 1971 to 1989 by using the share of exports of products in the gross national product, the results confirmed the negative relationship between economic development and resource abundance. Michael L. Ross, claims in his comprehensive analysis "Does Oil hinder Democracy?" that wealth from natural resources makes states less democratic. He argues that this idea has not been subjected to careful statistical tests, and is simply overlooked as an explanatory variable. Results from Kevin K. Tsui support Michael L. Ross findings. His article "More Oil, Less Democracy: Evidence from Worldwide Crude Oil Discoveries" concludes that discovering 100 billion barrels of oil lowers a countries democracy level by almost 20 percentage points below trend after three decades[14]. Taken into account the several number of scholar works and convincing empirical research, there is enough evidence to believe that the resource-rich countries follow different path of development and are struggling to use the natural wealth efficiently.

There is a variety of literature analyzing the reasons for poor resource management resulting in low economic and social performance in resource abundant countries. Although the results have stayed fragmented we could allocate the explanations into four main categories. First, the earliest explanation emerged from explaining Netherlands`s negative economic performance after enormous oil discoveries in the North Sea. The approach, called *"Dutch disease"*, suggested more economic reasons for decreasing economic growth, emphasizing mainly the role of markets. In the core of the theory lies the non functioning linkage between resource and non-resource export

[11] Auty, Richard M. (1993) *Sustaining Development in Mineral Economies: The Resource Curse Thesis,* London: Routledge.
[12] van der Ploeg, Frederick (2011) "Natural Resources: Curse or Blessing?" *Journal of Economic Literature*, Vol. 49, No.2, pp. 366-420.
[13] Sachs, Jeffrey D.; Warner, Andrew M. (1995) "Natural Resource Abundance and Economic Growth", *NBER Working Paper,* No. 5398.
[14] Tsui, Kevin K. (2011) "More Oil, Less Democracy: Evidence From Worldwide Crude Oil Discoveries", *The Economic Journal*, Vol. 121, No. 551, pp. 89-115.

sector. In other words, the theory of *Dutch disease* claims that exporting natural resources could strengthen a nation`s currency compared to other nations and making the manufacturing sector less competitive, resulting in low economical growth[15].

Several other approaches give social reasons more prominence. Ivar Kolstad and Arne Wiig refer to it as "decentralized explanations for resource curse"[16], also titled as societal explanations by Ross[17], concentrating on the incentives of the private or public agents outside the power elite. In the core of this approach lies the assumption that natural resources create a self-enrichment mentality. In other words, the rents from natural resources allure entrepreneurs in the productive sector to become rent seekers. There is a significant number of papers analyzing how the social mechanisms are causing the unproductive exploitation of rents. In this case, however, one of the main models by Mehlum, Moene and Torvik illustrates the idea with producers and grabbers equilibrium[18]. When producers enter the process of rent seeking, the opportunity cost (the next-highest-valued alternative use of that resource) declines, which evokes more grabbers. However, authors emphasize that the outcome of this equilibrium depends on the quality of institutions. Strong institutions are able to keep off the rent seeking even with increasing natural resources, while adding natural resources to this equilibrium with weak institutions creates more grabbers. Another example is provided by Ragnar Torvik showing the negative attraction of resource booms by reducing the number of entrepreneurs running productive, wealth creating firms in the public sector[19]. Thorvaldur Gylfason further exemplifies that the abundance of natural resources decreases investments especially in human capital, resulting in slow economic development[20].

[15] For more look van der Ploeng, Frederick; Poelhekke, Steven (2009) „Volatility and the Natural Resource Curse", *Oxford Economic Papers*, Vol. 61, No. 61, pp. 727-760.
[16] Kolstad, Ivar; Wiig, Arne (2009) „Political Economy Models of the Resource Curse: Implications for Policy and Research", *Governance of Africa`s Resources Program*, No. 40, pp. 1-19.
[17] Ross, Michael L. (1999) „The Political Economy of the Resource Curse", *World Politics*, 51, pp. 297-322
[18] Mehlum, Halvor; Moene, Karl; Torvik, Ragnar (2006) „Institutions and the resource curse", *The Economic Journal*, No. 116, pp. 1-20.
[19] Torvik, Ragnar (2001) „Natural resources, rent seeking and welfare", *Journal of Development Economics*, Vol. 67, pp. 455-470.
[20] Gylfason, Thorvaldur (2001) „Natural resources, education and economic development", *European Economic Review*, Vol. 45, pp. 847-859.

Thirdly, one modification of the previous approach is the cognitive explanation for resource curse, which contends that "resource booms produce a type of short–sightedness among policymakers"[21]. Meaning, that instead of long-term development, immediate bounties are chosen. According to this approach, profitable resources generate competition that could control these and this, in turn, could lead to conflicts and rent seeking. This idea is supported by a comprehensive analysis by Eoin F. McGuirick who argues that new unearned revenues from oil selling create political competition and dysfunctional behavior. Leading powers use every means to secure their position and therefore the state's development stays in the background. Others argue that natural resource abundance leads to greater corruption and inefficient bureaucracies. For example, the IMF working paper by Carlos Leite and Jens Weidmann argues that natural resource dependence causes not only economic slowdown but also makes countries more open to risk of violent conflict, greater inequality, less democracy and more corruption[22].

Fourthly, by far the most common and latest explanations for the resource curse have been political reasons or so-called state-centered approaches mixing cognitive, societal and institutional arguments, often referred to as *theories of the rentier state*. The institutions term has posed a great deal of scholarly attention. International Monetary Fund working paper by Andrei A. Levchenko defines institutions as "a wide range of social structure affecting economic outcomes: contract enforcement, property rights, shareholder protection, the political system and the like"[23]. Carlos Pareira and Vladimir Teles continue by saying that "political institutions, formal and informal, determine both the constraints and incentives faced by key players in a given society. The political institutions are capable of decreasing risks opportunistic behavior of political and economic players"[24]. Although a concrete definition for a "good political institution" is missing it is often referred to as institutions operating without patronage, rent-seeking,

---

[21] Ross, Michel L. 1999: 298.

[22] Leite, Carlos; Weidmann, Jens (1999) "Does Mother Nature corrupt? Natural resources, corruption and economic growth*", IMF working paper 99/85.*

[23] Levchenko, Andrei A. (2004) „Institutional Quality and International Trade", *IMF Working Paper*, Vol. 4, No. 231, p. 3.

[24] Pereira, Carlos; Teles, Vladimir (2011) "Political Institutions, Economic Growth, and Democracy: The Substitute Effect", *Brookings*, (URL: http://www.brookings.edu/research/opinions/2011/01/19-political-institutions-pereira, accessed May 9, 2013).

corruption and intimidation and their capacity to keep the rules of the contract. *The Paradox of Plenty* by Terry Lynn Karl explains, after analyzing six case studies, that natural resource wealth leads to impropriate fiscal reliance on petrodollars and public spending, resulting in destabilizing the regimes and weakening state institutions[25]. Kjetil Bjorvatn, Mohammad R. Farzanegan, and Friedrich Schneider modified these results and found a mountain of evidence of harmful effects of resource revenues in countries with weak governments. According to the authors, revenues are best used in countries with strong governments outperforming the strength of other institutions. "Indeed, with a strong government, resource wealth is likely to be growth enhancing, even when institutions are relatively weak"[26].

As previously illustrated, institutions are the key elements mediating the effects of natural resources to economic development. According to Ivar Kolstad and Arne Wiig the boundaries between decentralized and centralized approaches remain blurry[27], meaning that there is no pure example of one of them. Analyzing centralized models require some variables from centralized models and *vice versa*. Michael L. Ross adds that decentralized models offer an easy and tempting way to explain the resource curse; however, this approach misses empirical proof[28]. It is very difficult to scientifically prove the incentives of decision makers and the connections between the wealth of revenues and the slow economic growth.

In this thesis I will support the institutional approach to the resource curse. "Institutions constitute rules of the game that influence the positive and negative effects of resource rents and their relative dominance in a both centralized and decentralized political economy"[29]. The economic problem of a resource abundant country is not only the question how to manage resources but also how to secure the best use of resources. And this is done by strong and transparent institutions. Next, I will take a closer look on the *rentier state* theory and, later, present the effects of institutional inability to fiscal capacity.

[25] Karl, Terry L. (1997) *The Paradox of Plenty: Oil Booms and Petro-States (Studies in International Political Economy),* University of California Press.
[26] Bjorvatn, Kjetil; Farzanegan, Mohammad R.; Schneider, Friedrich 2012: 1308.
[27] Kolstad, Ivar; Wiig, Arne 2009: 9.
[28] Ross, Michael L. 1999: 310.
[29] Kolstad, Ivar; Wiig, Arne 2009: 15.

2.2 Theory of *rentierism*

Before we can learn how tax systems influence the political regime in natural resource wealthy countries we have to understand the concept of "*rentierism*" and "*rentier state*". The concept has raised several intellectual debates; however mutual agreement on how to define *rentierism/rentier state* is still missing. The concept of the "*rentier state*" was first postulated by Hussain Mahdavy with respect to pre-revolutionary Pahlavi Iran in 1970, since then it has been widely used to refer to mainly oil-rich countries in the Arab world[30]. The theory refers to countries which derive a substantial part of their revenue from external economic rent. In a broader sense the rent is understood as "the income derived from the gift of nature"[31]. In this light, every country is considered more or less a *rentier* state. Understanding more social function behind this idea, the concept was revisited by Hazem Beblawi. Author of *The Rentier State in the Arab World* suggested that for a country to be identified as a *rentier state* it has to fulfill four basic elements[32]. Firstly, based on its predecessor, Beblawi stated that the rent situation has to predominate. However, the author admits that the percentage remains a matter of judgment. Secondly, the rents are paid by foreign actors and therefore can sustain without a strong domestic production sector. Thirdly, while these two previous conditions constitute a *rentier economy*, in order to become a *rentier state* only a few are engaged in the generation of this rent (wealth) and the majority are only involved in the distribution or utilization of it. This means that the creation of general wealth is in the hands of a very limited group. Last but not least, the main receiver and the benefiter is the state government. This means that economic power is closely linked to political power, which gives governments the possibility to distribute wealth within their own best interests.

[30] Yates, Douglas A. (1996) *The Rentier State in Africa: Oil Rent Dependency and neocolonialism in the Republic of Cabon*, Threnton, NY: Africa World Press, p. 11.
[31] Marshall, Alfred (1920) *Principles of Economics*, London: Macmillan and Co., Ltd, 8th edition, p. 350.
[32] Beblawi, Hazem (1987) "The Rentier State in the Arab World", *The Rentier State*, edited by Beblawi, Hazem and Luciani, Giacomo, Croom Helm, pp. 51-52.

Hussain Mahdavy was mainly interested in cases in which “effects of the oil sector are significant and yet the rest of the economy is not of secondary importance”[33]. Also, Hazem Beblawi argues that although, the *rentierism* is mostly seen in oil rich countries, the concept is not exclusively about oil. However, not all natural resources produce rents for the country. The author of the *Crude Democracy* Thad Dunning defines natural resources that produce rents as resources that are geographically concentrated, generally capital-intensive in production, and pose high barriers to entry for many private actors. Resources that produce rents are relatively easy for the state to tax, and taxing these sectors generally does not involve separating a wide swatch of citizens from their private income[34]. In this sense, being dependent on exporting natural resources like coffee beans or fruits does not count as *rentierism*. Last of all, although the concept of *rentierism* stays arbitrary, we can see that the main characteristic ground for *rentierism/rentier state* is the *rentier mentality*, which refers to the broken classical economic concept of work-reward causality.

There are three commonly accepted causal mechanisms underlying the argument that *rentierism* harms democracy. First, the “*rentier effect*” implies that *rentier states* have a “blessed position” thanks to financial autonomy. Michael L. Ross distinguishes three sub-categories. The *“taxation effect”* claims that governments derive sufficient revenues from the sale of oil and therefore do not tend to tax the population very heavily. The *“spending effect”*, claiming that resource wealth may lead to greater spending on patronage, which in turn deepens the pressure for democratization[35]. Last but not least, the *“group formation”* effect. Ross argues, that secured with revenues, the government tries to prevent the formation of social groups that are independent from the state and hence that would be inclined to demand political rights[36]. However, the freedom from levying taxes “release[s] the state from the accountability ordinarily exacted by domestic appropriation of surplus. “…The state may be virtually completely autonomous from its society, winning popular acquiescence through distribution rather

[33] Mhadavy, Hossain (1970) “The Pattern and Problems of Economic Development in Rentier States: The Case of Iran“, *Studies in the Economic History of the Middle East: From the Rise of Islam to the Present Day,* edited by Cook, Michael Allan, Oxford: Oxford University Press, p. 431.
[34] Dunning, Thad 2008: 28.
[35] Ross, Michael L. 2001: 333.
[36] Ross, Michael L. 2001: 334.

than support through taxation and representation[37]". The second causal mechanism could be called the *"repression effect",* which implies states have a capacity to buy off and repress the opposition. This also refers to greater military expenditures in securing the regime. According to Michael Herb, these two previous mechanisms could be brought under the concept of "*rentier social contract*", meaning that the state provides goods and services to society, who will in turn provide state officials with a degree of autonomy in decision-making[38]. The third causal mechanism is called the "*modernization effect*", which argues that resource revenues limit socioeconomic changes. This means that oil-driven development often has an influence on state-market relations and deviate the balance redundantly towards the state.

In this paper I will support the first claim that resource wealth causes governments to perform poorly in economic development because of a "blessed" economic situation. In the following part I will continue with "*taxation effect*" in more detail. Governments are responsible for implementing taxation systems and by doing so increase the demand for democratic accountability. However, in the *rentier economy*, which refers to an economy where revenue is more of an "occurred" rent than an "earned" income[39], the wealth is concentrated around a small fraction of the society and, blessed with financial autonomy, they are not willing to give up their privileges.

2.3 Taxation and political regimes

In the following section I will take a look at the linkage between taxation and level of democracy in resource abundant countries. I will argue that taxation as a secondary factor within an institutional approach has influence on the social outcome, however, not as strong as political institutions themselves.

The common belief that taxes can foster a democracy lies in the interpretation of political development in early modern Europe and colonial America[40]. Foremost it

[37] Anderson, Lisa (1987) "The State in the Middle East and North Africa", *Comparative Politics*, Vol. 20, No. 1, p. 10.
[38] Herb, Michael (2005) "No Representation without Taxation? Rents, Development, and Democracy", *Comparative Politics*, Vol. 37, No, 3, p. 300.
[39]Beblawi, Hazem 1987: 86.
[40] Ross, Michael L. (2004) "Does Taxation Lead to Representation?", *B.J. Pol. S.,* Vol. 34, p. 230.

refers to modern European history, when monarchies were obliged to hand over some of their authority to parliamentary institutions, in exchange for the ability to raise new taxes. Until 16th century the sovereignty of monarchies in Europe was derived from their own private properties. While missing the right to tax, the falling of feudal organizations and the state`s increasing military expenditures raised the need for extra income. However, taxing was not thinkable without giving citizens back some social securities. No matter what the taxes were used for – to cope with emergencies above with war, the monarchy had to give up some degree of power. Adding a public sphere to the ruling of the state gave birth to the modern state. Many scholars of US history bring up the example of the Revolutionary War in 1760s, when the British government introduced three new measures to collect more taxes. In order to cover the Seven Years War the Sugar Act, the Stamp Act and the New Townshend levies were implemented. Most historians believe that this taxation without consent lead to rebellions, boycotts and organized resistance which helped to produce riots that finally resulted in independence and governments with strong representative institutions. In other words, this bargaining with the authority for tax contribution lead the way for a modern democracy with representative institutions. Keeping this in mind, it is no surprise that "in many countries voting rights have been linked to tax contributions, both rhetorically and practically"[41].

This previously described *fiscal sociology* paradigm is advanced by Joseph Schumpeter. In the early twentieth century Schumpeter developed a theory that claimed taxation was central to state-building. The general assumption is that „the budget is the skeleton of the state stripped of all misleading ideologies"[42] other than democracy. In other words, the fiscal pressure of the state reshapes the people and government. However, it does not mean that the fundamental change in the social structure could be brought out by changing the structure of revenues, rather it reflects that the state`s nature has changed and attitudes toward life and its culture cannot stay the same. According to Schumpeter, this sharing authority and the responsibilities had several benefits for both sides. However, this consensual path tended to benefit rulers only in the long run. In the short

[41] Moore, Mick (2004) "Revenues, State Formation, and the Quality of Governance in Developing Countries", *International Political Science Review*, Vol. 25, No. 3, p. 302.
[42] Schumpeter, Joseph (1991) *Crisis of the Tax State*, Springer, US, p. 7.

term they took the risk of sharing power and decisions. But most importantly, „rulers dependent on taxes developed a stake in the prosperity of (some of) their citizens and therefore faced incentives to promote that prosperity, which, in turn, would generate more revenues and strengthen the state“[43].

The linkage between fiscal policy and political regime has generated great empirical analysis. Although the positive effect on the regime is commonly posed, the empirical assessments come to different conclusions and empirical proof has stayed modest. José Antonio Cheibub has analyzed the problem of different taxation systems in different political regimes. His "Political Regimes and the extractive Capacity of Governments: Taxation in Democracies and Dictatorships" finds support for the claim that taxes tend to be higher in democracies than in dictatorships. However, the author admits, that "we should not infer that this is due to any inherent feature of democratic regimes"[44]. Meaning that differences in the taxation systems in different political regimes are not brought upon the inability to collect taxes efficiently. Both democracies and dictatorships are capable of collecting taxes equally and the differences lie somewhere else. Lead by this, Eoin F. McGuirck used micro-level data from public opinion surveys across sub-Saharan countries and to find clear evidence in support of the "resource rents lower the taxation burden" hypothesis. Eoin F. McGuirick argues that an "increase in resource rents lowers perceived tax enforcement, which itself is a significant predicator of the demand for accountability (a one point increase in perceived tax enforcement raises the demand for accountability by around third of a point. Both are measured on four-point scales)[45]. These results are also supported by "Sovereign rents and quality of tax policy and administration" by Stephen Knack who finds plenty of evidence for the claim that resource revenues reduce the quality of the taxation system[46]. Michael L. Ross also raises the question between taxation and democracy in a comprehensive research "Does Taxation Lead to Representation". The main question is whether democracies have a higher taxation burden since they produce more representation or

[43] Moore, Mick 2004: 300.
[44] Cheibub, José A. (1988) "Political Regimes and the extractive Capacity of Governments: Taxation in Democracies and Dictatorships", *World Politics*, Vol. 50, No. 3, p. 373.
[45] McGuirck Eoin F. (2013) "The illusory leader: natural resources, taxation and accountability", *Public Choice*, Vol. 154, p. 287.
[46] Knack, Stephen (2009) "Sovereign rents and quality of tax policy and administration", *Journal of Comparative Economics,* Vol. 37, pp. 359-371.

not? The author concludes that there is no connection between higher taxes and social outcome. Works by Paola Profeta, Ricardo Puglisi and Simona Scabrosetti[47] and the „Rentier Wealth, Unruly Law, and the Rise of Opposition“ by Gwenn Okruhlik [48] did not find any significant correlation between tax revenue and democratic institutions or the protection of the civic liberties. Similarly to José Antonio Cheibub, Ross finds that if taxation has a catalytic effect for a democracy, there is a critical ambiguity, in the sense that it is unclear "whether democracy is linked to a higher absolute tax burden ("pure anti tax" model), or a higher tax burden relative to the services the government provides ("cost-benefit" model)[49]". However, there seems to be strong support for a higher tax burden relative to the services the government provides. In other words, it suggests that taxes in general do not have a democratic effect but a rise in the government`s expenditures is linked to the level of democracy. An increase in the government`s services brings more democracy. Therefore, "measures that help authoritarian governments lower the price of government services will, *ceteris paribus*, tend to have anti-democratic effects; policies that force them to raise the price of government services will tend to have pro-democratic effects"[50]. These results are modified by Kevin M. Morrison who argues that externally obtained revenues have a stabilizing power, in a sense these revenues enable a democratic or autocratic regime tostay in power by whatever, means are best for the regime. "The causal mechanisms are that this revenue provides the regime with a greater ability to appease citizens, and thereby prevent a revolution or transition to democracy"[51]. Meaning that democracies provide elites with lower taxes and autocracies provide society with more social securities. Jørgen J. Andersen also tested the influence of oil revenues on government spending and after conducting an unbalanced panel of 63 democratic countries, in the period 1970 – 2001 he concludes that changes in the governmental revenue have effect

[47] Profeta, Paola; Puglisi, Riccardo; Scabrosetti, Simona (2012) "Does democracy affect taxation and government spending? Evidence from developing countries", *Journal of Comparative Economics*, (URL: http://dx.doi.org/10.1016/j.jce.2012.10.004, accessed April 22, 2012).
[48] Okruhlik, Gwenn (1999) "Rentier Wealth, Unruly Law, and the Rise of Opposition: The Political Economy of Oil States", *Comparative Politics*, Vol. 31, No. 3, pp. 295-315.
[49] Ross, Michael L. 2004: 234.
[50] Ross, Michael L. 2004: 247.
[51] Morrison, Kevin M. 2009: 113.

only for the presidential government expenditures but not for presidential parliamentary expenditures[52].

[52] Andersen, Jørgen J. (2009) „The form of government and fiscal dynamics", *European Journal of Political Economy*, Vol. 27, p. 306.

3. Research design

For better understanding of the effects of taxation for political regimes, I will execute an empirical analysis. In order to test the main hypothesis I will make three secondary hypotheses. First, I claim that resource-wealthy countries have different taxation systems. Second, mineral-rich countries tend to be more autocratic, since citizens are not made sufficiently accountable by the taxation system. Last, but not least, I argue that personal income is influenced by the type of political regime. The following chapter will give a detailed overview of the hypothesis, methods for testing them and used data.

3.1. Hypothesis and methods for testing them

By analyzing the linkage between taxation and level of democracy, I presuppose that rents from natural resources provide governments with economical autonomy, that they are not in need to extract taxes from citizens as heavily as resource-poor countries and therefore have a greater negative effect on social outcome. This research question is derived amongst others from the previously mentioned Joseph Schumpeter "fiscal sociology" and also Samuel L. Huntington`s argument in his *The Third Wave: Democratization in the Late 20th Century* - "the lower the level of taxation, the less reason for the public to demand representation"[53]. In order to test the relationship between taxation and the political regime, a careful empirical analysis is needed.

Hypothesis #1: *Resource-wealthy countries have a different taxation system*

To start with, I will take a closer look at what the relationship between the tax system and personal income in countries rich in natural resources is. I assume that mineral wealthy countries have more financial autonomy and less immediate pressure to collect taxes from citizens. This raises the question whether resource wealthy countries tax the population on the same basis as resource-poor countries? If not, there is great reason to believe that the revenues from the sale of natural resources allow the government

[53] Huntington, Samuel P. (1991) *The Third Wave: Democratization in the Late 20th Century*, Norman: University of Oklahoma Press, p. 65.

financial independence from its taxpayers` money, thus setting the stage for decreased democracy.

Hypothesis #2*: Mineral-rich countries tend to be more autocratic, since citizens are not made sufficiently accountable by the taxation system*

Do resource-rich countries follow the same rules in tax systems as resource-poor countries? By asking this I will check the "taxation effect" claim for the year 2010. It suggests that when the government gathers sufficient revenues from the sale of oil, it tends to be less reliant on its tax payers and the public in turn will be less likely to demand accountability from – and representation from – their government[54].

Hypothesis #3: *The type of political regime influences personal income*

In order to control previous results I will analyze how personal income is influenced by the regime. If resource-rich countries are more likely to be associated with inefficient tax-systems it will result in a negative impact on personal income. As a result of the low productivity of private investments and business.

3.2 Data and methodology

In this thesis resource-wealthy countries are indicated by share of minerals export in merchandise export (%) by World Bank (SITC section 3). According to the United Nations Statistics Division these minerals are coal, coke and briquettes, petroleum, petroleum products and related materials, gas (natural and manufactured) and electric current[55]. I have analyzed the share of exports of natural resources, since it expresses the dependency of resource exportation and because revenues from this export are the main source for the governmental budget. It's a matter of variety in a country's exports, not to become over dependent on fluctuations in a single product's price on international market. I have listed moderate resource dependent countries whose export of natural resources from merchandise exports is between 30-50% and heavily dependent resource-rich countries, where export of natural resources constitutes more than 50% of

[54] Ross, Michael L. 2001: 332.

[55] United Nation Statistics Division, Detailed structure and explanatory notes, SITC rev. 3, (URL: http://unstats.un.org/unsd/cr/registry/regcst.asp?cl=14, accessed April 22, 2013.)

merchandised exports. By doing this, many resource-rich countries like Australia, Canada, United Kingdom, United States of America are not included in this analysis, since the export of fuels remains under 30 % of merchandise exports.

Do resource-wealthy countries tax the population on the same basis or not? To test this claim, I use the variable "logincome1000" measured as the natural log of per capita Gross National Income (GNI) in 2010 with data from the World Bank[56]. This indicator developed by the World Bank reflects the average income of a country's citizens and since the indicator is closely linked with other important indicators that measure the social, economic, and environmental well-being, it decently reflects the general economical strength. The second variable "taxes % GDP", which indicates annual % of revenue taxes from countries` GDP with data collected by IMF in 2010 (Graph 1). It is important to point out that the data of the tax revenues creates great obstacles for this thesis. The data has been unpublished for many main resource exporting countries, since it might be considered sensitive data. In order to cover more countries this thesis includes the latest data for available from 2010. (See full data for "taxes as percentage of GDP" Appendix 2)

Secondly, I will analyze whether countries with higher taxes tend to be more democratic and where natural resource-rich countries are positioned? I assume that mineral rich countries tend to be more autocratic, since citizens are left out by the taxing system. Do countries with higher personal taxes tend to be more democratic or not, keeping in mind the "taxation effect"? Is it true, that democratic countries combine more citizens into governing the state than autocratic countries? To test this claim I correlated the type of regime ("autdem") and tax revenue percentage of GDP (taxes%GDP) (Graph 2). For „autdem" variable I used Marshall, Gurr and Jaggers PolitiyIV data for the year 2010. The Polity IV dataset covers all the major independent states in the global system, (i. e., states with total population of 500, 000 or more in the year 2010 164 countries) over the period 1800 – 2010[57]. I believe this data reflects the nature of the regime better than the alternative Freedom House Index, since the latter reflects only the individual and

[56] See full data World Bank, (2010) GNI per capita, PPP (current international $), (URL: http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD, accessed May 1, 2013).

[57] Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) "Polity IV Data Series version 2011", *Polity IV Project: Political Regime Characteristics and Transitions, 1800 – 2011,* (URL: http://www.systemicpeace.org/polity/polity4.htm, accessed April 22, 2013).

political freedoms. Measuring narrowly the attributes of regime themselves, Polity IV gives more direct measure of how representative a regime is. Since Marshall, Gurr and Jaggers` data consists of two data sets which evaluate the democracy and autocracy I co-bound these data’s by subtracting country’s autocracy score from its democracy score, and recalibrating the resulting – 10 to + 10 scale to a 0 to 10 scale, where 10 represents a full democracy and 0 a full autocracy.

Thirdly, how is the personal income affected by the regime in resource-wealthy countries? In order to control previous results, I checked how personal income and type of regime interacts with each other. Do revenue windfalls have an effect on income growth or not? For that purpose I correlated variable “autdem” data from Marshall, Gurr and Jaggers Polity IV for 2010 and variable “LogIncome1000” data from World Bank for year 2010 (Graph 3).

4. Results and discussion

In the following chapter I will analyze the results in depth. After carrying through an empirical research the results show that the relationship between taxation and political regime is not linear and the link is not as significant as one would expect.

4.1 Hypothesis #1: Resource-wealthy countries have a different taxation system

The “logincome1000” vs. “Taxes% GDP” scatter plot (Graph 1) indicates that resource-rich countries tend to establish a different kind of taxation systems compared to resource-poor countries. Resource-rich countries tend to have higher incomes and less heavy taxation. Above the best fit line we could only find Norway, Algeria and Bolivia, all other resource-wealthy countries stay below the best fit line. Below the best fit line there are 13 resource-rich countries, which is more than 9% of total countries presented in this correlation. Countries with fuel export 30-50% of merchandise exports totaled over 2 percentage points and countries with more than 50% of fuel export totaled 5 percentage points below the best fit line (See Table 1). Based on that we could claim that in mineral-rich countries (export more than 30% of merchandise exports), a higher income translates to lower taxes. However, in mineral-poor countries a higher income means higher taxes. This slightly confirms our expectations that resource-rich countries rely more on resource revenues than on established taxes. Although there are some deviations, e.g. Algeria. We can see that Algeria relates more to resource-poor countries with a relatively high personal income and established high taxation burden. A more closer look is needed to understand the reasons for such unusual linkage between taxation system and level of democracy. An analytical explanation will be given in next subchapter.

GRAPH 1. „Taxes as percent of GDP vs. Log of Income in 1000 USD“

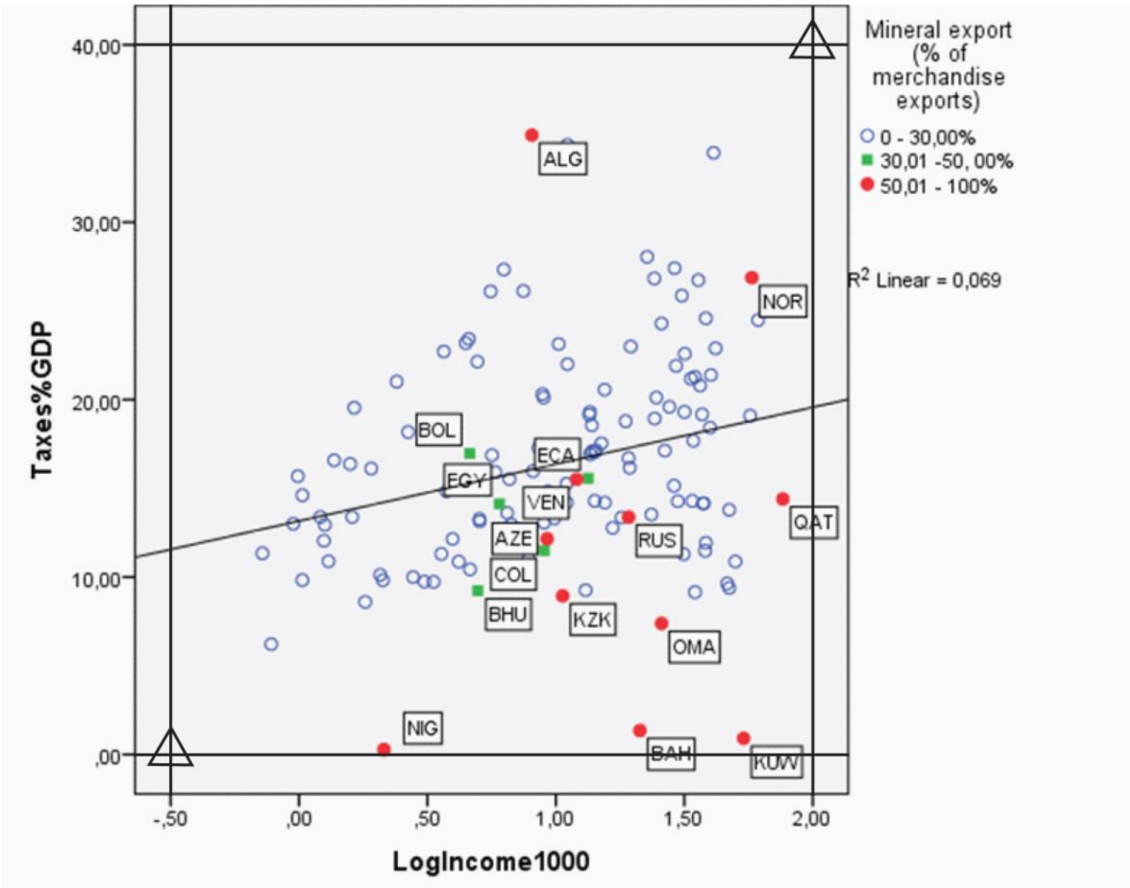


TABLE 1. “ The position of natural resource exporting countries”

Fuel export %	Fuel Export 30 – 50%	Fuel export 50 – 100%
Countries (136)		
Above best fit line	1	2
Below best fit line	4	9
	Total: 5	Total: 11
Mean		
Above best fit line	0,735	1,470
Below best fit line	2,941	6,618
	Percentage points: 2,21	Percentage points: 5,148

4.1.1 Explaining Algeria

In Graph 1, as well as on other graphs, as we will see later, Algeria presents an odd deviation from our general tendency, which requires some explanation. After the discovery of Algeria's first mineral resource fields Edelleh and Hassi Messaoud in 1956 the hydrocarbons` sector has remained the backbone of Algeria's economy. There are 3.4 billion cubic meters of proven natural gas reserves and 12.20 billion barrels in recoverable reserves of crude oil[58]. Algeria is currently producing 1.27 million barrels of crude oil per day. With 4 percent of proven global reserves of natural gas, Algeria ranks fifth in the world; moreover, only 17 percent of the reserves have been exploited[59]. Besides hydrocarbons, Algeria boasts resources like zinc, phosphates, uranium and mercury. All this raises the question, why has this resource-wealthy country deviated from the general *rentier state* theory? Algeria's position on the scatter plot raises several questions. Firstly, while scored as an "open autocracy", tax revenues involve a notable part of the Algerian financial budget. Secondly, although fuel exports constitute more than 97% of Algerian merchandise exports, it has established an extremely high tax burden. Algeria's tax percentage of GDP is even higher than the tax burden in the resource-rich democracy of Norway. Algeria has enormous amounts of natural resources, an open anocracy and, against all odds, a heavy tax burden. In this sense, Algeria's case undermines the "*rentier state"* theory and its basic claim that resource-wealth implies low taxation rates that might hinder democracy.

This topic has received relatively little academic attention and, therefore, many unanswered questions remain. Clement M. Henry argues in his article "Algeria's Agonies: Oil Rent Effects in a Bunker State" that "Algeria seems to be a wretched poster child for this *rentier theory* of the petrostate"[60]. The author sees the reasons for the failing of the *rentier state theory* more in the historical perspective than having natural resources itself. According to Henry, discovering oil in 1956 had no influence

---

[58] Federal Research Division, (1994) *Algeria: a country study*, edited by Metz, Helen Chapin, p. 147 (URL: http://www.marines.mil/Portals/59/Publications/Algeria%20Study_3.pdf, accessed May 4, 2013).

[59] U.S. Energy Information Administration, (2012) *Algeria. Country Analysis Brief Overview*, (http://www.eia.gov/countries/country-data.cfm?fips=AG, accessed April 2, 2013).

[60] Henry, Clement M. (2004) "Algeria's Agonies: Oil Rent Effects in a Bunker State", *The Journal of North African Studies*, Vol. 9, No. 2, p. 69.

on Algeria's political and economical development, since the development of civil society during colonial period occurred long before the discovery of oil. In a comprehensive comparison with neighboring country Tunisia sharing the same colonial legacy, Henry concludes that although sharing very similar conditions, the main difference lies in the origins of their respective elites. "The struggle against colonial rule enhanced the prestige of the educated elite in Tunisia and deepened its political and social intermediaries, whereas the liberation of Algeria completed the destruction of Algeria's elites and civil society"[61]. Having been a colony under French rule for 132 years destroyed the intermediaries of traditional elites and civil society without giving rise to new ones. On the contrary, the new social order was mainly based on clans of friends and cousins. Therefore, the trained and skilled French laborforce leaving Algeria left the country in economic chaos.

For these reasons, Algeria remains significantly autonomous compared to other resource-wealthy countries, so much so that we could consider it to be more of a "bunker state" - a country led with military support and with a potential for civil war. In this sense, we can see that the leaders of Algeria enjoy much more autonomy than other resource rich countries in the region. The need for controlling has created the situation where all the spheres of state, especially the economy, have been subjected to the ruling powers. They could be seen as instruments of the state and therefore serving the needs and interests of the government. According to Valerie Marcel, we can distinguish two types of national oil companies. Ones with ready access to capital and those without. Algeria's national oil company Sonatrach (Enterprise National Sonatrach) represents the companies that sell the crude oil they produce and retain earnings after paying their government and shareholders the royalties, tax on profits and dividends owed[62]. Although being able to finance its own projects, this national company stays under high state influence. Furthermore, in these bunker states, trade unions and business associations exist but are not permitted to acquire autonomous roots that might render them accountable to the general populations"[63]. Industries in bunker states act as

[61] Henry, Clement M. 2004: 69.
[62] Marcel, Valerie (2009) "States of Play", *Foreign Policy*,
(URL: http://www.foreignpolicy.com/articles/2009/08/17/states_of_play, accessed April 4, 2013).
[63] Henry, Clement M. 2004: 75.

political intermediaries for the ruling power. Meaning that many scholars have referred to this unconventional decision process as a “mafia type of industrialism”.

According to Clement Moore and Henry Robert Springbor there are altogether six countries that could be called bunker states. Besides Algeria also Saddam Hussein’s Iraq, Qaddafi’s Libya, Omar al-Bashir’s Sudan, Bashar al-Assad’s Syria, and Abd Rabbuh Mansur al-Hadi’s Yemen[64]. The aim of these states is to marginalize the private sector and limit the freedom of information or autonomy of economic action. Scholars see the reasons for this in the historical perspective and in the unconventional path of development of civil society rather than having the natural resources itself.

Leaving behind the historical point of view, what could be the reasons for Algeria being odd variation in its fiscal policy? After several attempts to liberalize the economy from the heavily centralized system and attract foreign investments, encourage domestic savings and investments, the mafia type decision-making legacy is hard to wash away. Although the Algerian government has expressed their interests to liberalize its economy the top-down decision perspective is still dominating and the outcome will be heavily dependent on the oil price in the global market. John P. Enteils argues in his article that Algeria is extremely dependent on oil prices. The author calls it pendulum swinging – during low prices of oil, Algeria has sought to attract investments, to push market reforms and push efficiency, but as soon as the price rises the government withdraws all the changes[65]. Only one example of this push-and pull strategy is the Algerian Hydrocarbons Reform Bill of 2005 and the subsequent changes to this legislation.

In order to liberalize the economy, more than 450 state-owned enterprises, including banks were granted with autonomy to two-thirds of the companies. Also, state controlled monopolies for import were opened to foreign and domestic companies. However, after Egypt`s mobile phone operator Osasco’s decision to sell cement plants to France in 2007, Algeria established several constraints for foreign investors. Since

[64] Henry, Clement M.; Springborg, Robert (2010) *Globalization and the Politics of Economic Development in the Middle East (The Contemporary Middle East*), Cambridge University Press, p. 99.

[65] Entelis, John P. (2012) “Sonatrach: the political economy of an Algerian state institution”, edited by Victor, David G.; Hults, David R.; Thurber, Mark C., *Oil and Governance: State-owned Enterprises and the World Energy Supply*, Cambridge University Press, p. 558.

then, foreign investors can own only 49% of any Algerian company and cannot buy real estate for constructing factories. By now the privatization process has slowed down due to a general lack of interests among foreign investors and a lack of confidence among government leaders. Foreign investors are faced with unpredictabilities and enormous bureaucracy when doing business. Measures are often imposed suddenly and without consulting with the business community. Moreover, the Word Bank ranked Algeria as no. 152 in ease of doing business in 2012.

According to U.S & Foreign Commercial Service and U.S Department of State it is estimated that 50 percent of Algeria's economy is informal[66]. This means that about half of the economy is not reflected on the tax level. Furthermore, approximately 10 percentage of the population is unemployed. The non-oil sector has experienced strong growth, averaging 6 percent a year between 2003 – 2007, but the oil and gas sector is still the backbone of the economy. Fuel revenues in 2010 represented 97 percent of exports, whereas hydrocarbon rents composed only 31% of the GDP. Since oil is the main and most profitable export article in Algeria, I have hereby used the percentage of oil rents of GDP.

This means that although mineral export dominates in the merchandise export, the proportion of hydrocarbons out of total GDP is rather low compared to other resource-rich countries. The economy is still poorly diversified and as we can see in the Table 2 the oil income out of total GDP is rather low, forcing it to depend on higher taxes. Taxes established include progressive personal income tax rates up to 35% on amounts over DZD 1.44million per annum and corporate profits tax, which was 45% on distributed profits and 20% on reinvested earnings.

[66] U.S. Commercial Service (2011) Doing Business in Algeria: 2011 Country Commercial Guide for U.S. Companies,
(URL: http://export.gov/middleeast/country_information/algeria/ccg%202011%20algeria.pdf, accessed April 4, 2013).

TABLE 2. "Countries with highest oil as share of GDP and countries with highest minerals as share of exports"

Oil rents (% of GDP)	2010	**Fuel exports (% of merchandise exports)**	2010
Iraq	69,1	**Algeria**	**97**
Congo, Rep.	61,6	Azerbaijan	95
Saudi Arabia	50,5	Venezuela, RB	93
Equatorial Guinea	47,3	Yemen, Rep.	91
Gabon	46,4	Saudi Arabia	87
Angola	46,1	Nigeria	87
Azerbaijan	42,6	Oman	81
Chad	41,2	Bahrain	74
Nigeria	29,5	Iran, Islamic Rep.	71
Kazakhstan	22,4	Congo, Rep.	68
Ecuador	20,2	Trinidad and Tobago	66
Turkmenistan	19,7	Russian Federation	64
Yemen, Rep.	19,0	Norway	64
Sudan	18,5	Colombia	60
United Arab Emirates	18,0	Ecuador	55
Venezuela, RB	18,0	Syrian Arab Republic	50
Algeria	**17,6**	Cameroon	50

In conclusion, Algeria is an odd case, I quite do not resolve here. It enjoys great benefits from selling hydrocarbons, a high taxation rate and is autocratic at the same time. This triangle of indicators is beyond the *rentierism theory*. Although a comprehensive analysis on Algeria's case is out of the scope this thesis I propose possible explanation to be in the historical perspective of the bunker state theory. It would be interesting to analyze the other bunker states, however, data for all other previously named bunker countries is not available(!). Also, it is worth noting that oil revenues compose under 20% of Algeria's GDP, which implies that income from fuels is not sufficient and higher taxes are needed.

4.2 Hypothesis #2: Mineral-rich countries tend to be more autocratic, since citizens are not made sufficiently accountable by the taxation system

The following subchapter analyzes whether countries with higher taxes tend to be more democratic and what we can say about natural resource- rich countries. In Graph 2 we can see that there is no pattern for mineral-healthy countries, although more heavily resource dependent countries tend to have less democracy and a lower tax system. More than 6% of resource-rich countries have variable “autdem”<0 (tendency to be more autocratic) (See Table 3). These results implicate that more autocracies with natural resources tend to have lower taxes than countries with poor natural resources. Most of the heavily resource-exporting countries tend to be autocratic and with a low tax system (autdem<0). Less heavily resource-exporting countries tend to be more democratic along with an average tax system. However, countries with autdem>0 tend to have no natural resources and a higher tax system. In this graph, Algeria’s case again raises interest. If my general hypothesis is correct, Algeria’s heavy tax burden should qualify as a full democracy. However, in this case it is considered a semi-democracy.

GRAPH 2. „Taxes as percent of GDP vs. Regime Type“

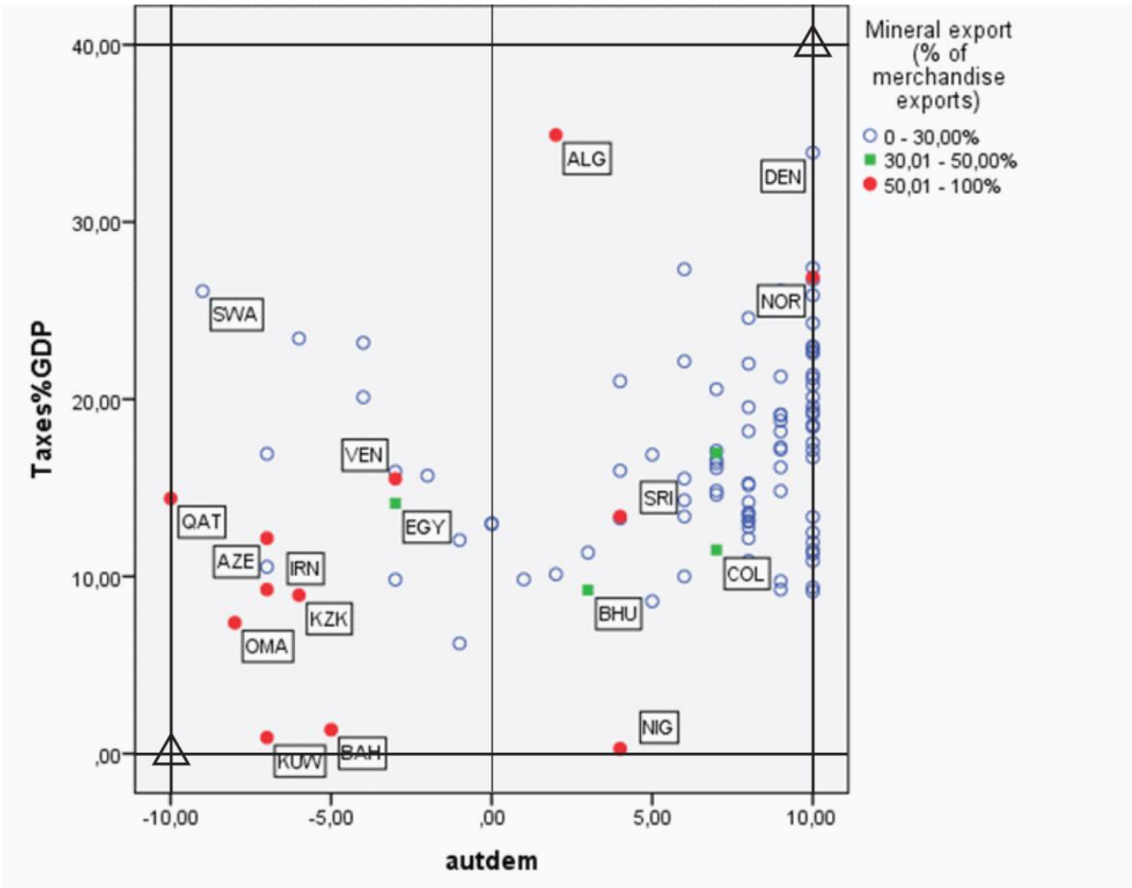


TABLE 3 “ Natural minerals exporting countries by regime type”

	autdem>0	autdem<0
Total: 116 countries		
Fuel export 30 – 50%	3	1
Mean	-	0,86
Fuel export 50 – 100%	4	8
Mean	-	6,90

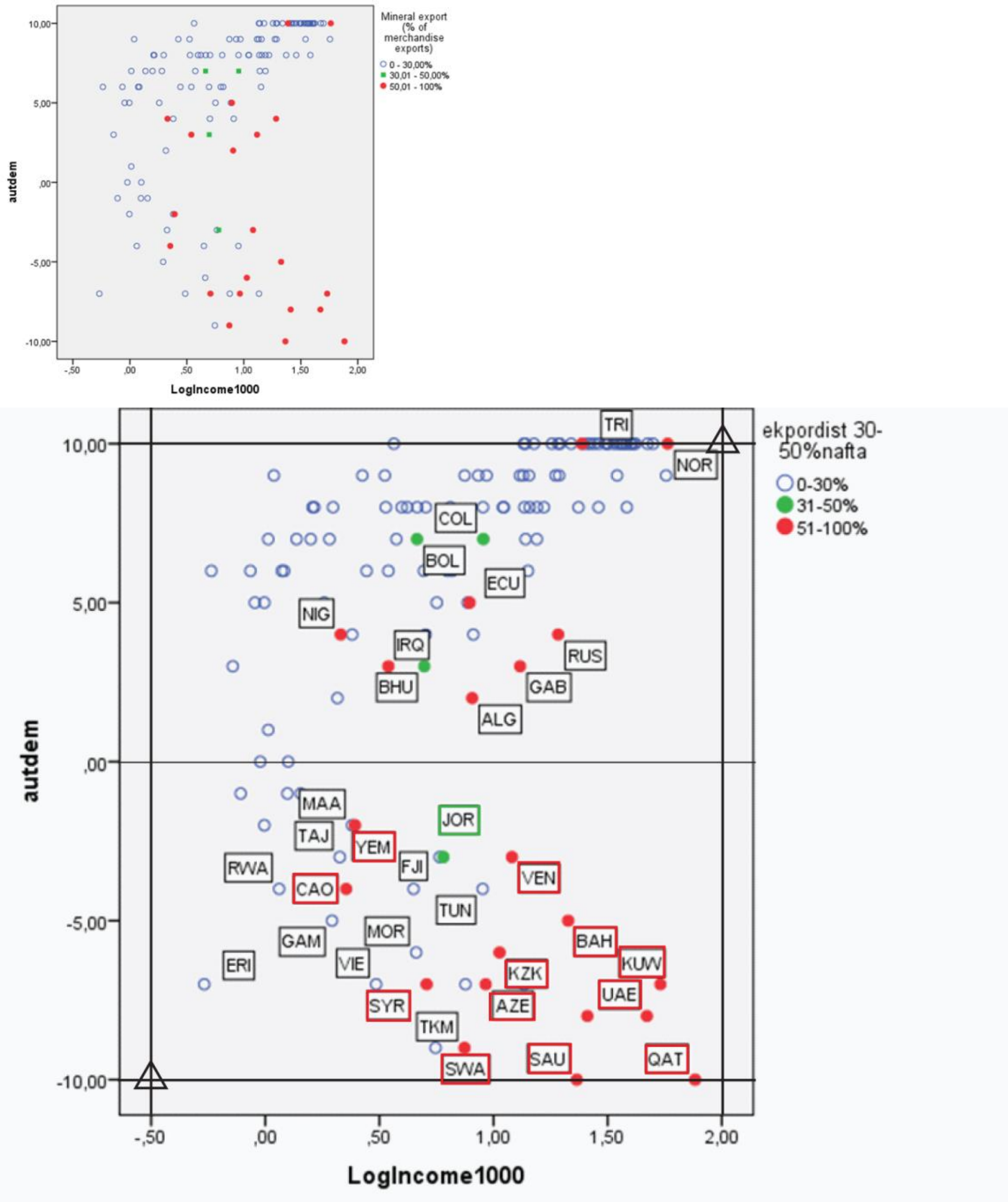
4.3 Hypothesis #3: the type of political regime influences personal income

Hypothesis #3 analyzed the relationship of how personal income is influenced by the regime type, especially in resource abundant countries.

Graph 3 seems to demonstrate a slight C-shaped pattern. For high “autdem”, democracy increases as income increases. Yet for low “autdem”, democracy decreases as income increases. Most of the countries in this group are heavily dependent on resource export, so one could propose that the more a state receives mineral export funds the more it can ignore popular demands, because it does not extract taxes from people and can buy off a sufficient number of people in order to avoid resistance. However, there are some odd deviations. There are resource-poor countries that follow the pattern of resource-wealthy countries. It is worth pointing out that these countries with autocratic tendencies and with higher incomes are mostly relatively small countries mainly located in Africa. More interestingly, 11 countries out of 16 have not published their tax revenue percentage after 2010 (See Appendix 2).

It is worth pointing out that personal average income per capita gross national income (GNI) creates some obstacles. While reflecting well the general economic performance of countries, the indicator of income as a country’s final income in a year divided by its population does not reflect how the wealth is produced. How much could be private business or state owned? In this case it could be crucial. Taking into account the value added by all resident producers plus any product taxes, the GNI per capita does not say anything about such distribution. Finding this kind of data is extremely complicated and stays out of the scope of this thesis. However, taking a closer look at Graph 3 gives us reason to believe that in the top right corner NOR, POR,SLV, GR may have a relatively low state ownership and in the bottom right corner of the Graph 3, on the other hand, KUW, QAT, UAE, BAH, SAU, OMAN may be inclined to have more state ownership. This gives us reason to believe that the wealth generated by the private sector has greater democratic influence than wealth distributed by state-owned sector.

GRAPH 3. " Regime Type vs. personal income as per capita GNI "



5. Case study

The presented analytical research paints a complex picture of the relationship between political regime and applied fiscal system in resource-wealthy countries. In order to test the results of my thesis, I have selected three countries – Norway, Venezuela and Qatar. Case analysis selection was based on methodological reasons and to have examples from different regions of the world. First, Norway represents a counter-example to the whole study. Unlike most resource dependent countries, Norway represents a strong mature democracy with a high level oil fund transparency, which does not support misuse and corruption. Venezuela, on the other hand, represents an ideological dimension. The country has transformed from autocracy to democracy and is showing a tendency of leaning towards autocracy again. Last, but not least, the case of Qatar differs from others significantly. Qatar has not been ruled by any ideological movements but has remained a strong stagnant autocracy. Furthermore, Venezuela and Qatar have experienced a considerably erratic fiscal system so we can analyze the taxation effect simultaneously on a country with a democratic and autocratic background. Secondly, I have considered geographical variation. As stated previously, *rentier state* theory has not applied strictly to oil countries in the Middle East. I have limited the work to countries that could provide a more general analysis. Thirdly, I considered the importance to the global energy market. Norway, Venezuela and Qatar are included since they are among the most significant players in the fuel sector.

Analyzing the fiscal policy and type of regime on a micro level poses some major obstacles. Cross country data for taxation burden over time is missing some crucial information. However, in order to retain the coherence with the general model, I use the same data from World Bank and Polity IV by Marshall, Gurr and Jaggers used earlier in our model building.

5.1 Norway

The case of Norway displays as an anomaly to the "resource undermines democracy" claim. Although discovering massive resources of petroleum reserves in the North Sea in the late 1960s and 1970s, resource wealth has not influenced Norway`s democratic development. According to Marshall, Gurr and Jaggers Polity IV data Norway is indicated as a full democracy before and after discovering oil reserves without any exceptions. Furthermore, Norway has managed to transform oil revenues into an economic success story. Although one can claim that Norway had the fortune to discover oil reserves after becoming a mature democracy with developed institutions and competent bureaucracy, many scholars have claimed petroleum has even improved Norway`s economical performance. Erling Røed Larsen argues in his research "Escaping the Resource Curse and the Dutch Disease? When and Why Norway Caught up with and Forged Ahead of Its Neighbors" that Norway is a significant example because before discovering oil in 1960s the country's gross domestic product per capita was much lower compared to other Scandinavian countries[67]. The economical acceleration started a few years after discovering oil and today Norway is one of the richest countries in the world by cross domestic product at purchasing power parity per capita (GDP (PPP)) passing all neighboring countries. Therefore, Norway has proved that natural resources might not necessarily have democracy- undermining features. On the contrary, natural resources might play a crucial role for democratic development.

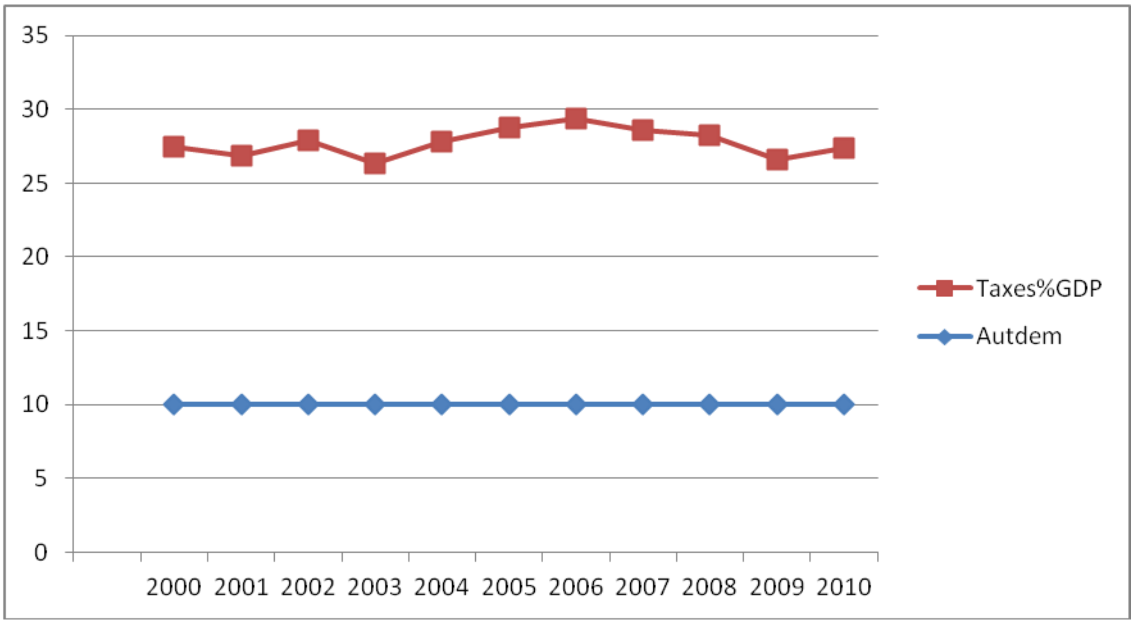
How does the case of Norway relate to this thesis? Norway represents a true anomaly to Hypothesis #1, which argued that resource-rich countries apply a different kind of fiscal policy than resource-poor countries. In Graph 1 we can see that resource-rich countries do not tend to follow the pattern of resource-poor countries with the exception of Norway. Heavily oil- dependent Norway follows the pattern of resource-poor countries more than natural-resource-rich countries. Having a relatively high personal high income per capita, Norway has a high taxation burden like many resource-poor countries. In other words, Norway has not let oil influence the previously established taxation burden in order to keep the demand for political accountability.

Which brings us to Hypothesis #2, according to which the presence of large resource rents tends to reduce the burden of taxation on citizens in order to reduce accountability. In Graph 2 we can see how Norway opposes Hypothesis #2. Heavily resource-dependent Norway has introduced a high taxation burden for citizens, resulting in

[67] Larsen, Erling Røed (2006) "Escaping the Resource Curse and the Dutch Disease? When and Why Norway Caught up with and Forged Ahead of Its Neighbors", *American Journal of Economics and Sociology*, Vol. 65, No. 3, pp. 605-640.

democratic accountability. In order to stay coherent with the general research model presented in this thesis I used the same Polity IV and taxation as a percentage of domestic gross product data by World Bank. Unfortunately, there is no information about taxation burden available since the major oil reserve discoveries in 1969, therefore data available from 2000 – 2010 were used. As can be seen from Graph 4, the tax burden in Norway has lingered between 25-30% of GDP without any change in regime. The limited data provided by World Bank, Polity IV and Graph 4 gives us great reason to believe that the taxation system did not influence the stable regime. Also, the following explanation provides us with clear evidence in support of a positive relationship between the taxation burden and regime type in resource-rich Norway.

GRAPH 4 "Relationship between taxes as a percentage of GDP and political regime in Norway in 2000 – 2010"[68]



How can we explain these results? As already noted, Norway had a privileged position when it entered its oil era, with a mature full democracy and bureaucratic institutions with experience of regulating other natural resources-dependent sectors such as

[68] Own compilation based on regime type from Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) and annual % of revenue taxes from countries` GDP with data collected by IMF in 2010 (See full data Appendix 2.

hydroenergy, fishing and mining. Norway had a functioning industry and low unemployment. For these reasons, Mark C. Thurber and Benedicte T. Istad conclude in their research "Norway`s evolving Champion: Statoil and the politics of state enterprise" that "Norway`s orientation [dealing with resources] was different from almost all of the other nations that came into petroleum riches, with a balance of risk and reward that tilted more in the direction of avoiding disruption than seeking immediate economic gain"[69]. Norway could have managed and was managing well without any revenues from oil, and, therefore, the priority was not to increase wealth, but rather avoid the negative effects from "unearned" revenues.

But this is not all. Being aware of possible negative effects of monetizing natural resources, the Norwegian government, unlike other countries with newfound natural resources, took oil management under careful supervision and debated publicly on how to manage hydrocarbons. Interviews carried through by the Program on Energy and Sustainable Development (PESD) reveal that the Norwegian government deliberately did not want to change the economy, the political system or affect in any other way the society, which was already functioning quite well in the opinion of its citizens[70]. The overriding goal was to stay on the same path as previously. This idea was supported by the fact that Norwegian government carried through overwhelming research about other countries' experiences and created "The Ten Commandments" (1971) of guiding principles for managing natural resources, and the "Parliamentary Report 25" for "considering potential effects of petroleum development on diverse aspects of society, focusing in particular on macroeconomic balance, employment, and industrial structure, but even touching on such fine grained topics as possible increased commute times for petroleum workers and consequent disruption of social and family life"[71]. The best option to achieve these goals was to create some kind of National Oil Company (NOC). Although the reasons for this varied, a fully state-owned oil company – Statoil, the Norwegian State Oil Company (Den Norske Stats Oljeselskap AS) – was created in 1972. Understanding the problems involved with fully national oil companies, Statoil

---

[69] Thurber Mark C.; Istad, Benedicte T. (2012) "Norway`s evolving champion: Statoil and the politics of state enterprise", edited by Victor, David G; Hults, David R.; Thurber, Mark C., *Oil and Governance: State-Owned Enterprises and the World Energy Supply*, pp. 610-611.

[70] PESD (Program on Energy and Sustainable Development) (2006) „National Oil Companies: Strategy, Performance and Implications for Global Energy Markets" *Prospectus*, Stanford University, p. 610.

[71] Thurber Mark C.; Istad, Benedicte T. 2012: 611.

goes to stock with 67% of shares to the Government of Norway. As stated earlier, “one of the fundamental strengths of Norwegian oil governance was precisely the combination of a thoughtful and comprehensive initial roadmap with flexible subsequent policymaking against the background of a diverse political system“.[72]

This distinctive way of revenue management has been pointed out as the “Norwegian Model”, which refers specifically to an administrative design that separates commercial from policy and regulatory functions in hydrocarbons”[73]. The “Norwegian Model” is basically an administrative system in which petroleum resources have been administered by using three state-controlled bodies. First, national oil company Statoil, which is engaged in commercial hydrocarbon operating. Second, the policy making body, the Ministry of Petroleum and Energy, whose’ responsibilities’ involves goal setting and forcing policies into law. Third, the regulatory body, the Norwegian Petroleum Directorate (NPD) collects data, advises the Ministry on technical matters and sets regulations related to resource management. According to authors Thurber, Mark C.; Hults, David R.; Heller, Patrick R.P; „Exporting the „Norwegian Model“: The effect of administrative design on oil sector performance“ the theory of „Norwegian Model“ has improved oil sector performance in Norway in several ways[74]. Firstly, National Oil Companies are believed to focus more on its commercial activities and generating revenues. Secondly, distinct state-controlled institutions might improve performance of oils sector and actors involved by being monitored and benchmarked by the government. Thirdly, the risk of conflicts of interests are diminished, since all the distinctive bodies in the oil sector are submerged under the government and its goals. Fourthly, the state’s involvement in hydrocarbon policy prevents at „state within a state“ situation, by preventing NOCs from capturing other state institutions.

So far, I have discussed how Norway managed with the enormous oil discoveries. However, this does not fully explain how Norway has managed to keep a democratic path. I would like to point out two possible explanations. First, understanding that the oil revenues are not infinite. The need to provide future generations with wealth lead to

[72] Thurber Mark C.; Istad, Benedicte T. 2012: 614.
[73] Thurber, Mark C.; Hults, David R.; Heller, Patrick R.P (2011) “Exporting the „Norwegian Model“: The effect of administrative design on oil sector performance“, *Energy Policy*, No. 39, p. 5366.
[74] Thurber, Mark C.; Hults, David R.; Heller, Patrick R.P 2011: 5368.

the establishment of the Government Petroleum Fund (GPF) in 1990. Today it is called the Government Pension Fund or just Fund, and is aimed to protect the Norwegian economy from petroleum related economic fluctuations in the global market. As we will see in comparison to other case analyses, these stabilizing mechanisms like the Fund and the Action Rule with other factors like transparency, media scrutiny, and the rule of law serve a great deal in a country's economy. Secondly, interviews carried through in the Program on Energy and Sustainable Development brought out that public ignorance about spending oil revenues also played a great role. The lack of public visibility on how the revenues are spent does not give the impression of unbounded national effect. For these reasons the traditional work-reward causality remains.

Norway had to face the same problems and obstacles like every other country that suddenly discovered large deposits of natural resources. However, unlike most petroleum-dependent countries, Norway had a very thoughtful and distinctive roadmap in order to prevent negative effects from the utilization and monetization of natural resources. The applied strategy of separate institutional bodies called the "Norwegian Model" is characteristic only to Norway. Although several countries, like Algeria, Brazil, Mexico, Nigeria, have tried to apply this model, the outcome has been modest and they have not met the sustainable and effective separation of functions. Moreover, a comprehensive research on the adaptability of the „Norwegian Model" concludes that „although the model is, as suggested by the Natural Resource Charter (2009), as a 'best practice of sorts , it is not the right prescription for every failing oil sector around the world"[75].

5.2 Venezuela

Another significant case to analyze is the case of Venezuela. The oil era in Venezuela started back in 1914 with commercial oil development from the Mene Grande fields by foreign owned Caribbean Petroleum. The oil sector burst after discovering enormous oil fields at Las Cruces and La Rose. Venezuela became the world`s leading oil exporter and second-largest oil producer. Unlike the majority of Latin American states during the 1960s and 1970s, Venezuela followed a path of democracy supporting the claim that

[75] Thurber, Mark C.; Hults, David R.; Heller, Patrick R.P 2011: 5376.

natural resources might actually promote democracy. Until recently, Venezuela was considered a success story of combining natural resource wealth with democracy, having a high level of economic growth, an improving social and economical sphere and a high degree of upward mobility. However, recent political developments in Venezuela have made it a rather poor example of crude democracy, a notion borrowed from Thad Dunning. According to the author of the "Crude Democracy", the concept embraces the idea of democracy being fostered, supported, or sustained by oil wealth[76]. Since January 1st 1976 fully state owned Venezuela National oil company Petróleos de Venezuela, S.A has experienced a variety of events, including nationalization, internationalization and transformation under strict state control. In the comprehensive Stanford Report "Oil and Governance: State-owned Enterprises and the World Energy Supply", David R. Hults characterizes the Venezuelan case as a "most significant recent transformation of the National Oil Companies being the most capable, forward thinking and autonomous NOCs between 1976 and 2000s[77]. It seems that oil revenues that once enabled the rise of democracy in Venezuela have become the main culprits for undermining democratic development in recent years. A closer look at how the relationship between taxation burden and regime type has evolved in Venezuela will be given and reasons behind it explored in the following section.

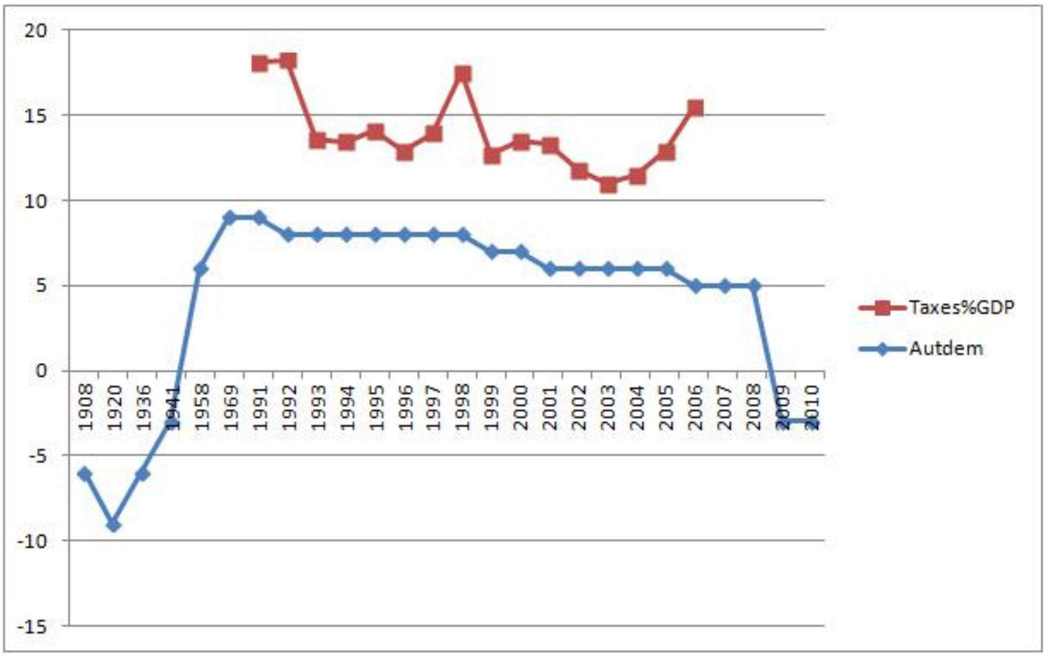
The macroeconomic history of Venezuela has been very diverse and, unfortunately, data provided by World Bank does not include the early era of oil in Venezuela and data after 2006 when there was a huge shift toward a more autocratic regime. The diminishing of democracy has gradually taken place already since 1991, resulting in a closed anocracy in 2008. According to the general model the case of Venezuela does not support Hypothesis #1. Venezuela tends to fit more with the resource-poor countries. Natural resource-poor countries with similar logincome1000 have similar taxation as percentage of GDP and Venezuela is close to the best fit line. On the other hand, the case of Venezuela appears to support Hypothesis #2 in a sense that its relationship between taxation burden and regime type is more similar to resource-wealthy countries than resource-poor countries. Venezuela, as a closed anocracy has a

[76] Dunning, Thad 2008: 1.

[77] Hults, David R. (2012) "Petróleos de Venezuela, S.A. (PDVSA): from independence to subservience", edited by Victor, David G.; Hults, David R., Thurber, Mark C., *Oil and Governance: State-Owned Enterprises and the World Energy Supply*, Cambridge University Press, p. 418.

lighter taxation compared to resource-poor full democracies. Although the financial policy has been relatively fluctuating, we can see a general decreasing pattern from 1991 to 2006. The strengthening of autocracy and declining fiscal burden gives us reason to believe that economical autonomy provided by oil revenues allows the Venezuelan government to exclude citizens from demand for democratic accountability by lowering the burden of taxation.

GRAPH 5 "Relationship between taxes as a percentage of GDP and political regime in Venezuela in 1991 – 2010"[78][79]



Why has the Venezuelan success story turned around? What might be behind the differences compared to the case of Norway? Do the reasons for the difference lie in the changes in the relationship between fiscal policy and regime type in Venezuela? I would like to bring out three main differences compared to Norway`s path in managing with oil revenues and its possible negative effects.

[78] Own compilation based on regime type from Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) and annual % of revenue taxes from countries` GDP with data collected by IMF in 2010 (See full data Appendix 2).
[79] Cautionary note: Time scale is uneven prior to 1991.

First, a different starting point has to be brought out. We noted earlier that Norway was a fully mature democracy with developed institutions and with rising economic development. In the 1920s when Venezuela discovered its hydrocarbon reserves, Venezuela was, on the other hand, an autocracy with a strong militant background, according to Marshall, Gurr and Jaggers Polity IV data. Discovering enormous oil reserves did not give rise to public discussion on how to manage oil revenues and how to make use of revenues to maximize the benefits for the country. On the contrary, there was no fixed plan for further actions dealing with oil management. In the beginning the international companies were granted a "fifty-fifty profit split" for a 40 year concession agreement. However, political instability followed by attempts to modify previous contracts lead to the nationalization of the oil company in 1976.

Secondly, as we can see, the path to NOC was rather long and complicated. The comprehensive book „Oil and Governance: State-Owned Enterprises and the World Energy Supply" claims, that PDVSA was built heavily on its private sector heritage and was therefore often referred to as a "Trojan Horse"[80]. This private business under government control still lacked a strategic plan except for maximizing profits. The international economic situation was advantageous due to the oil price boom of the 1970s, followed by the Arab oil embargo of 1973 and the Iranian hostage crisis in 1979. As a consequence, oil revenues generated a record share of the overall State budget. While in the 1930s petroleum provided just 30 % of the government`s total fiscal revenues, it had increased to nearly 60 percent by 1968 and reached its peak of 86 percent in 1974[81]. Thad Dunning argues that the positive effects of petroleum price shocks was the main reason that enabled Venezuela to put into practice massive public spending without much cost to elites[82]. As we see in Graph 5, the advantageous international economical situation played out winning cards for the Venezuelan democracy. From 1969 until 1991 Venezuela had the highest democracy score according to Polity IV data.

However, it was clear that this global situation was not sustainable and revenues couldn`t keep increasing. This leads to the third point. In Venezuela, there were no

[80] Hults, David R. 2012: 426.
[81] Dunning, Thad 2008: 162.
[82] Dunning, Thad 2008: 163-4.

counterbalancing powers installed like in the “Norwegian Model”. This self-governance granted the state economic independence and a power that was free from civilian or political control, thus allowing to act according to their own best interest. Roberto Briceño León concludes in „Petroleum and Democracy in Venezuela“ that this economic independency of the government also leads to extreme fragility, because such governments depend on a fluctuating revenue that is not based on a solid, normal source of profits, but on an extremely fragile exceptional one[83]. Any drop in price of petroleum could lead the State to an economic crisis. That said, Venezuela was more exposed to oil price fluctuations in the world market than Norway. There were no funds created to smoothen the fluctuations. Reduced oil revenues had an enormous effect on public spending. The external rent revenues were considerably cut in the 1980s and 1990s after the peak in oil rents. This reduced oil revenue was exhibited most visibly in growing class inequality and political instabilities. The decline in oil rents made democracy and previously established social securities significantly more costly to ruling elites. In the beginning of the 90s, social spending was below its 1980s level, including “real cuts of greater than 40 percent in education programs, 70 percent in housing and urban development, 37 percent in health care, and 56 percent in social development and participation”[84]. The gross domestic product fell nearly 20 percent from the late 1970s to the mid-1990s, influencing mainly lower-income groups. As a result, a tax reform first proposed already in the 1960s was pushed through. Political party Acción Democràtica tried to enforce the law proposals already in 1966 (also 1971; 1975, 1986, and 1989) but these were rejected because of hostility from the elites, since they did not see the actual need for it.

As a result this new social and economic situation represented a new polarization of classes, which required a new approach. This lead the way for new political structures and especially the populist symbol of “people’s power” – Hugo Chàvez. Ivan Krastev characterizes Venezuela as a democracy`s double – a regime that claims to be democratic and may look like a democracy, but which is ruled like autocracies.

[83] León, Roberto Briceño (2005) “Petroleum and Democracy in Venezuela“, *Social Forces*, Vol. 84, No. 1, p. 5.

[84] Roberts, Kenneth (2004) “Social Polarization and the Populist Resurgence in Venezuela,“ in Ellner, Steve; Hellinger, Daniel eds. *Venezuelan Politics in the Chaves Era: Class, Polarization, and Conflict*, Boulder: Lynne Rienner Publishers, p. 59.

"Democracy Double can best be understood as an attempt to construct political regimes that mimic democratic institutions but work outside the logic of political representation and seek to repress any trace of genuine political pluralism" [85]. After a successful presidency campaign in 1991 Hugo Chàvez pushed through several laws that secured state control over PDVSA. In 2000, the New Hydrocarbons law was introduced, which required future private investments to take the form of a joint venture with majority PDVSA ownership. Later, Chàvez purged the company from dissidents, converting PDVSA from a commercially oriented firm to one that is less proficient but much more attentive to state objectives, creating a "state within a state" situation.

5.3 Qatar

At first glance, Qatar represents a pure case of *rentierism*. Today, Qatar holds the world's third largest natural gas reserves and is the single largest supplier of liquefied natural gas. Proven reserves of oil were the 13th largest in the world at the end of 2012 with 25.38 billion barrels. Production and exporting of crude oil has tripled since 1986 and comprised more than 70 % of merchandise exports in 2009. Oil and gas account for more than 60% per cent of the country's gross domestic product, around 85 per cent of export earnings and 70% of government revenues. However, significant oil revenues have not had a democracy-boosting effect. Being highly dependent on oil exports, Qatar has been rated a pure autocracy according to Marshall, Gurr and Jaggers Polity IV data without any slight change since 1971 when first data was published for Qatar. Today, the fully state owned petroleum company Qatar Petroleum (QP) is closely linked with the state's political and economic interests. This is illustrated by the fact that Qatar Petroleum`s Chairman & Managing director HE Dr. Mohammed Bin Saleh Al-Sada is also the head of the Ministry of Energy and Industry of Qatar.

How is the case of Qatar connected to this thesis? The case of Qatar fits with the theory of *rentierism* relatively well. Analyzing the taxation system in resource rich countries, the case of Qatar clearly supports Hypothesis #1. Having high personal income per capita the introduced taxation burden stays low compared to resource-poor countries on that level (Graph 1). Qatar has a slightly higher taxation burden than most natural

[85] Krastev, Ivan (2006) "Democracy`s „Doubles"", *Journal of Democracy*, Vol. 17, No. 2, p. 52.

resource-rich countries and it clearly does not follow the pattern of resource rich countries. When it comes to Hypothesis #2, support from the case of Qatar remains modest (Graph 2). Although scoring a full autocracy, the taxation burden stays relatively high compared to other resource-rich autocracies. The established taxation burden for citizens has had no influence on political outcome whatsoever. This point is clarified in Graph 6. While having an erratic fiscal system, even the 10 percent point of difference in the tax burden as a percentage of gross domestic product has not influenced the outcome of accountability and bigger representation.

GRAPH 6 "Relationship between taxes as a percentage of GDP and political regime in Qatar in 2004 – 2010"[86]

In other words, the case of Qatar supports the idea of a different path of development for resource- rich countries, however, undermining the idea of the "taxation effect". How can we explain the resistance of "taxation effects" of autocratic natural resource rich Qatar? Furthermore, how does the case of Qatar relates to previous case studies of Norway and Venezuela?

Similarly to Venezuela, Qatar has a very diverse historic background. Oil was discovered in 1940 in Dunkhan Field when Qatar was ruled by Sheikh Abdullah bin

[86] Own compilation based on regime type from Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) and annual % of revenue taxes from countries` GDP with data collected by IMF in 2010 (See full data Appendix 2).

Jassim Al-Thani who was recognized by the British rule. Although the Qatar Petroleum Company was granted a 75-year oil concession, it was not until 1971 when Qatar declared its dependence from British rule. The oil sector was immediately fully nationalized and linked with the authority of Finance and Petrol Ministry at that time. Since then the oil sector have stayed under strong state supervision and serves the political and economical interests of their leaders.

Steven Heydemann refers to the political path of Qatar as an Arab authoritarian exceptionalism. By this, the author of the article "Authoritarian Learning and Current Trends in Arab Governance" means that the authoritarian governance in Middle East shares some distinctive features from the rest of the authoritarian rules. In other words, "a condition in which political trajectories are explained by reference to feature unique to the Arab world[87]. Benjamin Smith sympathizes with the idea of Arab exceptionalism and argues that after a slight decline in the state's involvement, the oil-gas funded mercantilism is on the rise again. "Use of trade as a foreign policy tool (or weapon), and of resource revenue-driven economic planning has emerged as an explicit challenge to that trend and especially oil-funded mercantilism in the 21st century began, really, in 1999 with the tripling of oil price". Furthermore, Andrew Rathmell and Kristen Schulze argue in article "Political Reform in the Gulf: The Case of Qatar", that the majority of Arab countries have experienced a special kind of authoritarian regime labeled as "democracy of bread" – "the tacit social contract in which the regime provides social and economic welfare in return for political loyalty". So, as we can see, Qatar poses a very different story from the case of Venezuela and Norway. Qatar has never experienced a democracy and moreover, has never had the intention to move toward it. Also, no counterbalancing mechanisms similar to Norway were implemented.

This raises the question why have there been no attempts to move towards more accountability? Graph 6 indicates that fiscal systems have had no influence on political regime. I would like to bring out two possible explanations. Unlike many *rentier states*, resource rich Qatar has not failed nor experienced economic breakdown. On the contrary, bounties from the oil revenues are not limited only to the ruling power. Qatar

[87] Heydemann, Steven (2009) "Authoritarian Learning and Current Trends in Arab Governance", *Oil, Globalization, and Political Reform, Governance Task Force: 2009 U.S. – Islamic World Forum*, p. 32

is one of the world’s richest countries and so are it citizens. The GDP per person of $80,000-plus at purchasing-power parity vastly underrates the wealth of a pampered 250,000 or so who hold the privilege of citizenship. In 2010 its tiny population had the third highest per capita GDP in the world and its economy grew by 16.6%, faster than any other. Extreme oil wealth has implemented the „democracy of bread“ to an extreme degree, granting citizens several social securities like free health care, education etc.

Secondly, the Economist’s article „Pygmy with the punch of a giant“ argues that since the emirate is extremely small, holding only 1.7 m people and fewer than one in seven of them are native-born citizens, this decreases the desirability of democracy[88]. The extreme wealth is divided among a small population and there is no attempt to share it with broader public. In fact, in 2003 Qatar had a democratic referendum. Qatar`s first constitution, enforced in 2005, left real power to the Amir and his family but gave citizens the power to directly elect 30 of the 45 members of the Advisory Council. However, the general impression to first-ever parliamentary election would be held in 2013 was very mild[89].

To sum up, the case of Qatar is not a typical case of *rentierism*. Contrary to the theory of *rentierism* the revenues of natural resources have transformed into economic prosperity not into democracy. There are no counterbalancing mechanisms introduced like in Norway. After discovering more offshore natural gas fields in 2013 with, more than 2.8 trillion cubic feet[90] of reserves is decreasing the probability of pro-democratic developments any time soon. However, understanding the finite nature of natural resources, Qatar has started to stimulate the private sector and a “*knowledge economy*” labeled Qatar National Vision 2030. The aim is to secure the future with human capital. The immediate results have been the Qatar Science Technology Park (QSTP), the Qatar Foundation for Education, the Science and Community Development and Education

[88] (2011) “Pygmy with the punch of a giant” *The Economist*, (URL: http://www.economist.com/node/21536659, accessed April 4, 2013).

[89] Ibidem.

[90] (2013) Qatar discovers new natural gas field, *Aljazeera*, (URL: http://www.aljazeera.com/business/2013/03/201331019541509471.html, accessed April 22, 2013).

City, which promote development in four primary areas: energy, environment, healthcare, information, technology and telecommunications[91].

However, some authors emphasize that these developments are not due to economical necessity but careful pragmatic moves. Andrew Rathmell and Kriste Schule argue that „since Emir Hamad`s coup in 1995, Qatar has portrayed itself as an increasingly open and participatory system". They argue the decisions are extremely pragmatic for reasons of foreign policy and domestic dynastic politics. Blake Hounshell from Foreign Policy even argues that this is an attempt to emerge as a player in global politics, the willingness to organize the Football World Cup 2013 is only one example[92]. Whatever the reasons for development towards more accountability and democratic freedoms, the analysis of this research does not show any support for the *taxation effect* in Qatar.

[91] Qatar: National Vision 2030, *Forbes Custom*, (URL: http://www.forbescustom.com/EconomicDevelopmentPgs/QatarNationalVisionP1.html, accessed April 22, 2013).

[92] Hounshell, Blake (2012) "The Qatar Bubble", *Foreign Policy*, (URL: http://www.foreignpolicy.com/articles/2012/04/23/the_qatar_bubble?page=0,1, accessed April 22, 2013).

6. Conclusions

This thesis analyzed the relationship between the state and economy in resource rich countries. The research questions looked for answer about whether taxation systems influence the social outcome in natural resource rich countries. The question was based on the theory of *rentierism* and the "*taxation effect*". The assumption of this thesis proposes that a higher taxation burden brings more accountability and representation from governments. In natural resource-rich countries, however, there is no need for taxation, which might lead towards more autocracy. In order to test this question I conducted three analytical models controlling the differences between taxation systems in resource-rich and resource-poor countries (Hypothesis #1), if the taxation burden influences the political regime (Hypothesis #2) and effects of political regime on income (Hypothesis #3). After the general research model I carried through comprehensive case study on Norway, Venezuela and Qatar. The selection of these countries was based on methodological reasons and in order to include variety.

The general results of the model predict that natural resource-rich countries do not follow the pattern of autocracy nor democracy. The results of this research do not show single clear characteristics of the relationship between taxation and political regime type in resource-rich countries. These results are also supported by the case analysis of these thesis. Changes in the taxation system did not have any significant influence on regime type either in the case of Norway, Venezuela nor Qatar. Oil discoveries in Norway have not brought any change to country's democracy nor taxation burden. Venezuela, on the other hand, has shown a slight pattern of lowering taxation and erosion of democracy, however not so significant as to be fully conclusive. Qatar has remained a stable autocracy even after changes in the taxation burden by more than 10 percentage points. However, recent democratic developments, such as a new constitution, gives us reason to suggest further analysis.

This thesis shows some support for hypothesis #1 in that the natural resource wealthy countries tend to tax its citizens on a different basis compared to natural resource- poor countries. Correlation between personal income and tax revenues (percentage of GDP) indicates that in mineral-rich countries, a higher income usually comes with lower taxes. This is contrary to resource-poor countries where a higher personal income tends to generate higher tax burden. Furthermore, heavily resource dependent countries tend to have a lower tax burden and less democracy (Hypothesis #2). While non resource dependent countries tend to be more democratic along with higher tax system. The case of Qatar clearly illustrates this point by being a country with very high personal income but with a lower taxation burden than other countries. However, other case studies show more modest support for this hypothesis, with Norway being and extreme opposite example.

The results of this thesis propose that taxation plays a great role in resource-rich countries and countries with natural resource-wealth tend to have different pattern as compared to pure autocracies or democracies. However, I have found no significant evidence for the "*taxation effect*". The effects of the taxation burden often referred to as fiscal sociology by Joseph Schumpeter is much smaller than one might assume and the results of this thesis did not show a strong indubitable relationship between fiscal policy and political regime in resource-wealthy countries. All the natural-resource rich countries face the same problems of, how to effectively manage resource revenues, provide sustainable development and secure the future wellbeing of its citizens. Having natural resources might foster the preferred outcomes and also bring out negative effects. There is no single recipe to deal effectively with resource revenues. And applied methods like the "Norwegian Model" are not successful in every country. The presented case studies constituted important puzzles that the "taxation effect" never entirely resolved. Money does not spend itself and therefore, the outcome is determined by many factors. Whether the key aspect is leaders' decisions, strength of institutions, role of public spending or something else, is beyond the scope of this thesis and will remain an interesting topic for further analysis.

There is great reason to believe that the applied taxation system is not the main factor within the institutional approach that influences the political regime in heavily resource dependent countries. This analysis concludes that the correlation between the taxation system and the political regime in resource-rich countries is not significant and the fiscal policy is not the principal factor affecting political regime. Although this master's thesis do not solve entirely the puzzle it adds some valuable insight and some new perspectives to the debate how natural resources influence country's development. Apart from the impact of natural resources on taxation, the data analysis in this thesis raises broader questions about what affects taxation. First, Graph 1 indicates that increased wealth (per capita income) tends to increase taxes as share of GDP, while extensive mineral exports have the opposite effect. The question raises, what else affects taxation in a systematic way, and how can these impacts be combined into a logical model? Second, Graph 2 indicates a puzzling parabolic relationship between autocracy/democracy (D) and wealth. With the scales and units used, $\log(\text{wealth})=2(D/10)^2$ expresses quite well the average pattern. But why should both extreme democracy and extreme autocracy go with high wealth? Natural resources do not offer a full answer. Here this thesis engenders broader questions, which go beyond the scope of the thesis itself.

Summary

The aim of this master`s thesis has been to analyze the relationship between taxation and political regime. This research topic is derived from the common idea of negative effect of natural resources on a country's social and economical performance – phenomena often referred to as *rentierism*. The core idea poses that resource abundant countries become over dependent on export of natural resources, resulting in low social and economic performance. There are several academic approaches to the theory of *rentierism*, however, this thesis presents the most broadly used institutional approach. Based on this I argue that taxation as a secondary institutional factor has an influence on the resource abundant country's political regime – an idea first proposed by Joseph Schumpeter. To test the linkage between taxation and level of democracy in resource wealthy countries careful empirical testing was needed. In order to do that I posed three sub-hypotheses. First, I tested if resource rich countries tend to have a different fiscal policy. To build the analytical model I used Gross National Income (GNI) for 2010 data available from World Bank and annual percentage of revenue taxes from countries GDP data collected by IMF in 2010. The relatively strong supporting results lead to the second sub-hypothesis that a higher taxation burden brings more democracy. Using data tax revenue percentage of GDP and Marshall, Gurr and Jaggers Polity IV, it was revealed that although there seems to be slight pattern in the connection between taxation and democracy, this is not that significant. The last sub-hypothesis checked previous results by analyzing how personal income and type of regime interact with each other. The analytical model did not reveal any significant correlation. The results of this empirical work were confronted with three case studies – Norway, Venezuela and Qatar. These countries were selected keeping in mind the methodological reasons and in order to include variety. After carrying through a careful case analysis the results supported the outcome from the previously built analytical model. There seems to be no clear linkage between taxation and type of political regime in resource rich countries. Taxes as an institutional outcome are important phenomena, however, as a secondary phenomena in the general institutional framework, not the main factor influencing the social and economic outcome in resource abundant countries.

References

Andersen, Jørgen J. (2009) „The form of government and fiscal dynamics“, *European Journal of Political Economy*, Vol. 27, pp. 297-310.

Anderson, Lisa (1987) “The State in the Middle East and North Africa“, *Comparative Politics*, Vol. 20, No. 1, pp. 1-18.

Auty, Richard M. (1993) *Sustaining Development in Mineral Economies: The Resource Curse Thesis*, London: Routledge.

Beblawi, Hazem (1987) “The Rentier State in the Arab World”, *The Rentier State*, edited by Beblawi, Hazem and Luciani, Giacomo, Croom Helm.

Bhattacharyya, Subhes C. (2011) *Energy Economic: Concepts, Issues, Markets and Governance*, Springer-Verlag: London.

Cheibub, José A. (1988) “Political Regimes and the extractive Capacity of Governments: Taxation in Democracies and Dictatorships”, *World Politics*, Vol. 50, No. 3, pp. 349-376.

D`Arcy, Michelle (2012) “Taxation, Democracy and State-Building: How Does Sequencing Matter?“; *QoG Working Paper Series*, Vol. 4, pp. 1-27.

Davis, Graham A., Tilton, John E. (2005) “The Resource Curse”, *Natural Resources Forum*, Vol. 29, No. 3, pp. 233-242.

Dunning, Thad (2008) *Crude Democracy: Natural Resource Wealth and Political Regimes (Cambridge Studies in Comparative Politics)*, Cambridge University Press.

Entelis, John P. (2012) “Sonatrach: the political economy of an Algerian state institution”, edited by Victor, David G.; Hults, David R.; Thurber, Mark C., *Oil and Governance: State-owned Enterprises and the World Energy Supply*, Cambridge University Press, pp. 557-599.

Freedman, Thomas L. (2006) “The First Law of Petropolitics”, *Foreign Policy*, No. 154, pp. 28-36.

Gylfason, Thorvaldur (2001) „Natural resources, education and economic development“, *European Economic Review*, Vol. 45, pp. 847-859.

Henry, Clement M. (2004) “Algeria’s Agonies: Oil Rent Effects in a Bunker State”, *The Journal of North African Studies*, Vol. 9, No. 2, pp. 68-81.

Henry, Clement M.; Springborg, Robert (2010) *Globalization and the Politics of Economic Development in the Middle East (The Contemporary Middle East*), Cambridge University Press.

Herb, Michael (2005) "No Representation without Taxation? Rents, Development, and Democracy", *Comparative Politics*, Vol. 37, No, 3, pp. 297-316.

Heydemann, Steven (2009) "Authoritarian Learning and Current Trends in Arab Governance", *Oil, Globalization, and Political Reform, Governance Task Force: 2009 U.S. – Islamic World Forum*, pp. 26-36.

Hults, David R. (2012) "Petróleos de Venezuela, S.A. (PDVSA): from independence to subservience", edited by Victor, David G.; Hults, David R., Thurber, Mark C., *Oil and Governance: State-Owned Enterprises and the World Energy Supply*, Cambridge University Press, pp. 418-478.

Huntington, Samuel P. (1991) *The Third Wave: Democratization in the Late 20th Century*, Norman: University of Oklahoma Press.

Karl, Terry L. (1997) *The Paradox of Plenty: Oil Booms and Petro-States (Studies in International Political Economy),* University of California Press.

Knack, Stephen (2009) "Sovereign rents and guality of tax policy and administration", *Journal of Comparative Economics,* Vol. 37, pp. 359-371.

Kolstad, Ivar; Wiig, Arne (2009) „Political Economy Models of the Resource Curse: Implications for Policy and Research", *Governance of Africa`s Resources Programme,* No. 40, pp. 1-19.

Krastev, Ivan (2006) "Democracy`s „Doubles"", *Journal of Democracy,* Vol. 17, No. 2, pp. 52-62.

Larsen, Erling R. (2006) "Escaping the Resource Curse and the Dutch Disease? When and Why Norway Caught up with and Forged Ahead of Its Neighbors", *American Journal of Economics and Sociology,* Vol. 65, No. 3, pp. 605-640.

Leite, Carlos; Weidmann, Jens (1999) "Does Mother Nature corrupt? Natural resources, corruption and economic growth*", IMF working paper 99/85.*

León, Roberto Briceño (2005) "Petroleum and Democracy in Venezuela", *Social Forces,* Vol. 84, No. 1, pp. 1-23.

Levchenko, Andrei A. (2004) „Institutional Quality and International Trade", *IMF Working Paper,* Vol. 4, No. 231.

Marshall, Alfred (1920) *Principles of Economics*, London: Macmillan and Co., Ltd, 8th edition.

McGuirck Eoin F. (2013) "The illusory leader: natural resources, taxation and accountability", *Public Choice*, Vol. 154, pp. 285-313.

Mehlum, Halvor; Moene, Karl; Torvik, Ragnar (2006) „Institutions and the resource curse", *The Economic Journal*, No. 116, pp. 1-20.

Mhadavy, Hossain (1970) "The Pattern and Problems of Economic Development in Rentier States; The Case of Iran", *Studies in the Economic History of the Middle East: From the Rise of Islam to the Present Day,* edited by Cook, Michael Allan, Oxford: Oxford University Press.

Moore, Mick (2004) "Revenues, State Formation, and the Quality of Governance in Developing Countries", *International Political Science Review,* Vol. 25, No. 3, pp. 297-319.

Morrison, Kevin M. (2009) "Oil, Nontax Revenue, and the Redistribution Foundations of Regime Stability", *International Organization*, Vol. 63, No. 1, pp. 107-138.

Okruhlik, Gwenn (1999) "Rentier Wealth, Unruly Law, and the Rise of Opposition: The Political Economy of Oil States", *Comparative Politics*, Vol. 31, No. 3, pp. 295-315.

PESD (Program on Energy and Sustainable Development) (2006) „National Oil Companies: Strategy, Performance and Implications for Global Energy Markets" *Prospectus,* Stanford University.

Roberts, Kenneth (2004) "Social Polarization and the Populist Resurgence in Venezuela," in Ellner, Steve; Hellinger, Daniel eds. *Venezuelan Politics in the Chaves Era: Class, Polarization, and Conflict,* Boulder: Lynne Rienner Publishers, pp. 55-72.

Ross, Michael L. (1999) „The Political Economy of the Resource Curse", *World Politics,* 51, pp. 297-322.

Ross, Michael L. (2001) "Does Oil Hinder Democracy?", *World Politics*, Vol. 53, No. 3, pp. 325-61.

Ross, Michael L. (2004) "Does Taxation Lead to Representation?", *B.J. Pol. S.,* Vol. 34, pp. 229-249.

Sachs, Jeffrey D.; Warner, Andrew M. (1995) "Natural Resource Abundance and Economic Growth", *NBER Working Paper,* No. 5398. pp. 1-36.

Schumpeter, Joseph (1991) *Crisis of the Tax State*, Springer: US.

Smith, Benjamin (2006) "The Wrong Kind of Crisis", *Studies in Comparative International Development*, Vol. 40, No. 4, pp. 55-76.

Stevens, Paul (2003) "Resource Impact: Curse or Blessing? A Literature Survey" *Journal of Energy Literature*, Vol. 9, No. 1, pp. 3-42.

Thurber, Mark C.; Hults, David R.; Heller, Patrick R.P (2011) "Exporting the „Norwegian Model": The effect of administrative design on oil sector performance", *Energy Policy*, No. 39, pp. 4675-5680.

Thurber Mark C.; Istad, Benedicte T. (2012) "Norway`s evolving champion: Statoil and the politics of state enterprise", edited by Victor, David G; Hults, David R.; Thurber, Mark C., *Oil and Governance: State-Owned Enterprises and the World Energy Supply*, pp. 610-611.

Torvik, Ragnar (2001) „Natural resources, rent seeking and welfare", *Journal of Development Economics*, Vol. 67 , pp. 455-470.

Tsui, Kevin K. (2011) "More Oil, Less Democracy: Evidence From Worldwide Crude Oil Discoveries", *The Economic Journal*, Vol. 121, No. 551, pp. 89-115.

van der Ploeg, Frederick (2011) "Natural Resources: Curse or Blessing?" *Journal of Economic Literature*, Vol. 49, No.2, pp. 366-420.

van der Ploeng, Frederick; Poelhekke, Steven (2009) „Volatility and the Natural Resource Curse", *Oxford Economic Papers*, Vol. 61, No. 61, pp. 727-760.

Yates, Douglas A. (1996) *The Rentier State in Africa: Oil Rent Dependency and neocolonialism in the Republic of Cabon*, Threnton, NY: Africa World Press.

Internet resources

Eigen, Peter (2005) "Avoiding the Resource Curse: What can we learn from the case of Botswana?", *Transparency International*,
(URL: http://eadi.org/gc2005/confweb/papersps/Peter_Eigen.pdf).

Federal Research Division (1994) *Algeria: a country study*, edited by Helen Chapin Metz, (URL: http://www.marines.mil/Portals/59/Publications/Algeria%20Study_3.pdf).

Hounshell, Blake (2012) "The Qatar Bubble", *Foreign Policy*,
(URL: http://www.foreignpolicy.com/articles/2012/04/23/the_qatar_bubble?page=0,1).

Marcel, Valerie (2009) "States of Play", *Foreign Policy*, (URL: http://www.foreignpolicy.com/articles/2009/08/17/states_of_play).

Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) "Polity IV Data Series version 2011", *Polity IV Project: Political Regime Characteristics and Transitions, 1800 – 2011*, (URL: http://www.systemicpeace.org/polity/polity4.htm).

Marshall, Monty G.; Gurr, Ted R.; Jaggers, Keith (2011) „Polity IV Individual Country Regime Trends, 1946-2010", *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2011*,
(URL: http://www.systemicpeace.org/polity/polity4.htm,).

Pereira, Carlos; Teles, Vladimir (2011) "Political Institutions, Economic Growth, and Democracy: The Substitute Effect", *Brookings*,
(URL: http://www.brookings.edu/research/opinions/2011/01/19-political-institutions-pereira).

Profeta, Paola; Puglisi, Riccardo; Scabrosetti, Simona (2012) "Does democracy affect taxation and government spending? Evidence from developing countries", *Journal of Comparative Economics*, (URL: http://dx.doi.org/10.1016/j.jce.2012.10.004)

United Nation Statistics Division, Detailed structure and explanatory notes, SITC rev.3, (URL: http://unstats.un.org/unsd/cr/registry/regcst.asp?cl=14).

U.S. Commercial Service (2011) *Doing Business in Algeria: 2011 Country Commercial Guide for U.S. Companies*, (URL: http://export.gov/middleeast/country_information/algeria/ccg%202011%20algeria.pdf).

U.S. Energy Information Administration (2012) *Algeria. Country Analysis Brief Overview*, (URL: http://www.eia.gov/countries/country-data.cfm?fips=AG).

World Bank (2010) *GNI per capita, PPP (current international $)*,
(URL: http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD).

(2011) "Pygmy with the punch of a giant" *The Economist*,
(URL: http://www.economist.com/node/21536659).

(2013) Qatar discovers new natural gas field, *Aljazeera*,
(URL: http://www.aljazeera.com/business/2013/03/201331019541509471.html).

Qatar: National Vision 2030, *Forbes Custom*, (URL: http://www.forbescustom.com/EconomicDevelopmentPgs/QatarNationalVisionP1.html)

Appendix

Appendix 1. **“Natural recourses exporting countries by regime type”**

Regime	**Democracy**		**Anocracy**		**Autocracy**
Total: (165)	95		48		22
Countries with fuel export >30% of merchandise exports					
	Full Democracy (10)	**Democracy (6 to 9)**	**Open Anocracy (1 to 5)**	**Closed Anocracy (-5 to 0)**	**Autocracy (-10 to -6)**
	Norway	Colombia	Algeria Belize Ecuador Gabon Iraq Nigeria	Cameroon Congo Russia Sudan (+ South Sudan) Venezuela Yemen	Kazakhstan Turkmenistan Uzbekistan Azerbaijan Iran Saudi Arabia Oman United Arab Emirates Qatar Kuwait Syria
Total: 25	1	1	6	6	11
Out of resource rich countries (%)	(1/25)*100% = 4%	4	24	24	44
Out of regime type (%)	(2/95)*100% = 2,11		25		50

Appendix 2.

“Tax revenue as percentage of GDP”

Country Name	Country Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
World	WLD		15,47188	14,42531	14,46155	14,66858	14,81377	15,40561	15,59086	14,92709	13,54161	**14,19016**
Afghanistan	AFG							6,290691	5,288022	5,225979	7,266421	**8,313807**
Albania	ALB			16,10892	17,07193	17,29176						
Algeria	ALG							40,70078	37,20343	45,25582	**34,91183**	
American Samoa	ASM											
Andorra	AND											
Angola	ANG											
Antigua and Barbuda	ATG											
Argentina	ARG			9,818954	12,51878	**14,19743**						
Armenia	ARM				13,99979	13,99641	14,33566	14,39599	15,96253	17,32176	16,50586	**16,86806**
Aruba	ABW											
Australia	AUL	22,98474	24,68702	23,3803	24,22423	24,219	24,73191	24,48654	23,99882	24,0912	22,14714	**20,79435**
Austria	AUS	19,79205	21,51965	20,96478	21,07204	20,78867	20,08947	19,68002	19,97659	20,1083	18,68729	**18,42522**
Azerbaijan	AZE									16,42118	14,10671	**12,15778**
Bahamas, The	BHS	13,63025	12,58468	11,48641	11,85584	12,0343	12,76615	14,35733	14,49842	15,47168	14,64127	**14,27089**
Bahrain	BAH	4,244386	4,64578	4,043726	3,757162	4,935495	1,378411	1,361113	**1,34702**			
Bangladesh	BNG		7,596541	7,697523	8,071475	8,11135	8,22067	8,171802	8,049301	8,818271	**8,599141**	
Barbados	BRB								35,5908	33,15248	30,69658	**27,24129**
Belarus	BLR	16,62473	15,75466	14,20104	17,68812	18,37135	20,14966	22,2231	23,7267	25,35339	19,25963	**16,91581**
Belgium	BEL	27,32778	26,94399	25,9372	25,315	25,89316	26,00784	25,71391	25,03809	25,34616	23,91748	**24,5886**
Belize	BLZ											
Benin	BEN		15,46708	15,68167	15,66474	16,34988	15,47201	15,95774		17,24794	16,27959	**16,37214**
Bermuda	BMU											
Bhutan	BHU	10,28362	8,914452	9,792079	9,53431	7,820352	8,346585	9,030973	7,519483	8,420716	**9,23515**	
Bolivia	BOL			13,1841	12,973	15,01635	16,21516	16,81617	**16,96487**			
Bosnia and Herzegovina	BIH				19,76277	19,03101	20,38543	22,50246	22,09173	20,92558	19,53515	**20,31103**
Botswana	BOT											
Brazil	BRA	14,00388	14,71205	15,83672	15,40582	15,88464	16,70868	16,45533	16,80935	16,7167	15,37815	**15,267**
Brunei Darussalam	BRN											
Bulgaria	BUL	17,87999	17,11367	16,38622	18,22702	21,27927	21,61056	22,50215	23,13009	23,2697	21,01527	**19,14597**
Burkina Faso	BFO			10,58849	10,923	12,02682	11,75282	12,06365	12,71471	11,89122	12,54676	**12,94326**
Burundi	BUI											
Cambodia	CAM			8,172912	7,537844	8,117265	7,893243	8,178915	9,696979	10,5552	9,668702	**10,12138**
Cameroon	CAO											
Canada	CAN	15,24062	14,62392	13,82178	13,65384	13,77955	13,73117	13,74995	13,70983	12,78562	12,40202	**11,93199**
Cape Verde	CAP						21,07697	22,74444	23,77649	24,38569	**19,77427**	
Cayman Islands	CYM											
Central African Republic	CEN					**6,214223**						
Chad	CHA											
Channel Islands	CHI											
Chile	CHL	16,72191	16,59747	16,79696	16,30546	17,01229	18,01176	19,50665	20,31834	18,71309	14,50617	**17,53631**
China	CHN	6,815633	7,402022	8,503402	8,538996	8,860552	8,679594	9,18806	9,928817	10,26866	**10,53973**	
Colombia	COL		11,02832	9,85437	11,22677	10,53215	12,81286	11,83208	13,60424	12,316	11,8309	**11,49909**
Comoros	COM											
Congo, Dem. Rep.	ZAI	3,456501	4,363621	6,667435	6,36838	8,344568	9,8506	11,1835	11,68669	15,19797	13,13603	**13,73681**
Congo, Rep.	CON	5,935426	9,215641	8,361449	8,702774	7,849248	**6,243112**					
Costa Rica	COS									15,72457	13,7946	**13,46793**
Cote d'Ivoire	CIV				14,90563	15,17896	9,770377	15,0238	15,47522	15,57469	16,55515	**16,99198**
Croatia	CRO	22,42281	21,05793	21,63418	20,92861	20,14067	20,04451	20,0894	20,18015	20,16523	18,9979	**18,78764**
Cuba	CUB											
Curacao	CUW											
Cyprus	CYP	39,31643	40,45838	41,15398	43,65512	42,82043	45,43914	47,70996	54,14499	51,01589	25,77068	**25,86716**
Czech Republic	CZR	14,88782	15,28566	15,1257	15,47918	15,08402	14,90082	14,08665	14,65658	14,21298	13,05573	**13,52818**
Denmark	DEN	30,82221	29,5494	29,4229	29,48763	30,79458	32,60966	31,57572	35,78157	34,76915	34,27915	**33,91911**
Djibouti	DJI											
Dominica	DMA											
Dominican Republic	DOM					12,89309	14,55017	14,83691	15,91425	14,92905	**13,06704**	
Ecuador	ECU											
Egypt, Arab Rep.	EGY			13,40776	13,34994	13,83598	14,06864	15,82951	15,34985	15,32052	15,66136	**14,13008**
El Salvador	SAL			10,71037	11,15926	10,99359	12,47704	13,51539	14,16869	14,31851	12,7593	**13,61309**

Equatorial Guinea	EQG											
Eritrea	ERI											
Estonia	EST	15,76828	15,48444	16,02946	16,19127	15,96238	16,05922	16,18279	16,37646	14,90351	17,2202	**16,16118**
Ethiopia	ETI		8,145883	9,784309	9,186839	9,755028	8,791357	8,326272	7,872492	7,432405	6,631195	**9,830251**
Faeroe Islands	FRO											
Fiji	FJI					22,19002	21,34806	**23,18702**				
Finland	FIN	24,64768	22,40753	22,97105	22,74017	22,54935	22,58605	22,10117	21,66435	21,20806	19,60607	**19,16971**
France	FRN	23,18964	22,97899	22,45893	22,13178	22,27067	22,41563	22,53315	21,88679	21,66657	19,84598	**21,28418**
French Polynesia	PYF											
Gabon	GAB											
Gambia, The	GAM											
Georgia	GRG	7,651757	7,352414	7,616658	7,032852	9,927429	12,11003	15,44825	17,71531	23,80936	23,13855	**22,13913**
Germany	GMY	11,60391	10,96817	10,9258	11,08359	10,60254	10,81011	11,02252	11,48857	11,55388	11,82944	**11,48256**
Ghana	GHA		17,19293	17,49311	18,47769	21,75211	21,32151	12,80738	13,87793	13,89595	12,61213	**13,38824**
Greece	GRC	23,4643	22,00925	21,61051	19,95724	19,76596	20,33777	20,45786	20,82496	20,46537	19,5664	**19,59943**
Greenland	GRL											
Grenada	GRD											
Guam	GUM											
Guatemala	GUA	10,06498	10,86303	11,88055	11,67386	11,55273	11,20539	11,85697	12,05936	11,27381	10,33552	**10,43471**
Guinea	GUI											
Guinea-Bissau	GNB											
Guyana	GUY											
Haiti	HAI											
Honduras	HON				13,74646	14,49586	14,53485	15,23835	16,385	16,13052	14,57337	**14,83632**
Hong Kong SAR, China	HKG			9,094631	10,60391	12,04491	12,66239	12,72228	14,24491	12,95167	12,78415	**13,79103**
Hungary	HUN	22,64187	21,70615	21,16	21,05121	20,69736	20,27891	20,13859	21,83904	23,67244	23,92815	**22,99148**
Iceland	ISL	26,05342	23,6601	23,63567	24,66871	25,83885	28,10662	28,06615	27,31004	24,30172	21,49059	**21,90566**
India	IND	8,693279	7,965619	8,545825	8,962471	9,405871	9,913767	11,02548	11,89429	10,74876	9,802362	**9,727842**
Indonesia	INS		11,57818	11,82696	12,38553	12,33077	12,50238	12,25446	12,42728	13,03621	11,43073	**10,86955**
Iran, Islamic Rep.	IRN	6,34189	6,316443	5,518011	5,897925	6,048875	7,851609	7,428923	7,262472	7,556702	**9,256529**	
Iraq	IRQ											
Ireland	IRE	25,77325	23,92646	23,01821	23,45994	24,54517	24,92421	26,27661	25,43921	23,26142	21,24034	**21,17872**
Isle of Man	IMN											
Israel	ISR	28,70307	28,42291	27,6372	26,7507	26,62528	26,98604	27,64709	27,89878	25,46733	23,2548	**24,29569**
Italy	ITA	23,07251	22,70466	21,96451	21,99307	21,47871	21,10515	22,61868	22,90087	22,39472	22,93473	**22,58696**
Jamaica	JAM				24,54518	25,21818	24,841	25,15374	25,90136	26,56361	26,16657	**26,12289**
Japan	JPN						10,54397	10,9317	10,47485	9,279197	8,695083	**9,149554**
Jordan	JOR	18,99115	18,66992	17,478	18,21365	20,99608	24,41581	24,55494	24,6896	17,6876	17,02853	**15,9146**
Kazakhstan	KZK	10,2214	9,642301	12,13436	13,08324	13,90868	17,14934	14,85084	12,27857	12,66099	8,055137	**8,93861**
Kenya	KEN	16,83114	17,83177	17,2946	15,76577	16,97282	18,67046	17,37619	17,79019	18,77561	18,81952	**19,54549**
Kiribati	KIR											
Korea, Dem. Rep.	PRK											
Korea, Rep.	ROK	15,40602	14,70534	14,42917	14,94749	14,24559	14,73181	15,19067	16,55969	16,29945	15,44938	**15,1472**
Kosovo	KOS											
Kuwait	KUW		1,037286	1,182053	1,324735	1,324428	1,029967	0,970478	1,086523	0,87582	0,971192	**0,909244**
Kyrgyz Republic	KYR	11,74379	12,43569					14,21827	16,39634	16,50851	15,03609	**15,03031**
Lao PDR	LAO							10,4897	11,58776	12,10293	12,75716	**12,92982**
Latvia	LAT	14,15564	13,74106	13,72899	14,10029	13,61095	15,05448	15,87239	15,64492	15,0109	13,40915	**12,77158**
Lebanon	LEB	11,90123	11,87808	14,43059	15,37671	16,03191	14,91599	14,7302	14,80733	15,89402	**17,0855**	
Lesotho	LSO	37,3777	40,24574	38,26639	40,89422	46,71757	46,18593	61,01812	56,8941	**58,85827**		
Liberia	LBR						0,234376	0,231095	0,309304	**0,315905**		
Libya	LIB											
Liechtenstein	LIE											
Lithuania	LIT	14,55502	14,38743	17,29419	17,08357	16,962	17,25997	17,85711	17,74781	17,38423	13,97877	**13,35847**
Luxembourg	LUX	26,37521	25,94065	25,37499	24,5546	24,39715	25,24806	24,164	24,01047	23,67068	24,49459	**24,48569**
Macao SAR, China	MAC	16,5673	17,26853	18,12917	20,85773	22,06664	21,6373	21,57881	25,9957	30,67312	29,68601	**34,35472**
Macedonia, FYR	MAC						19,26158	18,91776	19,4877	**19,09445**		
Madagascar	MAG	11,32608	9,738941	7,669634	10,00898	10,87752	10,10562	10,67094	11,43291	**13,00439**		
Malawi	MAW											
Malaysia	MAL	13,66691	17,79489	17,44696	15,49566	15,19909	15,42612	15,08081	14,82261	15,20563	15,66384	**14,29768**
Maldives	MDV	13,79611	10,84571	10,47164	10,63347	12,1543	13,5614	14,20831	14,71883	13,90498	10,99043	**11,03311**

Mali	MLI	13,15201	13,94888	13,00139	13,76618	15,28848	15,65609	15,66268	14,88175	13,27437	14,74822
Malta	MLT				24,27215	25,93258	26,08896	27,2685	28,29212	27,19401	27,81869
Marshall Islands	MHL										
Mauritania	MAA										
Mauritius	MAS										18,69474
Mexico	MEX	**11,65529**									
Micronesia, Fed. Sts.	FSM										
Moldova	MLD	14,72585	12,17134	12,88135	14,67291	16,35751	18,4854	19,57105	20,5667	20,4461	17,68526
Monaco	MCO										
Mongolia	MON	13,91016	14,66206	13,36924	18,03875			28,70997	23,47918	21,65182	16,54029
Montenegro	MNT										
Morocco	MOR			19,93177	19,63512	19,87134	21,96626	22,43165	25,11865	27,57396	23,96978
Mozambique	MZM										
Myanmar	MYA	2,966507	2,257141	2,001047	2,210412	**3,272456**					
Namibia	NAM	27,52966	26,39518	25,97572	23,17565	24,28691	25,76066	29,14517	**27,33425**		
Nepal	NEP	8,735981	8,802566	8,560583	8,651812	8,974959	9,179453	8,779758	9,772473	10,44009	11,84404
Netherlands	NTH	22,33013	22,59392	22,5206	21,63792	21,62917	22,63721	23,19387	23,37501	22,84901	22,66132
New Caledonia	NCL										
New Zealand	NEW		29,09745	28,70952	29,7584	29,74308	30,75909	32,61942	30,83883	32,17863	30,80051
Nicaragua	NIC	13,81416	12,71863	13,48803	15,20761	15,81399	16,73733	17,69589	18,17424	17,60356	17,54561
Niger	NIR						10,09072	10,70062	**11,34007**		
Nigeria	NIG					0,23042	0,175064	0,11668	0,195383	**0,279012**	
Northern Mariana Islands	MNP										
Norway	NOR	27,43522	26,8792	27,93311	26,30943	27,80635	28,72546	29,397	28,80424	28,26626	26,56392
Oman	OMA	7,161745	**7,388045**								
Pakistan	PAK	10,08899	10,04261	10,31131	10,78384	10,28455	9,604414	9,427413	9,838226	9,859638	9,277453
Palau	PLW										
Panama	PAN	10,20438	**9,260131**								
Papua New Guinea	PNG	18,97596	24,69645	**21,01325**							
Paraguay	PAR	10,85778	10,77419	10,127	10,30804	11,87143	11,84878	12,04245	11,41031	11,74807	12,97094
Peru	PER	12,23223	12,44139	12,0519	12,84044	13,09095	13,51694	15,04869	15,63309	15,69545	13,74864
Philippines	PHI	12,84755	12,59666	11,82304	12,10329	11,81462	12,42781	13,7113	13,5351	13,58881	12,23042
Poland	POL		15,98842	17,00801	16,95855	15,69443	16,67372	17,35808	18,30757	18,30509	16,3286
Portugal	POR	20,54466	20,23488	20,73137	20,8035	19,93061	20,64843	21,33614	21,66681	21,44428	19,51529
Puerto Rico	PRI										
Qatar	QAT					25,55534	21,04848	20,17915	20,64804	15,95784	19,96832
Romania	RUM			11,74065	12,27864	12,30175	12,20841	11,37557	11,8111	17,888	
Russian Federation	RUS			13,64919	13,31403	13,23403	16,62291	16,56822	16,55131	15,81807	12,95635
Rwanda	RWA										
Samoa	WSM										
San Marino	SMR			23,51806	21,96865	20,69813	21,98806	22,37013	22,84534	**22,2649**	
Sao Tome and Principe	STP										
Saudi Arabia	SAU										
Senegal	SEN	16,12958	**16,11536**								
Serbia	SER								23,60934	23,11101	22,50378
Seychelles	SYC	26,08089	25,25721	26,13803	32,72899	35,39972	27,36441	24,61362	23,58498	22,48137	25,42369
Sierra Leone	SIE	10,16039	12,03477	11,37662	11,51506	10,78354	10,76639	11,18011	10,21783	10,52579	11,04012
Singapore	SIN	15,13432	14,93355	12,95445	12,66525	11,84508	11,79659	12,06491	13,06316	14,98922	14,69761
Sint Maarten (Dutch part)	SXM										
Slovak Republic	SLO				17,23402	15,84101	14,91492	13,9405	14,19442	13,51249	12,43714
Slovenia	SLV	20,46252	20,41931	18,81054	20,73844	20,4878	20,54129	20,99534	19,64788	19,92931	18,07136
Solomon Islands	SOL										
Somalia	SOM										
South Africa	SAF	23,95569	24,80532	24,19634	24,00119	25,33469	26,86034	28,38043	28,87329	28,07609	25,47558
South Sudan	SUD										
Spain	SPN	16,16858	15,83546	12,78601	12,18672	11,75855	12,87796	13,46826	13,87623	10,4787	8,608545
Sri Lanka	SRI	14,50277	14,62551	13,55629	12,71068	13,46597	13,73253	14,57726	14,22161	**13,27733**	
St. Kitts and Nevis	KNA			16,23938	18,15383	20,06828	22,6884	21,60766	19,6911	19,19254	19,26649
St. Lucia	LCA										
St. Martin (French part)	MAF										
St. Vincent and the Grenadines	VCT	20,63168	20,28789	21,84716	20,92175	20,61023	20,47203	22,00843	21,76856	23,7264	23,83221

Sudan	SUD											
Suriname	SUR											
Swaziland	SWA	24,30882	23,97565	24,07951	**26,1012**							
Sweden	SWD	23,6495	21,45605	20,37084	20,70812	21,34995	22,58607	23,25609	22,42447	21,65221	21,54746	**21,3866**
Switzerland	SWZ	11,08721	10,03902	9,951442	9,951134	9,979079	10,30858	10,42721	10,00155	**10,87561**		
Syrian Arab Republic	SYR											
Tajikistan	TAJ	7,702823	8,201888		9,70953	**9,821183**						
Tanzania	TAZ											
Thailand	THI				15,46033	15,91719	17,24284	16,74466	16,12207	16,44629	15,16303	**15,972**
Timor-Leste	TLS											
Togo	TOG					15,31041	13,88488	14,81059	16,19505	14,90892	15,37247	**15,68753**
Tonga	TON											
Trinidad and Tobago	TTO		22,12129	20,4555	21,43331	22,70123	26,3787	30,25756	25,99529	29,48841	**26,16349**	
Tunisia	TUN	19,29237	19,5975	19,54062	18,74521	18,67219	18,8775	18,51076	19,06413	20,49121	20,01725	**20,11746**
Turkey	TUR							19,69712	18,72831	18,58659	18,91177	**20,56741**
Turkmenistan	TKM											
Turks and Caicos Islands	TCA											
Tuvalu	TUV											
Uganda	UGA	10,44395	10,43959	11,17998	11,26114	10,68892	11,75955	12,25196	12,39381	12,90343	12,1668	**12,04757**
Ukraine	UKR	14,10037	12,06136	13,0987	13,65448	13,27566	17,12308	17,74755	16,4846	17,86266	16,37177	**15,52417**
United Arab Emirates	UAE											
United Kingdom	UKG	28,44188	28,21603	27,05595	26,34292	26,57061	27,24477	27,95919	27,63765	28,93156	25,89568	**26,73997**
United States	USA		12,50941	10,37529	9,849251	9,988447	11,21205	11,91301	11,91866	10,38036	8,589688	**9,383364**
Uruguay	URU	14,69914	15,30598	15,77768	17,20601	17,8462	17,89692	18,98806	18,41051	18,24184	19,43674	**19,30451**
Uzbekistan	UZB											
Vanuatu	VUT											
Venezuela, RB	VEN	13,2866	11,79628	10,95046	11,53416	12,92812	**15,51373**					
Vietnam	VIE											
Virgin Islands (U.S.)	VIR											
West Bank and Gaza	PSE											
Yemen, Rep.	YEM											
Zambia	ZAM		18,6214	17,42504	16,65324	17,51903	17,1717	16,34406	16,88945	17,39439	14,96165	**16,57942**
Zimbabwe	ZIM											

Kokkuvõte

ÜKSIKISIKU MAKSUSTAMINE JA POLIITILISE REŽIIMI VAHELINE SEOS MAAVARADERIKASTES RIIKIDES

Marie Jaksman

Käesolev magistritöö analüüsib indiviididele kehtestatud maksude ja demokraatia vahelist seost maavarade poolest rikastes riikides. Uurimusküsimus on tuletatud tuginedes eelkõige *rantjee* riigi teooriale, mille kohaselt maavarade poolest rikkad riigid muutuvad antud ekspordiartiklist sõltuvaks, mis omakorda pärsib riikide sotsiaalset ja majanduslikku arengut. Antud *rantjee* riigi teooriat ning võimalike põhjuseid rantjee riikide vähesele arengule on akadeemilises kirjanduses palju uuritud, kuid teoreetilised ja empiirilised põhjused varieeruvad suuresti. Siinne magistritöö esindab kõige levinumat - institutsionaalset lähenemist, mille järgi maavarde poolest rikaste riikide vähene areng on tingutud riikide institutsionaalsest nõrkusest. Olgugi, et puudub konkreetne definitsioon peetakse siinkohal silmas riigi institutsioonide võimekust jälgida reeglitest ja kokkulepetest kinnipidamist. Antud magistritöö teiseks keskseks teooriaks on Joseph Schumpeteri "fiskaal sotsioloogia" tihti nimetatud ka kui "maksustamise efekt", mis väidab, et riikide poliitiline režiim on vormitud riigis kehtestatud maksusüsteemi poolt. Teisisõnu, maksustamine kui institutsionaalne faktor mõjutab suuresti demokraatia arengut, kuna kodanikud on kaasatud võimumehhanismidesse maksude tasandil. Kui demokraatliku riigis on kehtestatud maksude eesmärgiks riigimehhanismide käigus hoidmine, siis maavarade poolest rikastes riikides see ühendus puudub. Käesolev magistritöö püstitab hüpoteesi, et maavarade ekspordist saadud tulu muudab riigid majanduslikult autonoomseks, mistõttu puudub vajadus kodanikke maksustada, mille tulemusel väheneb võimu jagamine riigi kodanikega.

Antud magistritöö kontrollib antud väidet kolme analüütilise mudeliga ning hiljem kolme juhtumanalüüsiga – Norra, Venetsueela, Katar. Juhtumanalüüsi valik tugines metodoloogilistel põhjustel ning eesmärgiga lisada geograafilist mitmekesisust. Esiteks, kontrollin, väidet, kas mineraalide rikastes riikides kehtestatud maksukoormus erineb

maavarade poolest vaestes riikidest (Hüpotees #1). Siinkohal on maavarade rikkad riigid defineeritud toetudes ÜRO SITC osa 3. jaotusele. Selle järgi on nendeks mineraalideks kivisüsi, koks, brikett, petrooleum ja kõikvõimalikud petrooleumproduktid, naturaalne ja töödeldud gaas. Korrelatsiooni analüüsimiseks on kasutatud riikide rahvuslikku keskmist sissetulekut (*Gross National Income*, GNI), 2010 aasta Maailmapanga andmestikku ning IMF andmestik 2010. aastal indiviididele kehtestatud maksude protsent sisemajanduse koguproduktist (*Gross Domestic Product*, GDP). Siinkohal olen eelistanud GNI andmestikku, mis peegeldab hästi rahvastiku keskmist jõukust, kuna on tihedalt seotud näitajatega, mis mõõdavad majanduslikku, sotsiaalset ja keskkondlikku heaolu. Põhjalik analüüs toetab väidet, et mineraalide rikastes riikides on indiviididele kehtestatud maksusüsteemid madalamad, mis annab põhjuse uskuda, et antud riigid toetuvad eelkõige maavaradest saadud tulule kui kehtestatud maksudele.

Teine mudel testib, kuidas indiviididele kehtestatud maksukoormus mõjutab poliitilist režiimi (Hüpotees #2). Selleks on kasutatud Marshall, Gurr ja Jaggers Polity IV 2010. aasta andmestikku ning IMF koostatud andmestikku indiviididele kehtestatud maksukoormuse osakaalu kohta SKPst. Polity IV andmestik analüüsib iseseisvate riikide (populatsioon suurem kui 500 000) poliitilise režiimi arengut 1800 – 2010. Antud andmestik on eelistatud Freedom House Indeksile, kuna annab parema ülevaate poliitilise režiimi esinduslikkusest. Tulemused näitavad, et ülekaalukalt maavarade ekspordist sõltuvad riigid kalduvad olema rohkem autokraatlikud ning väiksema maksukoormusega. Siiski jäävad tulemused statistiliselt ebaoluliseks.

Kolmanda mudeliga kontrolliti, kuidas mõjutab poliitiline režiim indiviidide sissetulekut. Selleks asetasin korrelatsiooni Marshall, Gurr ja Jaggers Polity IV 2010 andmestiku ning indiviidide keskmine sissetulek 2010. aastal Maailmapanga järgi. Tulemused ei kinnita seost poliitilise režiimi ja indiviidide sissetuleku vahel. Siinkohal on oluline välja tuua, olgugi, et GNI väljendab hästi riikide üldist heaolu, siis jätab välja, kuidas rikkus on toodetud. Kui suur osakaal on toodetud erasektoris ning riigisektoris. Siinkohal võib vastav eristus olla võtmetähtsusega.

Käesolev magistritöö eesmärgiks oli testida indiviididele kehtestatud maksusukoormuse ja poliitilise režiimi vahelist seost mineraalide rikastes riikides. Tulemused näitavad, et maavarade poolest rikastes riikides sotsiaalne ja majanduslik tulem erineb riikidest, kus maavarade eksport ei domineeri, kuid antud uurimus ei leidnud statistiliselt olulist toetust “maksustamise efektile”, mida kinnitasid ka juhtumanalüüsid. Kõik maavarade rikkad riigid seisavad vastamisi samade küsimustega, kuidas efektiivselt kasutada maavarade ekspordist saadavat tulu. Puudub ühene lahendus, kuidas vältida maavarade “lõksu” sattumist ning isegi Norras väljatöötatud “ Norra mudel” ei ole ennast tõestanud teistes riikides. Käesolev magistritöö järeldab, et indiviidide maksustamine kui sekundaarne faktor üldises institutsionaalses raamistuks omab küll tähtsust, kuid ei ole demokraatia kujundamisel võtmetähtsusega.